

Protecting Protected Areas *in Bello*: Learning From Institutional Design and Conflict Resilience in the Greater Virunga and Kidepo Landscapes

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Abstract

It has often been cited that major armed conflicts (>1,000 casualties) afflicted two-thirds (23) of the world's recognized biodiversity hotspots between 1950 and 2000.¹ In 2011, the International Law Commission (ILC) included in its long-term work program *Protection of the Environment in Relation to Armed Conflict*.² This led to the adoption of twenty-eight Draft Principles, including designation of protected zones where attacks against the environment are prohibited during armed conflict.³ Protected zone designations apply to places of major environmental and cultural importance, requiring that they “[...] shall be protected against any attack, as long as it does not contain a military objective.”⁴ Most research on armed conflict and protected areas has focused on impacts to wildlife and less on how to protect these natural habitats from the ravages of armed conflict.⁵

This article highlights some of the gaps in the ILC Draft Principles towards protecting protected zones *in bello*. It uses transboundary protected areas (TBPAs) formalized through multilateral agreements to illustrate challenges on the ground. TBPAs are internationally designated “[...] protected areas that are ecologically connected across one or more international boundaries [...]” and sometimes even established for their promotion of peace (i.e., Parks for Peace).⁶ There is little legal research on how to design TBPA agreements for

¹ T. Hanson *et al.*, ‘Warfare in Biodiversity Hotspots’, 23 *Conservation Biology* (2009) 3, 578, 578.

² *Report of the International Law Commission to the Sixty-Third Session*, UN Doc A/66/10, 2011, 289.

³ ILC, *Protection of the Environment in Relation to Armed Conflicts, Text and Titles of the Draft Principles Provisionally Adopted by the Drafting Committee on First Reading*, UN Doc A/CN.4/L.937, 6 June 2019, Draft Principle 4.

⁴ *Report of the International Law Commission to the Seventy-First Session*, UN Doc A/74/10, 2019, 213.

⁵ A. J. Plumptre, ‘Lessons Learned from On-the-Ground Conservation in Rwanda and the Democratic Republic of the Congo’, 16 *Journal of Sustainable Forestry* (2003) 3-4, 69-88; J. H. Daskin & R. M. Pringle, ‘Warfare and Wildlife Declines in Africa’s Protected Areas’, 553 *Nature* (2018) 7688, 328-336; J. P. Dudley *et al.*, ‘Effects of War and Civil Strife on Wildlife and Wildlife Habitats’, 16 *Conservation Biology* (2002) 2, 319-329.

⁶ M. Vasilijević *et al.*, *Transboundary Conservation: A Systematic and Integrated Approach* (2015), available at <https://portals.iucn.org/library/sites/library/files/documents/PAG-023.pdf> (last visited 17 March 2020).

conflict resilience, conflict sensitivity, and ultimately positive peace.⁷ The research draws from two case studies in Africa's Great Rift Valley: the Greater Virunga Landscape (GVL) between the Democratic Republic of the Congo (DRC), Rwanda, and Uganda, and the Kidepo Landscape, which forms part of the broader Landscapes for Peace initiative between South Sudan and Uganda. Both suffer from armed conflicts of various types and present two of the only TBPA in the world that have incorporated environmental peacebuilding into their transboundary agreements.⁸ The case studies illustrate different approaches to TBPA design and the pros and cons of each modality in the context of conflict resilience and conflict sensitivity. This guides us on how to better protect protected areas *in bello*, ensuring that protected zones endure on the ground and not just in principle.

⁷ E. C. Hsiao, 'Missing Peace: Why Transboundary Conservation Areas Are Not Resolving Conflicts', News Security Beat (19 February 2019), available at <https://www.newsecuritybeat.org/2019/02/missing-peace-transboundary-conservation-areas-resolving-conflicts/> (last visited 17 March 2020).

⁸ E. C. Hsiao, *Protecting Places for Nature, People, and Peace: A Critical Socio-Legal Review of Transboundary Conservation Areas* (2018), available at <https://hdl.handle.net/2429/67561> (last visited 17 March 2020).

A. Introduction

Protected areas (PAs) are often considered the “cornerstone of biodiversity conservation”, relied upon to safekeep not only wildlife but also human security.⁹ According to the International Union for the Conservation of Nature (IUCN), PAs are “[...] a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values”.¹⁰ Some, namely Parks for Peace, are also heralded for their potential to contribute to peace.¹¹ The IUCN applies the term Parks for Peace to transboundary protected areas (TBPAs) specially “[...] dedicated to the promotion, celebration and/or commemoration of peace and cooperation”.¹² They define TBPAs as “[...] a clearly defined geographical space that consists of protected areas that are ecologically connected across one or more international boundaries and involves some form of cooperation”.¹³ In other words, TBPAs are internationally designated PAs.

Work by the International Law Commission (ILC) on *Protection of the Environment in Relation to Armed Conflict* has led to the adoption of twenty-eight Draft Principles, including the designation of protected zones where attacks against the environment are prohibited during armed conflict.¹⁴ Protected zone designations apply to places of major environmental and cultural importance,

⁹ K. Beazley & R. Baldwin, ‘Biodiversity and Protected Areas’, 8 *Land* (2019) ix. See Website of Secretariat of the Convention on Biological Diversity Secretariat, *Protected Areas*, available at <https://www.cbd.int/protected/> (last visited 17 March 2020); M. Deguignet *et al.*, *United Nations List of Protected Areas* (2014) vi, available at https://wdpa.s3.amazonaws.com/WPC2014/2014_UN_LIST_REPORT_EN.pdf (last visited 17 March 2020); S. Stolton *et al.*, ‘Values and Benefits of Protected Areas’, in G. L. Worboys *et al.* (eds), *Protected Area Governance and Management* (2015), 145; A. H. Westing, *Transfrontier Reserves for Peace and Nature: A Contribution to Human Security* (1993).

¹⁰ N. Dudley (ed.), *Guidelines for Applying Protected Area Management Categories* (2008), 8, available at <https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf> (last visited 16 April 2020).

¹¹ S. Ali, *Peace Parks: Conservation and Conflict Resolution* (2007), 7-10, 17; Westing, *Transfrontier Reserves for Peace and Nature: A Contribution to Human Security*, *supra* note 9.

¹² Vasilijević *et al.*, *Transboundary Conservation: A Systematic and Integrated Approach*, *supra* note 6, xi.

¹³ *Ibid.*

¹⁴ *Report of the International Law Commission to the Sixty-Third Session*, *supra* note 2, 289; ILC, *Protection of the Environment in Relation to Armed Conflicts, Text and Titles of the Draft Principles Provisionally Adopted by the Drafting Committee on First Reading*, *supra* note 3, Draft Principle 4.

requiring that they “[...] shall be protected against any attack, as long as it does not contain a military objective”.¹⁵ Commentary to the ILC Draft Principles note that internationally designated PAs by multilateral agreements may be recognized as protected zones.¹⁶ In principle, this includes TBPA established through multilateral agreements. As noted by the Special Rapporteurs in their Introductory Note of this Special Issue, Draft Principle 4 on protected zones should enhance protection *in bello*. However, the vulnerability of international cooperation to armed conflict, the existence of “paper parks” that are legally designated yet ineffective on the ground, and the frequent occurrence of protected areas downgrading, downsizing, and degazettement (PADDD) even in peacetime, indicate that the designation of protected status alone is not enough to safeguard the environment.¹⁷

The first section of this article provides a critique of potential gaps in international law as captured by the ILC Draft Principles regarding protected zones and questions whether they suffice to effectively protect PAs *in bello*. It identifies a number of weaknesses, namely the possibility that not all protected or conserved areas may qualify as protected zones when interpreting the ILC Draft Principles and that there is insufficient guidance on the active protection of protected zones in times of armed conflict. Ideally, all protected and conserved areas should by default be considered *protected zones* in relation to armed conflicts, but it is unlikely States will accept such a blanket protection, so we need to consider what is required to operationalize the protection of protected areas beyond just designation. In the second section, two case studies in different parts of Africa’s Great Rift Valley illustrate what may be needed institutionally and legally to sustain cooperation and conservation – two fundamental elements of ecological peacebuilding or the resolution of armed conflicts through collaborative environmental protection.

International cooperation through TBPA elicits the potential for environmental peacebuilding or improved relations and even the resolution

¹⁵ *Report of the International Law Commission to the Seventy-First Session*, *supra* note 4, 213.

¹⁶ *Report of the International Law Commission to the Sixty-Eighth Session*, UN Doc A/71/10, 2 May-10 June and 4 July-12 August 2016, 327.

¹⁷ M. B. Mascia *et al.*, ‘Protected Area Downgrading, Downsizing, and Degazettement (PADDD) in Africa, Asia, and Latin America and the Caribbean, 1900-2010’, 169 *Biological Conservation* (2013), 355-356; J. P. Rodriguez & K. M. Rodriguez-Clark, ‘Even ‘Paper Parks’ Are Important’, 16 *TRENDS in Ecology & Evolution* (2001) 1, 17; Š. Waisová, ‘Environmental Cooperation as Instrument of Conflict Transformation in Conflict-Prone Areas: Where Does It Start, How Deep It Can Be and What Effects It Can Have’, *Politické Vedy* (2015) 2, 105, 118-119.

of conflicts through shared natural resource management.¹⁸ Yet, evidence to this effect in TBPA has been elusive, suggesting that they rely on pre-existing international peace between States for formalization and ongoing non-violent relations for continuity.¹⁹ TBPA, including Parks for Peace, and the multi-stakeholder cooperation upon which they are premised are not conflict resilient.²⁰ This vulnerability compromises TBPA protection *in bello* and its potential for environmental peacebuilding. Furthermore, TBPA have been repeatedly criticized for afflicting other violences and contributing to conflicts, including armed conflict,²¹ hence the need for conflict sensitivity in addition to conflict resilience.²² Conflict sensitive conservation should contribute to conflict resilience and, in turn, better protect protected zones *in bello*. In a TBPA, this facilitates ongoing cooperation that can contribute to broader environmental peacebuilding.

While the case studies present different issues and adaptations, their experiences, as discussed in section three, provide valuable lessons regarding engagement of the security sector and other partners in conservation. This teaches us something of how TBPA institutions and their objectives can prevail, even in places where negative peace is evasive. Only by offering actual protection for PAs on the ground *in bello* can Draft Principles one day achieve enhanced protection for the environment in relation to armed conflict.

¹⁸ Ali, *Peace Parks: A Conservation and Conflict Resolution*, *supra* note 11, 7-10; K. Conca & G. D. Dabelko, *Environmental Peacemaking* (2002), 4-5, 9-11, 220, 223, 230.

¹⁹ K. Barquet, P. Lujala, & J. K. Rød, 'Transboundary Conservation and Militarized Interstate Disputes', 42 *Political Geography* (2014) 1, 1, 8-10; Waisová, 'Environmental Cooperation as Instrument of Conflict Transformation in Conflict-Prone Areas: Where Does it Start, How Deep it Can Be and What Effects it Can Have', *supra* note 17, 105, 118-119.

²⁰ T. Ide, 'The Impact of Environmental Cooperation on Peacemaking: Definitions, Mechanisms, and Empirical Evidence', 21 *International Studies Review* (2018) 3, 327-346.

²¹ D. Brockington, *Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania* (2002); M. Dowie, *Conservation Refugees: The Hundred-Year Conflict Between Global Conservation and Native Peoples* (2009); R. Duffy *et al.*, 'Why We Must Question the Militarisation of Conservation', 232 *Biological Conservation* (2019), 66; J. Verweijen & E. Marijnen, 'The Counterinsurgency/Conservation Nexus: Guerrilla Livelihoods and the Dynamics of Conflict and Violence in the Virunga National Park, Democratic Republic of the Congo', 45 *The Journal of Peasant Studies* (2016) 2, 300.

²² See A. Hammill *et al.*, *Conflict-Sensitive Conservation: Practitioners' Manual* (2009), available at <https://www.iisd.org/library/conflict-sensitive-conservation-practitioners-manual> (last visited 17 March 2020).

B. Protecting Protected Areas From Armed Conflict

I. Protected Areas on the Frontlines

Biodiversity everywhere is under threat from human activities, including land and forest conversion, pollution, over-exploitation, and armed conflict.²³ Major armed conflicts (>1,000 human casualties) afflicted two-thirds (23 total) of the world's recognized biodiversity hotspots between 1950 and 2000.²⁴ Although ten of the countries hosting biodiversity hotspots were untouched by major armed conflicts, they may have experienced conflicts of lesser scale.²⁵ Many of today's armed conflicts do not rise to the level of major armed conflicts, but the suffering of both people and nature in these places is not dismissible.²⁶ Considering that PAs are intended to safeguard nature from human harms, it would be disappointing if these places were not protected from arguably the worst of human behaviors – armed conflict.

The impacts of armed conflict on PAs can be direct and indirect, resulting from targeted attacks, collateral damage or other, often less visible impacts linked to either of the former. Direct impacts (tactical pathways) include physical destruction or degradation of land, resources, or species, which can be intended tactics of war (e.g., fire-bombing forests) or collateral damage resulting from conflict activities (e.g., exploitation of wildlife for conflict-supporting revenues).²⁷ Indirect impacts (non-tactical pathways) include the effects of conflict-displaced peoples (i.e., refugees and internally displaced people) and disruption or changes to institutional and economic systems.²⁸ Although some claim that violent conflict can have the positive effect of keeping people and

²³ Hanson *et al.*, 'Warfare in Biodiversity Hotspots', *supra* note 1, 578; N. Myers, 'Threatened Biotas: "Hotspots" in Tropical Forests', 8 *Environmentalist* (1988) 3, 187; N. Myers *et al.*, 'Biodiversity Hotspots for Conservation Priorities', 403 *Nature* (2000) 853, 855-856; United Nations Environment Programme, *Global Environment Outlook 5: Summary for Policy Makers* (2012) 20.

²⁴ Hanson *et al.*, 'Warfare in Biodiversity Hotspots', *supra* note 1, 580.

²⁵ *Report of the International Law Commission to the Sixty-Eighth Session*, *supra* note 16, 327.

²⁶ K. Dupuy *et al.*, *Trends in Armed Conflict, 1946-2016*, (2017) 4, at 2.

²⁷ J. E. Austin & C. Bruch, *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives* (2000), 1-6; B. N. Bella, 'A Survey of the "War on Wildlife": How Conflict Affects Conservation', *New Security Beat*, 3 April 2017, available at <https://www.newsecuritybeat.org/2017/04/survey-war-wildlife-conf> (last visited 17 March 2020); S. V. Price, *War and Tropical Forests: Conservation in Areas of Armed Conflict* (2003).

²⁸ Bella, 'A Survey of the "War on Wildlife": How Conflict Affects Conservation', *supra* note 27; K. M. Gaynor *et al.*, 'War and Wildlife: Linking Armed Conflict to Conservation', 14 *Frontiers in Ecology and the Environment* (2016) 10, 533.

development out of PAs,²⁹ thereby inadvertently safeguarding nature and even providing opportunity for ecological regeneration (e.g., forests in Colombia and the Demilitarized Zone between the Koreas), many of the effects are indisputably negative.³⁰ PAs can become overwhelmed by displaced peoples, used for military cover and maneuvers, and PA staff may be recruited into armed forces, removed for their safety, or lose funding to maintain conservation activities.³¹ It is important, therefore, to sustain effective conservation in PAs during armed conflict, allowing them to play a positive role in post-conflict peace.

When it comes to protecting PAs from armed conflict, there is increasing experience on the ground, but little published guidance to draw upon. Most research on armed conflict and PAs has focused on impacts to wildlife and less on effective conservation practices, which I argue should be conflict resilient, conflict sensitive, and ideally, conflict-transformative or peacebuilding.³² While the ILC Draft Principles call for enhanced protection of internationally designated PAs, there is little legal scholarship on how to designate such areas and design their agreements for conflict resilience, conflict sensitivity and ultimately, positive peace.³³ Design in this case refers to

²⁹ R. Burgess, E. Miguel & C. Stanton, 'War and Deforestation in Sierra Leone', 10 *Environmental Research Letters* (2015) 9, 1, 6; K. C. Kim, 'Preserving Biodiversity in Korea's Demilitarized Zone', 278 *Science* (1997) 5336, 242-243; J. Lelieveld *et al.*, 'Abrupt Recent Trend Changes in Atmospheric Nitrogen Dioxide over the Middle East', 1 *Science Advances* (2015) 7, 1, 2.

³⁰ Gaynor *et al.*, 'War and Wildlife: Linking Armed Conflict to Conservation', *supra* note 28; P. Le Billon, *Power Is Consuming the Forest: The Political Ecology of Conflict and Reconstruction in Cambodia* (1999), 1, available at https://ora.ox.ac.uk/objects/uuid:9dd5daa2-704c-4909-850a-d4d64294cce3/download_file?file_format=pdf&safe_filename=602330160.pdf&type_of_work=Thesis (last visited 17 March 2020); A. J. Plumptre, M. Masozera & A. Vedder, *The Impact of Civil War on the Conservation of Protected Areas in Rwanda* (2001), 4-13.

³¹ J. Kalpers, *Volcanoes under Siege: Impact of a Decade of Armed Conflict in the Virungas*, BSP Case Studies (2001), 4-24; S. Kanyamibwa, 'Impact of War on Conservation: Rwandan Environment and Wildlife in Agony', 7 *Biodiversity & Conservation* (1998), 1399; de Merode *et al.*, 'The Impact of Armed Conflict on Protected-Area Efficacy in Central Africa', 3 *Biology Letters* (2007) 3, 299; Plumptre, Masozera & Vedder, *The Impact of Civil War on the Conservation of Protected Areas in Rwanda*, *supra* note 30, at 1-25.

³² Plumptre, 'Lessons Learned from On-the-Ground Conservation in Rwanda and the Democratic Republic of the Congo' *supra* note 5, 69-88; Daskin & Pringle, 'Warfare and Wildlife Declines in Africa's Protected Areas', *supra* note 5, 328-336; Dudley *et al.*, 'Effects of War and Civil Strife on Wildlife and Wildlife Habitats', *supra* note 5, 319-329.

³³ Hsiao, 'Missing Peace: Why Transboundary Conservation Areas Are Not Resolving Conflicts', *supra* note 7.

“[...] the legal and governance framework which stipulates why a PA is being created, how it shall be constituted and governed, as well as who is responsible for specific activities within the territory in order to achieve its goals or principles, and any other aspect of its constitution”.³⁴

Even TBPAAs designated under or in response to an international agreement (e.g., Convention on Biological Diversity or World Heritage Convention) need to determine context-appropriate formulations for cross-border institutional and governance arrangements. This is important for conflict resilience, as will follow in the two case studies. Oftentimes, these arrangements are captured in multilateral or transboundary agreements (e.g., Memorandum of Understanding or MoU establishing a TBPA).³⁵ This article is intended to provide insights into what TBPA agreements or designations should incorporate in order to sustain conservation *in bello*.

TBPAAs are an idealized solution for species and ecosystems requiring connectivity (i.e., territory and freedom of movement) unhindered by political or human divides.³⁶ Parks for Peace attribute another value to transboundary conservation – *peace* – or the possibility that cooperation can triumph over the self-interests of States.³⁷ Waterton-Glacier International Peace Park between Canada and the United States, for example, celebrates friendly relations between those two States.³⁸ La Cordillera del Condor helped resolve a long-time border

³⁴ Hsiao, *Protecting Places for Nature, People, and Peace: A Critical Socio-Legal Review of Transboundary Conservation Areas*, *supra* note 8, 4.

³⁵ See for example, Democratic Republic of Congo, Republic of Rwanda and Republic of Uganda, *Greater Virunga Transboundary Collaboration Treaty on Wildlife Conservation and Tourism Development (GVTCT)*, 30 October 2015; Hsiao, *Protecting Places for Nature, People, and Peace: A Critical Socio-Legal Review of Transboundary Conservation Areas*, *supra* note 8, 121-129, 136.

³⁶ Vasilijević *et al.*, *Transboundary Conservation: A Systematic and Integrated Approach*, *supra* note 6, xi.

³⁷ R. Lejano, ‘Peace Games: Theorizing About Transboundary Conservation’, in S. H. Ali (ed.), *Peace Parks: Conservation and Conflict Resolution* (2007), 41, 41.

³⁸ National Park Service and Parks Canada, *Memorandum of Understanding Between the National Park Service of the Department of the Interior of the United States of America and Parks Canada of the Government of Canada, on Cooperation in Management, Research, Protection, Conservation, and Presentation of National Parks and National Historic Sites* (May 1998), available at <http://www.watertonglacierpeacepark.org/history.html> (last visited 16 April 2020).

dispute between Ecuador and Peru.³⁹ Some TBPA's have aspirations for peace exactly because they still experience violent conflict (e.g., the Greater Virunga Landscape).⁴⁰ In conflict-afflicted TBPA's, sustained conservation safeguards resources that can contribute towards a peaceful future, hence this article focuses on TBPA's and their protection *in bello*.

II. Not all Protected Areas are Created Equal: Qualifying as a Protected Zone

Some international humanitarian laws offer protection for natural environments in armed conflict, notably:

1. Prohibitions against widespread, long-term and severe damage to the natural environment [Arts. 35(3) and 55(1) of *Protocol I to the Geneva Conventions* (1977); Art. 8(2)(b)(iv) of *Rome Statute*; Art. 1 of the ENMOD Convention]⁴¹
2. Protection of forests and vegetation from incendiary attacks [*Protocol III of the Convention on Certain Conventional Weapons*]⁴²

³⁹ S. Ali, 'A Casualty of Peace? Lessons on De-Militarizing Conservation in the Cordillera Del Condor Corridor', in T. Lookingbill & P. Smallwood, *Collateral Values of Natural Capital* (2018), 177-188; Government of Peru and Government of Ecuador, 'Peace, Friendship, and Boundaries Between Peru and Ecuador Protocol Between Peru and Ecuador (Translation)', 29 January 1942, available at <https://peacemaker.un.org/sites/peacemaker.un.org/files/Rio%20Protocol%20English%201942.pdf> (last visited 18 March 2020).

⁴⁰ E. C. Hsiao, 'Interview with Fidele Ruzigandekwe, Deputy Director of Programs of Greater Virunga Transboundary Collaboration Executive Secretariat' (2017). All cited interviews were conducted by the author.

⁴¹ *Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts*, 8 June 1977, 1125 UNTS 3 [Protocol I]; *Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques*, 18 May 1977, 1108 UNTS 151 [ENMOD Convention]; *Rome Statute of the International Criminal Court*, 17 July 1998, UN Doc A/CONF.183/9.

⁴² *United Nations Conference 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 on Prohibitions or Restrictions on the Use of Incendiary Weapons* (Protocol III), 27 October 1980, UN Doc A/CONF.95/15.

3. Care taken to protect and preserve the natural environment from hostilities not of military necessity [ICRC on Rules of Customary International Humanitarian Law]⁴³

A few non-binding multilateral environmental texts express a general principle that natural environments should be protected from warfare (e.g., Principles 24 & 25 of the Rio Declaration).⁴⁴ These have all been echoed by the International Court of Justice in its Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons.⁴⁵ International laws protecting natural environments in relation to armed conflict do not, however, specifically mention PAs. This makes the ILC's Draft Principles addressing *protected zones* potentially important.

While PAs certainly qualify as natural environments, there is no existing mandate that, at minimum, all protected or conserved areas must be spared when it comes to armed conflicts. The 2019 commentary accompanying the ILC Draft Principles says particular weight should be given to areas of “[...] major environmental and cultural importance [...]”.⁴⁶ While PAs, by IUCN definition, are designated for their environmental values, they may not equate to *major* environmental importance. There is no universally accepted standard for *major environmental importance*. Some organizations use the terminology “biodiversity hotspots”, which are typically based on a minimum threshold of species diversity (e.g., at least 1,500 endemic vascular plants) and significant levels of threat (i.e., has already lost 70% or more of its natural vegetation).⁴⁷

⁴³ J.-M. Henckaerts & L. Doswald-Beck, *Customary International Humanitarian Law* (2005), available at <https://www.icrc.org/en/doc/assets/files/other/customary-international-humanitarian-law-i-icrc-eng.pdf> (last visited 22 April 2020), Rules 43-45; International Committee of the Red Cross (ICRC), ‘Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict’, 301 *International Review of the Red Cross* (1996), available at <https://www.icrc.org/eng/resources/documents/article/other/57jn38.htm> (last visited 27 April 2020).

⁴⁴ *Report of the United Nations Conference on Environment and Development*, 12 August 1992, UN Doc A/CONF.151/26 [Rio Declaration on Environment and Development]; GA Res. 37/17, UN Doc A/RES/37/17, 20 October 1982.

⁴⁵ *Legality of the Threat of the Use of Nuclear Weapons*, Advisory Opinion, ICJ Reports 1996, 226, 241-243, para. 27-32.

⁴⁶ *Report of the International Law Commission to the Seventy-First Session*, *supra* note 4, 211.

⁴⁷ R. A. Mittermeier *et al.*, ‘Global Biodiversity Conservation: The Critical Role of Hotspots’, in F. E. Zachos & J. C. Habel (eds), *Biodiversity Hotspots: Distribution and Protection of Conservation Priority Areas* (2011), 5-7; Myers *et al.*, ‘Biodiversity Hotspots for Conservation Priorities’, *supra* note 23, 853-857.

Others refer to “key biodiversity areas”, which are based more on an area’s contribution to the persistence of threatened species, broader ecological integrity, and biological processes.⁴⁸ World Heritage Sites are the ILC’s most mentioned protected zone of major environmental importance, yet there are only 197 World Heritage Sites compared to 242,423 PAs in the World Database on Protected Areas maintained by UN Environment’s World Conservation Monitoring Centre.⁴⁹ This Database has only begun to capture all of the *areas and territories conserved by indigenous peoples and local communities* (ICCAs), private PAs, and Other Effective Area-Based Conservation Measures (OECMs) – all worthy of protection *in bello*.⁵⁰ PAs distinguish themselves from other natural environments by their designation, indicating the importance of their conservation, but the ILC’s repeated mention of only a small subset of PAs (i.e., World Heritage Sites) in the commentary could be interpreted by States to imply a hierarchy of importance and thereby protection in relation to armed conflict.

Cultural importance is another vague concept in the ILC Draft Principles. The 2019 ILC commentary on Draft Principle 4 explicitly recognizes ancestral lands and sacred areas of indigenous peoples as protected zones.⁵¹ ICCAs fit squarely within this environment-culture linkage, but do privately protected areas or nationally designated areas without indigenous cultural value? Many nationally gazetted or privately protected areas emphasize ecological values; their social interests may have more to do with permanent sovereignty over natural resources, aesthetic and recreational values, or financial benefits. Is that

⁴⁸ International Union for the Conservation of Nature, ‘A Global Standard for the Identification of Key Biodiversity Areas’ (2016), vi, available at <https://portals.iucn.org/library/node/46259> (last visited 18 March 2020).

⁴⁹ *Report of the International Law Commission to the Sixty-Eighth Session*, *supra* note 16, 324; *Report of the International Law Commission to the Seventy-First Session*, *supra* note 4, 222-223; Special Rapporteur M. G. Jacobsson, *Second Report on the Protection of the Environment in Relation to Armed Conflicts*, UN Doc A/CN.4/685, 28 May 2015, 69-70; UN Environment World Conservation Monitoring Centre & International Union for Conservation of Nature, ‘Protected Planet Report’ (2019), available at <https://livereport.protectedplanet.net> (last visited 18 March 2020).

⁵⁰ S. T. Garnett *et al.*, ‘A Spatial Overview of the Global Importance of Indigenous Lands for Conservation’, 1 *Nature Sustainability* (2018) 7, 369, 369-370; Indigenous and Community Conserved Areas Registry, ‘ICCA Registry’ (2020), available at www.iccaregistry.org (last visited 18 March 2020); H. Jonas *et al.*, ‘New Steps of Change: Looking Beyond Protected Areas to Consider Other Effective Area Based Conservation Measures’, 20 *PARKS* (2014) 2, 111, 112-114; S. Stolton, K. H. Redford & N. Dudley, *The Futures of Privately Protected Areas* (2014), 21-23.

⁵¹ *Report of the International Law Commission to the Seventy-First Session*, *supra* note 4, 223.

the cultural importance envisioned by the ILC? Does its ecological importance to humans amount to cultural value? ILC comments refer to the inherent connection between environmental and cultural importance recognized in international agreements (e.g., Convention on Biological Diversity, World Heritage Convention), meaning the nature of cultural value (e.g., economic vs. ancestral) may not be important for the designation of protected zones, but this is unclear.⁵²

In the interest of protecting all PAs all the time, all *de jure* or *de facto* protected or conserved areas ought to be, by default, protected zones in relation to armed conflict. Clearly, certain authorities have deemed them important enough to delineate them for the purposes of conservation and these protections should be respected and upheld against the negative impacts of armed conflict. It could otherwise be confusing for parties to armed conflict to distinguish between PAs that are protected zones and those that are not. Ignorance would be an unfortunate excuse for wartime destruction. Blanket recognition of all PAs as protected zones can also prevent confusion regarding nuances in PA designation and avoid hierarchies of environmental and cultural importance, which can be very subjective. Future comments on the Draft Principles should also address the status of international jurisdictions, which are also supposed to be devoted to peaceful uses (e.g., high seas and the poles).⁵³

The distinction between a protected zone (Draft Principle 4), a protected zone protected *in bello* (Draft Principle 17), and the generally protected environment (Draft Principle 13) is important because it connotes different levels of protection for nature in relation to armed conflict. General protection of the environment expressed in Draft Principle 13 declares that “[n]o part of the natural environment may be attacked, unless it has become a military objective” but protected zones potentially go further by stating that they “[...] shall be protected against any attack [...]”. This signals a responsibility to protect, not just a duty to refrain. ILC comment on Draft Principle 17 states that the designation of a protected zone serves to enhance protection offered in Draft Principle 13, affirming a higher duty for protected zones.⁵⁴

Like PAs, not all protected zones are created equal. In fact, Draft Principle 17’s *in bello* enhanced protection of protected zones only applies to areas that

⁵² *Ibid.*, 221-224.

⁵³ *The Antarctic Treaty*, 1 December 1959, Preamble, Art. 1, 402 UNTS 71; *United Nations Convention on the Law of the Sea*, 10 December 1982, Preamble, Art. 141 & 301, 1833 UNTS 397.

⁵⁴ *Ibid.*, 260.

have been designated by agreement, even though Draft Principle 4 says that protected zones can be designated by agreement *or* otherwise.⁵⁵ This makes protected zones established by agreement, broadly interpreted to include “[...] mutual as well as unilateral declarations accepted by the other party, treaties and other types of agreements, as well as agreements with non-State actors [...]” particularly important.⁵⁶ TBPA’s designated by cross-border agreements between State parties should fall within this remit, but the Draft Principles and their comments do not clarify how the designation should be stipulated. If the existence of an international agreement alone is sufficient for *in bello* protection, are States prepared to take on active protection of these zones during armed conflict? Will existing TBPA’s be grandfathered in, even if this kind of protection was not envisioned at the time of agreement? Ongoing armed conflicts in TBPA’s with international agreements indicate that agreements alone are not enough.

III. Holes in the Armor: Protection During Armed Conflict

As is common in international law and humanitarian law, the ILC Draft Principles rely heavily on the good behavior and *promise-keeping* of State parties (*pacta sunt servanda*). This can become problematic in at least two contexts: indigenous territories and TBPA’s. Paragraph 6 of the 2019 ILC comments on Draft Principle 5 notes that States should ensure that military activities do not take place within indigenous territories and they can do so by designating them as protected zones.⁵⁷ This ignores the self-determination of indigenous peoples by calling on States to designate indigenous territories as protected zones. ILC commentary to Draft Principle 4 notes that protected zone agreements can be with non-State actors or through an international organization, but this implies that a State must be party and/or relegates the representative institutions of indigenous nations to the categories of non-State actors or international organizations, which demeans indigenous sovereignty.⁵⁸

Asking States to take appropriate measures in consultation and cooperation with indigenous peoples, through their own leadership and representative structures, assumes rather naively that all States recognize the existence,

⁵⁵ ILC, *Protection of the Environment in Relation to Armed Conflicts, Text and Titles of the Draft Principles Provisionally Adopted by the Drafting Committee on First Reading*, *supra* note 3, Draft Principle 4[I-(x), 5].

⁵⁶ *Report of the International Law Commission to the Seventy-First Session*, *supra* note 4, 260, Draft Principle 17 (1).

⁵⁷ *Ibid.*, 226.

⁵⁸ *Ibid.*, 222.

authority, and territories of all indigenous peoples in the world.⁵⁹ Requiring States and other wartime actors (e.g., private security forces) to recognize and protect indigenous territories *in bello*, when priorities of national security and military necessity dominate, may be asking too much. It can also aggravate conflicts around competing systems of indigenous leadership and representation (e.g., State-determined tribal representation vs. traditional governance systems of indigenous peoples). As the Kidepo case study will indicate, indigenous and traditional communities can be effective in protecting natural environments and resolving conflicts. Conflict sensitivity and resilience requires that this potential not be undermined through the dilution of indigenous sovereignty or self-determined representation.

The protection of TBPA's *in bello* is precarious for other reasons. Waisová's article on "Environmental cooperation as instrument of conflict transformation in conflict-prone areas" and a survey of TBPA practitioners I conducted in 2017 emphasize the challenges of sustaining transboundary cooperation in times of armed conflict.⁶⁰ As TBPA agreements give no indication that they do not apply during armed conflicts, breakdowns in cross-border conservation could result in material breaches of the agreements upon which a TBPA's protected zone status resides.⁶¹ The same could be said for the cessation of conservation activities due to the occupation of a portion of the PA by security forces.⁶² ILC comments to Draft Principle 17 specifically state that military presence would cause *in bello* protections to cease.⁶³ The ease with which Draft Principle 17's protection could fall away is troubling for TBPA's, which often draw on military support during times of insecurity or are managed by paramilitary ranger forces.

Cooperation typically underpins international designation of PAs and TBPA's, yet the ILC Draft Principles' only mentions of cooperation are:

⁵⁹ ILC, *Protection of the Environment in Relation to Armed Conflicts, Text and Titles of the Draft Principles Provisionally Adopted by the Drafting Committee on First Reading*, *supra* note 3, Draft Principle 5.

⁶⁰ Waisová, 'Environmental Cooperation as Instrument of Conflict Transformation in Conflict-Prone Areas', *supra* note 17, 105-126.

⁶¹ Based on the author's 2017 review of 56 TBPA agreements. Hsiao, *Protecting Places for Nature, People, and Peace: A Critical Socio-Legal Review of Transboundary Conservation Areas*, *supra* note 8, 121-187.

⁶² *Report of the International Law Commission to the Seventy-First Session*, *supra* note 4, 260.

⁶³ *Ibid.*

1. Draft Principle 5: States to cooperate with indigenous peoples' leadership and representative institutions regarding protection or remediation of indigenous territories;
2. Draft Principle 24: States or international organisation to cooperate in good faith in sharing or granting access to information vital to national defense or security;
3. Draft Principle 25: cooperation among relevant actors on post-conflict environmental assessments and remedial measures; and
4. Draft Principle 28: States and relevant international organizations to cooperate in ensuring remnants of war at sea do not endanger the environment.⁶⁴

These Draft Principles potentially miss the diverse network of cooperation required to sustain conservation *in bello*; for example, humanitarian and development organizations, as well as traditional and faith-based leaders. It also does not identify the legal responsibilities of States engaging with non-State or non-military State actors, including armed groups and paramilitary ranger forces operating in PAs. In places like the Greater Virunga Landscape and Kidepo Landscape, complex relations between State and non-State armed groups require extreme conflict sensitivity and unconventional approaches to conservation.

It is well known amongst local conservationists that, in 2008, when Laurent Nkunda's rebel group, the Congrès National pour la Defense du Peuple (CNDP), took over the Mikeno sector of Virunga National Park on the Congo-side of the Greater Virunga Landscape, they continued mountain gorilla conservation and even tourism.⁶⁵ At the end of 2018, exiled park management (technically contracted to an NGO) negotiated with Nkunda and his forces to allow rangers to return to the area.⁶⁶ If this would have constituted an international armed conflict, these responsibilities may fall under Draft Principle 20 on Occupying

⁶⁴ ILC, *Protection of the Environment in Relation to Armed Conflicts, Text and Titles of the Draft Principles Provisionally Adopted by the Drafting Committee on First Reading*, *supra* note 3, Draft Principles 5 [6], 24 [18], 25 [15] & 28 [17].

⁶⁵ Based on anonymous interviews during field research in 2010-2011 and 2016-2017.; H. Thomas & G. Nienaber, 'Interview with General Laurent Nkunda' (2009), available at <https://www.youtube.com/watch?v=K9tiu-lig58&feature=related> (last visited 18 March 2020).

⁶⁶ N.N., 'Gorilla Warfare', *The Sydney Morning Herald* (4 January 2009), available at <https://www.smh.com.au/world/gorilla-warfare-20090104-gdt8lz.html> (last visited 18 March 2020).

Powers, but that does not consider relations between NGOs, rangers, and rebels, which delicately negotiated the future of critically endangered mountain gorillas. In other parts of the Virunga, local communities negotiate rights of access and use of natural resources with armed groups (e.g., Mai Mai militias regulating fisheries in Lake Edward) in order to sustain livelihoods.⁶⁷ These negotiated agreements are critical to the well-being of species and habitats during armed conflict, but it is uncertain where they sit within the ILC Draft Principles, in particular given that this concerns a non-international armed conflict. Generally, there is little guidance on conservation partnerships with armed forces, both in capacity-building/training and in law or policy, including TBPA agreements.⁶⁸

Lack of diverse agency in conservation *in bello* can undermine conservation objectives, play into social conflicts and criticisms deriving from the exclusive nature of PAs (especially where a history of PA-induced displacement or disenfranchisement remains unreconciled), and displaces indigenous self-determination and/or endogenous approaches to conflict resolution and peacebuilding. As the two case studies will demonstrate, these are key considerations for conflict resilient, conflict sensitive, and conflict-transformative conservation in places of armed conflict.

C. Transboundary Conservation in Africa's Great Rift Valley

When the IUCN first proposed a definition of Parks for Peace, it considered these places a “[...] particular sub-set of protected areas where there is a clear biodiversity objective, a clear peace objective *and* co-operation between at least two countries or sub-national jurisdictions”.⁶⁹ The updated definition refers to Parks for Peace as a “[...] special designation [...] dedicated to the promotion, celebration and/or commemoration of peace and cooperation”.⁷⁰ This effectively transforms peace from a clear objective of transboundary conservation to a symbolic designation. Perhaps this retreat from a stronger position on TBPAs

⁶⁷ E. C. Hsiao, ‘Interview with Congolese Conservationist, Goma 16 Feb 2017’ (2017).

⁶⁸ L. Braack *et al.*, *Security Considerations in the Planning and Management of Transboundary Conservation Areas* (2006), 5, available at <http://www.tbpa.net/docs/pdfs/Securityconsiderationsintransboundary.pdf> (last visited 18 March 2020).

⁶⁹ T. Sandwith *et al.*, *Transboundary Protected Areas for Peace and Co-Operation* (2001), 4, available at http://web.bf.uni-lj.si/students/vnd/knjiznica/Skoberne_literatura/gradiva/zavarovana_obmocja/IUCN_TBPA.pdf (last visited 18 March 2020).

⁷⁰ Vasilijević *et al.*, *Transboundary Conservation: A Systematic and Integrated Approach*, *supra* note 6, 14.

and peace is related to lack of evidence that TBPA's can and are impacting positively on peace and conflict in violent borderlands.⁷¹ This section looks at how two TBPA's address conflicts with a common vision towards regional peace. The case studies illustrate the challenges and needs of sustained transboundary cooperation, an act which can protect the status of PAs involved and ideally supports broader peacebuilding. At the end of the day, *de facto* protection of PAs *in bello* is more important than *de jure* protected zone status, but the hope is that *de jure* protected zones will lead to effective *de facto* protection *in bello*.

I. Notes on Methodology of Field Research

The case studies that follow provide a brief description of the bioregion, a simplified landscape of conflict issues, a history of transboundary collaboration, and an overview of the legal frameworks. All of the interviews cited were conducted in both the Greater Virunga Landscape and Kidepo Landscape, primarily between December 2016 and May 2017. The Kidepo Landscape is actually one of four sub-TBPA's that constitute the Landscapes for Peace initiative between South Sudan and Uganda. Due to time and resource constraints, visits to other parts of the Landscapes for Peace were restricted and, due to insecurity in South Sudan, only Kidepo Valley National Park (Uganda) of the Kidepo Landscape was covered. More field time was spent in the Greater Virunga Landscape, where transboundary collaboration is more active than in Kidepo Valley National Park (NP).⁷²

Field research was based on observation and semi-informal interviews with PA managers and staff, namely in the Law Enforcement, Community Conservation, and Research and Monitoring departments. Other interviewed stakeholders include security officers (military, police, intelligence), local government representatives (village-level and district-level), NGOs engaged in transboundary activities, academics, and Community-Based Organizations (CBOs). The Greater Virunga Transboundary Collaboration (GVTC) Executive Secretariat was very helpful in providing a number of contacts and access to transboundary meetings.

⁷¹ Barquet, Lujala & Rød, 'Transboundary Conservation and Militarized Interstate Disputes', *supra* note 19; Hsiao, 'Missing Peace: Why Transboundary Conservation Areas Are Not Resolving Conflicts', *supra* note 7; Waisová, 'Environmental Cooperation as Instrument of Conflict Transformation in Conflict-Prone Areas', *supra* note 17, 105-126.

⁷² E. C. Hsiao, 'Interview with WCS Uganda, Country Director, Kampala, Uganda, 7 December 2016' (2016); A. J. Plumptre, 'E-Mail from Andy Plumptre, WCS Albertine Rift Programme' (2016).

Communities that were bordering both the TBPA and international boundary were visited for a better understanding of cross-border social dynamics and conflicts, and to identify traditional conflict resolution mechanisms. In PA communities, the Community Conservation Wardens served as liaisons to other interviewees, providing contacts and sometimes coordinating meetings, which when needed were translated on-site by a Community Conservation Ranger. Interviews involving local languages were transcribed but not translated due to resource limitations. The implications are that my understanding of interviewee responses is based entirely on rangers' translations during the time of interview and may be misinterpreted or biased, especially given the influence of a ranger's presence on interviewees' comfort or willingness to speak freely. As much as possible, information is further confirmed through secondary literature, media publications, or other interviews.

II. Major Ecological and Cultural Importance

The Great Rift Valley encompasses the West (Albertine) Rift Valley and East (Kenya/Gregory) Rift Valley.⁷³ In the heart of the Albertine Rift is the Greater Virunga Landscape between DRC, Rwanda, and Uganda. In the heart of the Gregory Rift is the series of smaller TBPA or Landscapes for Peace between South Sudan and Uganda. One of these is the Kidepo Landscape, which also sits near the border of northern Kenya. Africa's Great Rift Valley is a key region to highlight for a number of reasons. Naturally, it is one of the most biodiverse regions of the world and, in terms of violence and conflict, possibly one of the most threatened.⁷⁴ It is considered a biodiversity hotspot and hosts numerous key biodiversity areas, as well as World Heritage Sites (Bwindi Impenetrable, Rwenzori Mountains, and Virunga National Parks).⁷⁵ Most of its PAs are marked by porous borders where species, including people, move back and forth somewhat regardless of where military and customs posts are located.

⁷³ A. Seimon & A. J. Plumptre, 'Albertine Rift, Africa', in J. A. Hilty, C. C. Chester & M. S. Cross (eds), *Climate and Conservation: Landscape and Seascape Science, Planning and Action* (2012), 33, 33.

⁷⁴ K. Omeje & T. Redeker Hepner, 'Introduction', in K. Omeje & T. Redeker Hepner (eds), *Conflict and Peacebuilding in the African Great Lakes Region* (2013), 1; A. Plumptre *et al.*, 'The Biodiversity of the Albertine Rift', 3 *Albertine Rift Technical Reports* (2003), 102-103.

⁷⁵ Greater Virunga Transboundary Collaboration, *Transboundary Collaboration in the Greater Virunga Landscape Protected Area Network: Transboundary Strategic Plan 2013-2018* (2014), available at http://www.greatervirunga.org/IMG/pdf/transboundary_strategic_plan_2feb16.pdf (last visited 18 March 2020); Plumptre *et al.*, 'The Biodiversity of the Albertine Rift' *supra* note 74, Preface.

The Greater Virunga Landscape was divided by the British and Belgians at the 1894 Conference of Berlin between DRC, Rwanda, and Uganda.⁷⁶ The peak of Mount Sabinyo marks the trinational jurisdictions of the Virunga Massif. This water tower hosts over 400 endemic species and at least 70 threatened species in one of the world's most resource rich landscapes, featuring oil and gas reserves, precious metals (e.g., gold, rare earth, coltan), and fertile agricultural land.⁷⁷ The Landscapes for Peace appear as four islands straddling a border infamous for its stories of violence, famine, and child soldiers.⁷⁸ It hosts some of the last remaining natural woodland patches and important wetlands for human and other populations.⁷⁹ Nimule funnels the White Nile River, tracing back to Lakes Albert and Victoria, while the Imatong and Didinga Mountains form a watershed between the Nile and Congo river systems.⁸⁰ Kidepo Valley, specifically, is an attractive wildlife destination because the Narus Valley provides a perennial water source and open gathering space for a diversity of species.⁸¹

III. Armed Conflicts in the TBPA's

The socio-political context of the Greater Virunga Landscape and Kidepo Landscape are complex and vary from village to village, as well as from landscape to landscape, but they share at least a few common factors: (1) ongoing armed conflicts impacting PAs; (2) transboundary agreements that address armed conflicts and environmental peacebuilding; and (3) human populations characterized by natural resource-dependent subsistence livelihoods

⁷⁶ I. Griffiths, 'The Scramble for Africa: Inherited Political Boundaries', 152 *The Geographic Journal* (1986) 2, 204, 204.

⁷⁷ Plumptre *et al.*, 'The Biodiversity of the Albertine Rift', *supra* note 74, 25; W. Okumu, 'Resources and Border Disputes in Eastern Africa', 4 *Journal of Eastern African Studies* (2010) 2, 279, 279-297.

⁷⁸ M. Fekadu Mulugeta, 'Small Arms and Conflict among East African Pastoralists: The Karamoja (In)Security Complex', 87 *Africa* (2017) 4, 739, 741; *Memorandum of Understanding Between the Government of Southern Sudan and the Government of Uganda On the Management of Transboundary Conservation Landscapes for Peace*, 5 March 2007 (on file with author); B. Knighton, 'Belief in Guns and Warlords: Freeing Karamojong Identity From Africanist Theory', 4 *African Identities* (2006) 2, 269, 269-271.

⁷⁹ United Nations Development Programme, *Launching Protected Area Network Management and Building Capacity in Post-Conflict Southern Sudan*, July 2010, ii.

⁸⁰ *Ibid.*, 7.

⁸¹ Uganda Wildlife Authority, 'Kidepo Valley National Park: Park at a Glance' (2018), available at <http://ugandawildlife.org/explore-our-parks/parks-by-name-a-z/kidepo-valley-national-park> (last visited 18 March 2020).

and economic poverty, and deemed a threat to PAs and peace.⁸² As two separate landscapes, they have long been connected through regional politics as well as ancient wildlife and transhumance migrations. In some places, ethnic groups share relations across borders (e.g., the Bakonzo and Banyarwanda); in others, they inter-raid (e.g., Karamojong, Dading'a, Jie, and Dodoth between South Sudan and Uganda).⁸³

Many of the TBPA-adjacent communities share a story of conservation induced displacement as colonial administrators gazetted forest, hunting, and wildlife reserves and independent post-colonial States asserted permanent sovereignty over natural resources through paramilitary institutionalization of reserves turned national parks.⁸⁴ At times, contingents of formerly displaced local identity-based groups have occupied or *encroached* PA lands and resources in direct conflict with central governments or PA authorities. For example, the Allied Democratic Forces – National Army for the Liberation of Uganda (ADF-NALU) rebel forces, who took over the Rwenzori Mountains and trafficked minerals and ivory amongst other illicit goods.⁸⁵ The ADF-NALU were allegedly

⁸² Greater Virunga Transboundary Collaboration, 'Greater Virunga Landscape Annual Conservation Status Report 2015' (2017), 8-12; A. Plumpre *et al.*, 'The Socio-Economic Status of People Living Near Protected Areas in the Central Albertine Rift', 4 *Albertine Rift Technical Reports* (2004), 132; United Nations Development Programme, *Launching Protected Area Network Management and Building Capacity in Post-Conflict Southern Sudan*, *supra* note 79.

⁸³ J. Leff, 'Pastoralists at War: Violence and Security in the Kenya-Sudan-Uganda Border Region', 3 *International Journal of Conflict and Violence* (2009) 2, 188, 190; G. Prunier, *From Genocide to Continental War: The 'Congolese' Conflict and the Crisis of Contemporary Africa* (2011), 82-83.

⁸⁴ D. Hart-Davis, 'Let Us Never Go the Way of the Ik', *The Independent* (20 August 1994), available at <http://www.independent.co.uk/voices/country-matters-let-us-never-go-the-way-of-the-ik-1384655.html> (last visited 18 March 2020); M. Matovu, 'Land Injustice for the Basongora', *Minority Voices Newsroom*, 20 June 2012, available at <http://www.minorityvoices.org/news.php?action=view&id=1140> (last visited 18 March 2020); L. A. Young & K. Sing'Oei, 'Land, Livelihoods and Identities: Inter-Community Conflicts in East Africa' (2011), 48, available at <http://minorityrights.org/wp-content/uploads/old-site-downloads/download-1076-Land-livelihoods-and-identities-Inter-community-conflicts-in-East-Africa.pdf> (last visited 18 March 2020).

⁸⁵ S. Hege *et al.*, *Letter Dated 12 October 2012 from the Group of Experts on the Democratic Republic of the Congo Addressed to the Chairman of the Security Council Committee Established Pursuant to Resolution 1533 (2004) Concerning the Democratic Republic of the Congo*, UN Doc S/2012/843, 15 November 2012, 44, 23; K. Hoffman, 'Myths Set in Motion: The Moral Economy of Mai Mai Governance', in A. Arjona, N. Kasfir & Z. Mampilly (eds), *Rebel Governance in Civil War* (2015), 158, 163; K. Hoffman, K. Vlassenroot & G. Marchais, 'Taxation, Stateness and Armed Groups: Public Authority and Resource

recruited by President Mobutu (DRC) to destabilize the Ugandan border and, while taking refuge in the DRC, liaised with Sudanese intelligence and security forces supplying Hutu militia or genocidaires in Rwanda.⁸⁶ The Hutu genocidaires, often known as Interhamwe or the Democratic Forces for the Liberation of Rwanda (FDLR), are still cited by villagers and security personnel in the Greater Virunga as a threat to security and peace.⁸⁷

Other ethnically-identified militias also engage in poaching, resource trafficking, and armed conflicts, including with PA authorities.⁸⁸ The Mai-Mai, for example, occupy the central sector of Virunga National Park and largely derive their income from local communities in the territories they control.⁸⁹ The name Mai-Mai refers to “[...] resistance fighters who are invincible [...]” and many of them “[...] are formed on an ethnic basis to protect their communities from ‘invasion’ or domination by other ethnic groups [...]” but

Extraction in Eastern Congo’, 47 *Development and Change* (2016) 6, 1434, 1441; International Criminal Police Organisation & United Nations Environment, ‘Strategic Report: Environment, Peace and Security - A Convergence of Threats’ (2016), available at https://wedocs.unep.org/bitstream/handle/20.500.11822/17008/environment_peace_security.pdf?sequence=1&isAllowed=y (last visited 18 March 2020); M. Kavira Luneghe, ‘Armed Groups at DRC’s Lake Edward Devastate Fish Stocks, Jobs and Farms’, *Global Press Journal* (6 September 2017), available at <https://globalpressjournal.com/africa/democratic-republic-of-congo/armed-groups-drcs-lake-edward-devastate-fish-stocks-jobs-farms/> (last visited 20 March 2020); J. Kule Bitswande, ‘Kasese – a Tragic Conflict Rooted in Land, One Boy’s Dream and a Family’s Hope’, *The Observer* (3 March 2017), available at <http://allafrica.com/stories/201703030450.html> (last visited 18 March 2020).

⁸⁶ Prunier, *From Genocide to Continental War: The ‘Congolese’ Conflict and the Crisis of Contemporary Africa*, *supra* note 83, 86-87.

⁸⁷ E. C. Hsiao, ‘Interview with Village Leader, Kimitoni Village, 14 February 2017’ (2017); E. C. Hsiao, ‘Interview with FARDC Liaison to Virunga National Park in Rumangabo, Goma 16 February 2017’ (2017); E. C. Hsiao, ‘Interview with Local Leader near Ishasha Sector, Queen Elizabeth NP, 13 April 2017’ (2017); E. C. Hsiao, ‘Interview with Uganda People Defense Force (UPDF) Colonel Seconded to ICGLR EJVM, 24 March 2017’ (2017).

⁸⁸ E. C. Hsiao, ‘Interview with Uganda Security Officer, Goma 24 March 2017’ (2017); D. Howden, ‘Gorilla Warfare: The Battle to Save One of Africa’s Rarest Animals’, *The Independent* (17 October 2009), available at <https://www.independent.co.uk/environment/nature/gorilla-warfare-the-battle-to-save-one-of-africas-rarest-animals-1803193.html> (last visited 18 March 2020); Verweijen & Marijnen, ‘The Counterinsurgency/Conservation Nexus: Guerrilla Livelihoods and the Dynamics of Conflict and Violence in the Virunga National Park, Democratic Republic of the Congo’, *supra* note 21, 13, 15.

⁸⁹ Hsiao, ‘Interview with Village, Kimitoni Village, 14 February 2017’, *supra* note 87.

they are sometimes of mixed identity (i.e., Nande, Hunde, and Nyanga tribes).⁹⁰ It is difficult to say whether they are protecting or extorting their own local communities. Of course, there are numerous Mai-Mai groups, so it is difficult to generalize, but it could be said such uses of armed force represent a very mafia-like strategy that coercively reclaims authority once displaced by conservation. It is this violent relationship between conservation through PAs and armed conflict in the Greater Virunga Landscape that makes conventional State-based PAs management more challenging *in bello*.

The story of conservation induced displacement and resentment towards green-grabbing in the Kidepo Landscape is not too different. After the Ik's traditional lands were gazetted into Kidepo Valley National Park, they settled in a key cattle rustling corridor used by Didinga from the north, Turkana from the east, and Karamojong and Jie from the west. The constant inter-raiding left them without livestock or crops, crippled economic development, and allegedly led the Ik to abandon their sick and elderly during the 1960 famines.⁹¹ Today, the Ik are considered one of the most destitute and marginalized ethnic groups in all of Uganda.⁹²

Luo agriculturalists and agro-pastoral Karamojong sub-groups who populate the Kidepo Landscape similarly found themselves on the wrong side of park borderlines. Many were displaced or abandoned their lands during decades of armed conflict between the Lord's Resistance Army (LRA) and the Uganda People's Defense Force (UPDF). In their absence, UWA undertook land surveys and a boundary demarcation process that was soon challenged.⁹³ When residents returned, they found their communal lands and homesteads converted into a

⁹⁰ E. C. Hsiao, 'Messages with a Congolese Conservationist, 6 July 2018' (2018).

⁹¹ E. C. Hsiao, 'Interview with UWA Community Conservation Warden, Kidepo Valley National Park 18 April 2017' (2017); D. Harmon, 'Cultural Diversity, Human Subsistence, and the National Park Ideal', 9 *Environmental Ethics* (1987) 2, 147, 152-153; Hart-Davis, 'Let Us Never Go the Way of the Ik', *supra* note 84; C. M. Turnbull, *The Mountain People* (1987).

⁹² Forest Peoples Programme, United Organisation for Batwa Development in Uganda & International Work Group for Indigenous Affairs, 'Alternative Report to the Second Periodic Report of Uganda to the African Commission on Human and Peoples' Rights' (2009) 23, available at <http://www.forestpeoples.org/sites/fpp/files/publication/2010/08/ugandaachprsupprepmay09eng.pdf> (last visited 18 March 2020); B. Okiror, 'Ugandan Tribes Face Extinction', *New Vision* (15 November 2008), available at https://www.newvision.co.ug/new_vision/news/1176983/ugandan-tribes-extinction (last visited 18 March 2020).

⁹³ N.N., 'Interview with AWF Programme Officer, Karenga 18 Apr 2017' (2017); M. A. Rugadya & H. Kamusiime, 'Tenure in Mystery: The Status of Land Under Wildlife,

national park.⁹⁴ Rugadya and Kamusiime note that “[...] today the demarcation of the gazetted areas is perceived as land grabbing. Even though it was common knowledge that much of the land in the region was under protected status [...]”.⁹⁵ People knew there was a national park nearby, but did not realize until after its boundaries were signposted that their lands were part of it.

Kidepo locals remain skeptical of conservation activities, fearing they will lose more land and access to essential livelihood resources and rights of pasture. The same skepticism could be applied to the State in general, seeing as how the current status of (negative) peace was secured through multiple extremely violent disarmament campaigns in villages across the Kidepo Landscape.⁹⁶ These complex connections between PAs and armed conflict, as well as local communities and armed groups, require special consideration when designing and undertaking conservation in places of conflict. In order to be conflict resilient, conservation must be conflict sensitive.

IV. Institutionalizing Transboundary Cooperation

The Greater Virunga Landscape began when Belgians designated Albert National Park in 1925 “[...] to protect mountain gorilla populations on the boundary between the colonies of Ruanda-Urundi and the Congo”.⁹⁷ Post-independence, Albert National Park became Virunga National Park in the DRC and Volcanoes National Park in Rwanda. Shortly before that, George Schaller and his protégée Dian Fossey initiated mountain gorilla research in 1959.⁹⁸ In

Forestry and Mining Concessions in Karmoja Region, Uganda’, 17 *Nomadic Peoples* (2013) 1, 33, 40.

⁹⁴ P. Carmody & D. Taylor, ‘Globalization, Land Grabbing, and the Present-Day Colonial State in Uganda: Ecolonization and Its Impacts’, 25 *Journal of Environment & Development* (2016) 1, 100, 114-116.

⁹⁵ Rugadya & Kamusiime, ‘Tenure in Mystery: The Status of Land Under Wildlife, Forestry and Mining Concessions in Karmoja Region, Uganda’, *supra* note 93, 40.

⁹⁶ J. Kerry, ‘The Lord’s Resistance Army Disarmament and Northern Uganda Recovery Act of 2009: Report (to Accompany S. 1067)’, Senate Report No. 2, 15 December 2009; K. Mkutu, ‘Disarmament in Karamoja, Northern Uganda: Is This a Solution for Localised Violent Inter and Intra-Communal Conflict?’, 97 *The Round Table* (2008) 394, 99, 100-116; E. Stites & D. Akabwai, ‘“We Are Now Reduced to Women”: Impacts of Forced Disarmament in Karamoja, Uganda’, 14 *Nomadic Peoples* (2010) 2, 24, 24-30.

⁹⁷ H. van der Linde *et al.*, *Beyond Boundaries: A Bibliography on Transboundary Natural Resource Management in Sub-Saharan Africa* (2001), 3; Vasilijević *et al.*, *Transboundary Conservation: A Systematic and Integrated Approach*, *supra* note 6, 4.

⁹⁸ J. Refisch & J. Jenson, ‘Transboundary Collaboration in the Greater Virunga Landscape: From Gorilla Conservation to Conflict-Sensitive Transboundary Landscape Management’,

1979, a coalition of international NGOs founded the Mountain Gorilla Project, based in Rwanda.⁹⁹ In 1991, they became the International Gorilla Conservation Programme (IGCP).¹⁰⁰

While IGCP and its partners supported transboundary technical meetings in the Virunga Massif, the Wildlife Conservation Society (WCS) observed that PA authorities in DRC and Uganda (the ICCN and UWA respectively) were informally cooperating in the elephant corridors and savannah lands to the north. In 2003, they facilitated a transboundary meeting between PA authorities and local governments in the central and northern sectors of Virunga National Park and adjacent Ugandan national parks.¹⁰¹ These PAs collectively formed the Central Albertine Rift Transfrontier Conservation Area Network under a 2004 trilateral MoU between the three countries' PA authorities.¹⁰² Since then, a paper trail of agreements (see Table below) at increasingly higher levels of government mark a decade of institutional formation and formalization, resulting in the Greater Virunga Transboundary Collaboration (GVTC).

in C. Bruch, C. Muffett & S. S. Nichols (eds), *Governance, Natural Resources, and Post Conflict Peacebuilding* (2016) 825, 5.

⁹⁹ M. Gray & E. Rutagarama, *20 Years of IGCP: Lessons Learned in Mountain Gorilla Conservation* (2011), 5.

¹⁰⁰ Refisch & Jenson, 'Transboundary Collaboration in the Greater Virunga Landscape: From Gorilla Conservation to Conflict-Sensitive Transboundary Landscape Management', *supra* note 98, 5-6.

¹⁰¹ A. J. Plumptre, D. Kujirakwinja & S. Kobusingye, 'Transboundary Collaboration between Virunga Park, Democratic Republic of Congo and Queen Elizabeth, Rwenzori and Semuliki Parks, Uganda: Report of Transboundary Meeting 20-21st June 2003' (2003), 3.

¹⁰² Office Rwandais de Tourisme et des Parcs Nationaux, Uganda Wildlife Authority & Institut Congolais pour la Conservation de la Nature, *Trilateral Memorandum of Understanding between the Office Rwandais de Tourisme et Des Parcs Nationaux the Uganda Wildlife Authority and the Institut Congolais Pour La Conservation de La Nature on the Collaborative Conservation of the Central Albertine Rift Transfrontier Protected Area Network* (2004), available at http://www.tbpa.net/docs/treaties_MOUs/TRILATERAL_Central_Albertine_Rift_MOU_2004-Eng.pdf (last visited 18 March 2020).

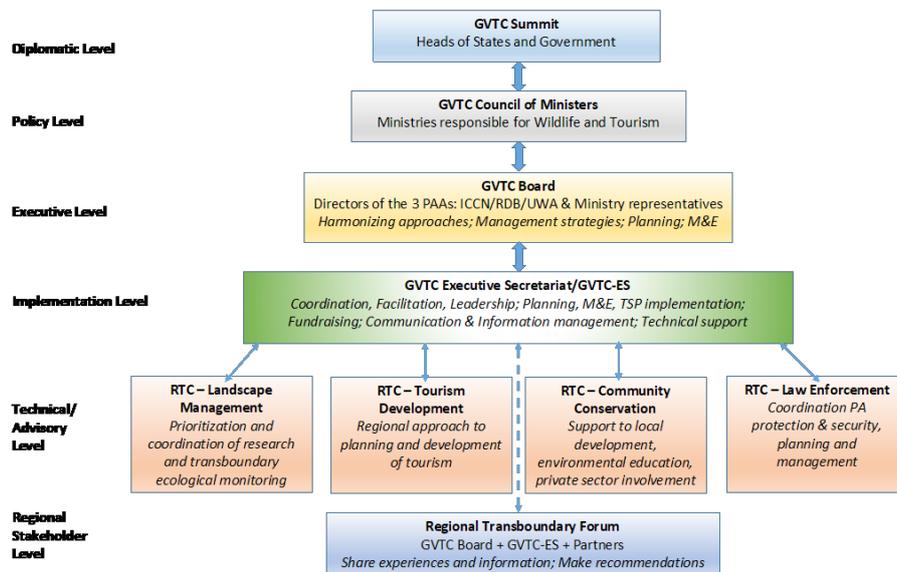
Table of GVTC Framework Agreements¹⁰³:

DATE	AGREEMENT	SHORT TITLE
9 January 2004	Trilateral Memorandum of Understanding between the Office Rwandais de Tourisme et des Parcs Nationaux, the Uganda Wildlife Authority, and the Institut Congolais pour la Conservation de la Nature on the Collaborative Conservation of the Central Albertine Rift Transfrontier Protected Area Network	2004 Trilateral MoU
14 October 2005	Tripartite Ministerial Declaration of Goma on the Transboundary Natural Resources Management of the Transfrontier Protected Area Network of the Greater Virunga landscape	2005 Ministerial Declaration
28 May 2006	Trilateral Memorandum of Understanding between the Uganda Wildlife Authority, <i>UWA</i> , the Office Rwandais de Tourisme et des Parcs Nationaux, <i>ORTPN</i> , and the Institut Congolais Pour La Conservation de la Nature, <i>ICCN</i> , on the Collaborative Monitoring of and Sharing Revenues from Transfrontier Tourism Gorilla Groups	2006 Revenue-Sharing MoU
15 July 2008	The Rubavu Ministerial Declaration for the Greater Virunga Transboundary Collaboration	2008 Rubavu Declaration
6 February 2009	Minute of the Inter-Ministerial Board Relating to the Institutionalization of the Greater Virunga Transboundary Collaboration	2009 Board Minutes
December 2013	Headquarters Agreement between the Government of the Republic of Rwanda and the Greater Virunga Transboundary Collaboration <i>GVTC</i>	2013 Headquarters Agreement
14 May 2014	Memorandum of Understanding between International Conference on the Great Lakes Region (ICGLR) and the Economic Community of the Great Lakes Countries (CEPGL) and Greater Virunga Transboundary Collaboration (GVTC)	2014 MoU between ICGLR, CEPGL, and GVTC

¹⁰³ The respective references can be found in the annex to this article.

DATE	AGREEMENT	SHORT TITLE
30 October 2015	Treaty on the Greater Virunga Transboundary Collaboration on Wildlife Conservation and Tourism Development	2015 GVTC Treaty

GVTC began as a cooperation mechanism among NGO-supported PAs and turned into inter-ministerial cooperation through an inter-ministerial Board, national secondments to a Kigali-based GVTC Executive Secretariat, and spread to other areas of government, including finance, through a revenue-sharing scheme, and security forces. Different levels of institutional alliance allow for cooperation through different channels (see diagram below).



Adapted from GVTC Transboundary Strategic Plan 2013-2018, based on 2015 GVTC Treaty.

Interventions are designed to occur primarily at the Implementation and Technical levels, involving the GVTC Executive Secretariat, PA authorities, and a number of NGO or research organizations that form Regional Technical Committees (RTC). When appropriate, conflict issues may be raised to the GVTC Board, Council, or Summit. This happened when accusations of kidnappings, armed robberies, and military incursions along the contested Sarambwe border plagued Bwindi and Sarambwe National Parks as well as adjacent communities

in Uganda and DRC respectively.¹⁰⁴ A fact-finding mission and meetings between PA authorities, local authorities, and the military were facilitated by GVTC's Executive Secretariat, resulting in improved communication between national armies (FARDC and UPDF) and ameliorated suspicions of military trespass.¹⁰⁵

Transboundary meetings led to Board resolutions calling on relevant Ministers to address border conflicts, not only in Sarambwe but also along other areas of common concern (e.g., Kagezi, Lake Edward) within the Greater Virunga Landscape.¹⁰⁶ Open communication between the national armies also facilitated joint operations with UPDF and UWA on the Uganda-side of Sabinyo when the trinational volcano was occupied by the Congolese rebel group, March 23 Movement (M23), and over 100 alleged rebels were arrested by the UPDF while attempting to cross from refugee camps in Uganda back to DRC through the national park in late January 2017.¹⁰⁷ This demonstrates the environmental peacebuilding potential of transboundary conservation *in bello* and yet it is unclear whether this kind of military involvement constitutes a breach of Draft Principle 17 protected zone status.

Transboundary conservation in the Kidepo Landscape has a much shorter history than in the Greater Virunga Landscape. There was some informal cross-border collaboration when South Sudan was still a part of Sudan, but that is not well-documented and likely ceased during various conflict years. In 2005, a USAID-funded WCS report on "The Impact of Conflict in Northern Uganda on the Environment and Natural Resource Management", identified

¹⁰⁴ A. Meder (ed.), 'Sarambwe Reserve: Current Developments and Threats', 51 *Gorilla Journal* (2015) 9.

¹⁰⁵ E. C. Hsiao, 'Interview with UPDF Brigade Commander, Kihiki April 11, 2017' (2017); J. Byamukama & I. Ochen Ochen, *Sarambwe Habitat Degradation and Other Transboundary International Porous Border Conflicts Threatenin Sustainable Conservation and Tourism Development in Greater Virunga Landscape Between Democratic Republic of Congo and Uganda*, GVTC-Board (2016), iv, 2.

¹⁰⁶ *Ibid.*; Greater Virunga Transboundary Collaboration, 'Round Table on Dialogue Between State Partners of DRC and Uganda on Wildlife Conservation and Development in the Greater Virunga Landscape (Security Group)' (2017) (on file with author and GVTC Secretariat); P. Mateke, S. E. F. Lutaichirwa Mulwahale & G. Muamba Tshibusu, 'Report on the Cross Border Bilateral Meeting Between Ugandan South Western Border Districts of Kisoro, Kanungu, Rukungiri, Rubirizi, Kasese, Bundibugyo and Ntoroko and the North Kivu Province of the Democratic Republic of the Congo' (2017) (on file with author and GVTC Secretariat) 11.

¹⁰⁷ E. C. Hsiao, 'Interview with UWA Chief Warden, Mgahinga Gorilla National Park on April 2017' (2017).

three potential peace parks in the Imatong Massif, Greater Kidepo, and Otzi-Nimule.¹⁰⁸ Between 2007 and 2010, WCS in partnership with UWA conducted aerial surveys to determine what wildlife was left after the war.¹⁰⁹ They found that, with conflict-displaced people moving towards roads, urban centers, and military outposts, vegetation had regenerated and recovered to pre-war conditions over the previous 25 years.¹¹⁰

As part of a broader strategy to rebuild the PA system in South Sudan and integrate them into a post-conflict nation-building and development strategy, WCS supported dialogues between the nascent Government of South Sudan and the Government of Uganda, resulting in the 2007 MoU “On the Management of Transboundary Conservation Landscapes for Peace”.¹¹¹ The 2007 MoU called for the establishment of an Inter-governmental Steering Committee and Site Technical Committees to operationalize the MoU. Transboundary collaboration was to “[...] deliberately support conflict resolution and promote peace and stability in the border areas [...] to establish dialogue, build trust and confidence between our peoples”.¹¹² That same year, South Sudan and Uganda signed a bilateral “Agreement on Technical, Economic, Political, Social and Cultural Cooperation”, indicating that relations between the newly independent State and its southern ally were strong.¹¹³

In 2009, WCS received a USAID grant to implement a transboundary program.¹¹⁴ According to UWA, there were cross-border visits and coordinated patrols up to 2014, but these diminished and became largely one-way visits of the South Sudanese going to Uganda and then none at all.¹¹⁵ In 2014, WCS’

¹⁰⁸ S. Nampindo, G. Picton Phillipps & A. Plumtre, *The Impact of Conflict in Northern Uganda on the Environment and Natural Resource Management* (2005), 42-44.

¹⁰⁹ United Nations Development Programme, *Launching Protected Area Network Management and Building Capacity in Post-Conflict Southern Sudan*, *supra* note 79, ii.

¹¹⁰ Hsiao, ‘Interview with WCS Uganda, Country Director, Kampala, Uganda 7 December 2016’, *supra* note 72.

¹¹¹ *Memorandum of Understanding Between the Government of Southern Sudan and the Government of Uganda On the Management of Transboundary Conservation Landscapes for Peace*, *supra* note 78 (on file with author and the WCS Uganda).

¹¹² *Ibid.*, Art. 3, 9.

¹¹³ Discussed in G. Carrington, *Cross-Border Trade: Fuelling Conflict or Building Peace? An Exploration of Cross-Border Trade Between Sudan and Uganda and the Implications for Peacebuilding* (2009), 14.

¹¹⁴ Hsiao, ‘Interview with WCS Uganda, Country Director, Kampala, Uganda 7 December 2016’, *supra* note 72.

¹¹⁵ Hsiao, ‘Interview with UWA Community Conservation Warden, Kidepo Valley National Park 18 April 2017’, *supra* note 91.

transboundary program funding ended, leaving coordination of cross-border activities to the States. Instead of supporting rangers in the park when armed conflict resurged shortly after, the Sudanese People's Liberation Army (SPLA) took over Kidepo Wildlife Reserve in South Sudan, potentially breaching its protected zone status.¹¹⁶ With peace in northern Uganda, UWA is eager to work with their South Sudanese counterparts in protecting big game species (especially elephants) as they migrate seasonally out of Ugandan protection and into armed conflict zones in the north.¹¹⁷ The Kidepo Valley National Park Law Enforcement Warden remarked that: "We have the will to do it. The other side, they're not in a position to do it, just because of the insecurity that is there."¹¹⁸ The 2007 MoU on Landscapes for Peace could become a well-intentioned corridor of 'paper parks'.

These two case studies highlight important issues regarding the operationalization of *in bello* protection and the fragility of protected zone status, which states will need to consider as they finalize and operationalize the Draft Principles. Both TBPA's constitute areas of major environmental and cultural importance "[...] susceptible to the adverse consequences of hostilities [...]" – exactly the kind of places that should be designated protected zones.¹¹⁹ Both are international PAs designated by agreement(s) that refer specifically to conflict resolution and environmental peacebuilding, and thus should constitute protected zones with "enhanced protection" under Draft Principle 17.¹²⁰ Yet both continue to suffer from armed conflicts. In the Kidepo Landscape, the agreement has stalemated and, in both TBPA's, Draft Principle 17 protection *in bello* could be breached. Thus far, it is uncertain whether the ILC Draft Principles will be able to protect such places from the adverse consequences of armed conflict.

¹¹⁶ *Report of the International Law Commission to the Seventy-First Session, supra* note 4, 260, Draft Principle 17(3).

¹¹⁷ Hsiao, 'Interview with UWA Community Conservation Warden, Kidepo Valley National Park 18 April 2017', *supra* note 91.

¹¹⁸ Hsiao, 'Interview with UWA Law Enforcement Warden, 18 April 2017' (2017).

¹¹⁹ *Report of the International Law Commission to the Seventy-First Session, supra* note 4, 222, Principle 4(3).

¹²⁰ *Ibid.*, 260, Draft Principle 17(2).

D. Lessons in Sustaining Transboundary Conservation in Places of Armed Conflict

After the Rwandan genocide, Plumptre conducted a survey of PA staff who stayed on in Volcanoes National Park and Nyungwe National Park (part of another TBPA on the Burundi-Rwanda border), “[...] despite the loss of all senior staff, the suspension of regular salaries, and threats to their lives”.¹²¹ He identified the following elements as key to sustaining conservation during armed conflict: (1) commitment of junior staff, (2) maintained presence of long-term projects with funding, (3) care for employees (including families of murdered staff), (4) good communication with the capital and safe zones, and (5) education of local communities.¹²² Field research and interviews in the Greater Virunga Landscape and Kidepo Landscape affirm the importance of maintaining activities and projects (which rely on sustained resourcing, both human and material), inclusive partnership (including with and beyond security organs), and education or awareness-raising in local communities, but emphasize that conflict sensitivity must be incorporated across the board. It is not sufficient solely to sustain cooperation if it is aggravating root causes or social conflicts linked to armed conflict.

I. Engaging the Security Sector

One of the great achievements and risks of transboundary conservation is engagement with the security sector. In the Greater Virunga Landscape, cooperation with security organs, ranging from the military to judiciary, has played an increasing role in protecting the constituent PAs from the harmful impacts of armed conflicts in the region. In 2018, a communiqué resulting from a roundtable dialogue facilitated by the GVTC Executive Secretariat on wildlife conservation and development between DRC and Uganda committed to establish a “[...] permanent framework for communication and information sharing between local administrative entities and security authorities [...]” institutionalizing the conservation-security nexus.¹²³

¹²¹ Plumptre, ‘Lessons Learned from On-the-Ground Conservation in Rwanda and the Democratic Republic of the Congo’, *supra* note 5, 69.

¹²² *Ibid.*, 85.

¹²³ S. E. F. Lutaichirwa Mulwahale, H. S. Sekandi & G. Muamba Tshibusu, *Round Table on Dialogue Between State Partners of DRC and Uganda on Wildlife Conservation and Development in the Greater Virunga Landscape (Communique)*, 28 June 2017 (on file with author and GVTC Secretariat).

In the Greater Virunga Landscape, national security cooperation extends to other regional bodies. GVTC's partnership with ICGLR has helped unify security cooperation by facilitating otherwise logistically complicated (and potentially controversial) border crossings of military personnel.¹²⁴ The East African Community (EAC) participated in GVTC efforts towards legal harmonization of wildlife crimes and is in the process of developing a regional wildlife policy that could address illicit activities linked to armed groups in the PAs.¹²⁵ In October 2018, the GVTC Executive Secretariat hosted a conference on peace and security that emphasized the need to strengthen cooperation to address causes and impacts of violent conflict in coordination with the UN and other peace and development programs in the landscape.¹²⁶

During the January 2017 Law Enforcement Regional Technical Committee meeting in Goma that I attended as an observer, the group of military officers, police, customs agents, judiciary, and PA wardens from the three countries determined their first priority is 'Peace and Security' and then proceeded to outline a series of activities along with each of their responsibilities towards securing that common goal.¹²⁷ The Chief Park Warden of Volcanoes National Park (Rwanda) attributed this broadened inclusivity to the signing of the Treaty:

"But, you know, engaging people is the most useful, productive approach and without the treaty you can't achieve it easily, because bringing onboard these institutions is very difficult... the legal framework is very, very important. [...] There's no meeting as wardens without police, without the army, without customs, because... we need them, more than they need us."¹²⁸

¹²⁴ Greater Virunga Transboundary Collaboration, International Conference on the Great Lakes Region & Economic Community of Great Lake Countries, *Memorandum of Understanding Between International Conference on the Great Lakes Region (ICGLR) and the Economic Community of Great Lake Countries (CEPGL) and Greater Virunga Transboundary Collaboration (GVTC)*, 81-103; Hsiao, 'Interview with UPDF Colonel Seconded to ICGLR EJVM, 24 March 2017', *supra* note 87.

¹²⁵ GVTC, *Concept Note on Harmonization of Wildlife Crime Related Policies and Laws in GVL Stakeholders Meeting*, 2017 (on file with author and GVTC Secretariat).

¹²⁶ CGVTC Secretariat, *Coalition Building Conference for Peace and Security and Shared Natural Resources Management in the Greater Virunga Landscape: Concept Note*, 2018 (on file with author and GVTC Secretariat).

¹²⁷ E. C. Hsiao, 'Interview with Chief Park Warden, Volcanoes National Park, Kinigi, Rwanda' (2017).

¹²⁸ *Ibid.*

This provides some attestation to the importance of formalizing mechanisms of inclusion for other stakeholders in transboundary conservation through multilateral agreements and the need for diverse partnerships and security coordination. Conservation-security partnerships in places of armed conflict must be undertaken with great awareness. One researcher describes the European Commission's armament and training of Virunga National Park ranger forces in fulfilment of UNESCO World Heritage Committee decisions as a threat to post-conflict peace.¹²⁹ Duffy and others question whether conservation should be financing more guns in an already violent landscape and speak to fears shared by other academics that *green militarization* undermines just and stable peace.¹³⁰ This is certainly the case when ranger forces are implicated in wildlife crimes or human rights abuses.¹³¹

The danger of *green militarization* in the Greater Virunga Landscape is not just about further antagonizing communities, it is also about 'sleeping with the enemy.' In the Kidepo Landscape, after South Sudanese PA authorities fled, UWA tried to collaborate with the SPLA stationed in and around the park, but the army was not interested in wildlife protection.¹³² They have been linked to ivory and resource trafficking out of the Kidepo Wildlife Reserve, much like how the UN mission in DRC (MONUSCO) was caught trafficking ivory and minerals from Virunga National Park.¹³³ When elements of the UN, the

¹²⁹ B. Sjöstedt, 'Environmental Governance and Peacebuilding as a Joint Enterprise', in *Protecting Nature in Conflicts & Building Peace: Success Stories in Conflicts & Their Aftermath*, Paper Presented to 15th Annual Colloquium of the IUCN Academy of Environmental Law, Cebu, 29 May - 2 June 2017 (2017), 12 (on file with B. Sjöstedt).

¹³⁰ Duffy *et al.*, 'Why We Must Question the Militarisation of Conservation', *supra* note 21.

¹³¹ E. C. Hsiao, 'Interview with Local Leader near Bwindi Impenetrable NP on 16 January 2017' (2017); T. Warren & K. J. M. Baker, 'WWF's Secret War', BuzzFeed News (2019), available at <https://www.buzzfeednews.com/collection/wwfsecretwar> (last visited 19 March 2020).

¹³² J. Delaney & S. Sautner, 'Deep Concern for South Sudan's Natural Resources – an Emerging Illegal Exploitation and Trafficking Crisis', WCS News Release (2 March 2016), available at <https://newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/8603/Deep-Concern-for-South-Sudans-Natural-Resources-an-Emerging-Illegal-Exploitation-and-Trafficking-Crisis.aspx> (last visited 19 March 2020); C. Doki, 'South Sudan's Wildlife Become Casualties Of War and Are Killed to Feed Soldiers and Rebels', Inter Press Service (17 June 2014), available at <http://www.ipsnews.net/2014/06/south-sudans-wildlife-become-casualties-war-killed-feed-soldiers-rebels/> (last visited 19 March 2020).

¹³³ Hsiao, 'Interview with Congolese Conservationist, Goma 16 Feb 2017', *supra* note 67; E. C. Hsiao, 'Interview with UWA Community Conservation Ranger, Kidepo Valley

national armies, or other (security) partners are compromised, engagement must implement safeguards, transparency, accountability, and conflict sensitivity or the credibility of transboundary institution(s) can be sacrificed.¹³⁴ Militarization or military engagement in TBPA's may be necessary to respond to armed groups and ensure conservation *in bello*, but conflict sensitivity and long-term peacebuilding may require alternative approaches.

II. Reaching Out to Other Partners for Conservation

PA authorities are not neutral actors in a landscape. During a border visit in May 2017, I was advised that field interviews with an UWA escort in South Sudan would not be safe given recent arrests by UWA of a number of poachers from border-adjacent villages.¹³⁵ The local Catholic priest suggested that I accompany him instead, as his clerical garb serves as a well-accepted cloak of neutrality on the other side of the border. This comment reiterates the risk of alienation when allying with paramilitary/security forces and highlights the value of working with non-conventional conservation allies to link human and environmental needs during armed conflict.

Without a PA counterpart and little success in partnering with the military in South Sudan, UWA has piggybacked on local peace processes facilitated by the Catholic Diocese.¹³⁶ In May 2017, the Catholic Diocese held a youth dialogue, bringing approximately 50 young people from Birra, Lotukei, and Mening in South Sudan to Karenga, Uganda where the Kidepo Valley National Park headquarters is based.¹³⁷ UWA staff spoke to the youth during this two-day event about the importance of wildlife for post-conflict peace and the benefits of

National Park' (2017).

¹³⁴ H. Dranginis, 'Grand Theft Global: Prosecuting the War Crime of Natural Resource Pillage in the Democratic Republic of the Congo' (2015), 3, 17, available at <http://www.satsentinel.org/sites/default/files/reports/GrandTheftGlobal-PillageReport-Dranginis-Enough-Jan2015.pdf> (last visited 19 March 2020); H. Dranginis, 'The Mafia in the Park: A Charcoal Syndicate Is Threatening Virunga, Africa's Oldest National Park' (2016), 45, available at https://enoughproject.org/files/report_MafiaInThePark_Dranginis_Enough_June2016.pdf (last visited 19 March 2020).

¹³⁵ E. C. Hsiao, 'Communications with UWA Community Conservation Ranger, Kidepo Valley National Park, 18-20 April 2017' (2017).

¹³⁶ E. C. Hsiao, 'Interview with Father Raphael Lobeerei, Kidepo Valley National Park 19 April 2017' (2017).

¹³⁷ Hsiao, 'Interview with UWA Community Conservation Warden, Kidepo Valley National Park 18 April 2017' (2017), *supra* note 91; *Ibid.*

cross-border conservation, and then toured them around the park to witness the revenue potential of abundant wildlife and post-conflict tourism.¹³⁸

Plumptre's study indicates these efforts in environmental education are critical to supporting rangers in continuing their work during armed conflict.¹³⁹ Unfortunately, environmental education and awareness-raising is not contemplated at all in the ILC Draft Principles, nor is it mentioned in most TBPA agreements.¹⁴⁰ In the Greater Virunga Landscape, there is only generic reference to the promotion of biodiversity conservation.¹⁴¹ There is no direction as to the kind of environmental education that can be most meaningful for communities inhabiting these landscapes or more effective towards engaging them in ongoing support for PAs during armed conflict. This non-violent approach to securing PAs *in bello* needs further research.

III. Bottom-up vs. Top-down Approaches to TBPA Design

While internationally designated PAs are encouraged by the ILC Draft Principles, it is worth questioning whether the top-down approach of designation by States or international organizations is conducive to their sustained protection and peacebuilding potential during times of armed conflict. Both the TBPA in this study started with an MoU, but the Greater Virunga Landscape was more of a *bottom-up* approach beginning with PA authorities attempting to formalize support for existing activities on the ground. The Landscapes for Peace MoU between corresponding Ministers of Environment on behalf of their respective governments took a higher-level approach. There are advantages and disadvantages to different levels of entry in TBPA designations. The Greater Virunga approach was deemed appropriate by its early proponents because relations were poor between the central governments.¹⁴² A more *top-down* approach works when relations between higher-levels of government are stronger, as between South

¹³⁸ E. C. Hsiao, 'E-Mails from Kidepo Valley National Park Community Conservation Warden' (2017).

¹³⁹ Plumptre, 'Lessons Learned from On-the-Ground Conservation in Rwanda and the Democratic Republic of the Congo', *supra* note 5, 85.

¹⁴⁰ Hsiao, *Protecting Places for Nature, People, and Peace: A Critical Socio-Legal Review of Transboundary Conservation Areas*, *supra* note 8, 158.

¹⁴¹ Democratic Republic of Congo, Republic of Rwanda and Republic of Uganda, *Greater Virunga Transboundary Collaboration Treaty on Wildlife Conservation and Tourism Development (GVTCT)*, *supra* note 35, Art. 6(1).

¹⁴² A. Martin *et al.*, 'Understanding the Co-Existence of Conflict and Cooperation: Transboundary Ecosystem Management in the Virunga Massif', 48 *Journal of Peace Research* (2011) 5, 621, 626-630.

Sudan and Uganda. As Brock says, “[...] ecological cooperation is a dependent variable that reflects the state of overall relations more than it influences the relations”.¹⁴³

According to John Hanks, the first Chief Executive Officer of the Peace Parks Foundation in Southern Africa, “[...] if you can have this high level of political support, it definitely makes a difference in getting things up and running”.¹⁴⁴ Adding support to Hanks’ observation of the value of high-level collaborations, Schoon notes that, in the Greater Limpopo, “[...] the top-down emergence of the transboundary park has resulted in a high degree of success in the achievement of goals requiring senior government officials and crossing a breadth of governmental ministries [...]”.¹⁴⁵ He also observed that “[...] the bottom-up genesis of a transboundary park results in more collaborative responses at an operational level than a top-down origination”, which in turn, he posits supports greater institutional resilience.¹⁴⁶ In other words, TBPA initiated at a political level are better at dealing with high-level matters and TBPA initiated at the technical level are better at maintaining operations throughout changing circumstances.

Hanks also notes that, once the green light is given by the Heads of State, it is imperative that other levels of government push forward operationalizing cooperation. High-level arrangements may not transfer to operations on the ground though, and this is critical for PAs experiencing armed conflict. In the Landscapes for Peace, initial high-level meetings were held until 2011, but according to WCS, “[...] these did not really quickly translate into real action on the ground, seeing rangers on the other side coming to Uganda or rangers from this side going to the other side [...]”.¹⁴⁷ If transboundary conservation relies only on high-level institutions to cooperate, it can become ineffective *in bello*.

Schoon hypothesizes that institutional design at the outset of collaboration can determine path dependence for institutional resilience, meaning the Landscapes for Peace initiative may have been inappropriately designed. Given the fragility of peace in the region, a more *bottom-up* approach would provide a baseline of operational cooperation that, if bolstered by Plumptre’s suggestions,

¹⁴³ L. Brock, ‘Peace Through Parks: The Environment on the Peace Research Agenda’, 28 *Journal of Peace Research* (1991) 4, 407, 414.

¹⁴⁴ E. C. Hsiao, ‘Interview with John Hanks, First CEO of Peace Parks Foundation’ (2017).

¹⁴⁵ M. Schoon, ‘Governance in Transboundary Conservation: How Institutional Structure and Path Dependence Matter’, 11 *Conservation and Society* (2013) 4, 420, 426.

¹⁴⁶ *Ibid.*, 425.

¹⁴⁷ Hsiao, ‘Interview with WCS Uganda, Country Director, Kampala, Uganda 7 December 2016’, *supra* note 72.

might produce a pathway of greater (conflict) resilience. Alternatively, the Landscapes for Peace initiative could build on a long history of peacemaking and biocultural connectivity by agro-pastoral communities moving across its borders to establish a community-governed TBPA or Transboundary ICCA. In the Kidepo Landscape specifically, this would draw on the authority of non-State actors in the Karenga Community Conservation Area adjacent to Kidepo Valley National Park, where most of the wildlife ranges seasonally and the border is more porous to local communities than it is to UWA staff. Furthermore, despite all their inter-raiding, these communities share common peacemaking practices that endure today.¹⁴⁸

“We try [...] to resolve the clan issues by bringing back the elders together and they talk together. Some Karamojong, they come, they say ‘we are killing ourselves, these things have brought us bad omen.’ So there are some of these places that people have been going for these kind of, what people call *kalongat*. They go there sometimes to pray, to possibly take away some bad happenings within the society.”¹⁴⁹

The cultural authority of elders extends to environmental management:

“Well, in one way or another, in terms of environmental protection, the shrines and the authority of the elders was actually more holding. Look, for example, this area that we are sitting in. This area could be bare by now. There wouldn’t be there any of these trees. It used to be clean, but far back ’95, ’96, ’91, the elders sat and said, [...] ‘We should not cut these trees. Let’s leave them.’ [...] So it was done and that’s why these small things are surviving, otherwise by now we’d have stones rolling because it was really terrible by then. There would be complete erosion.”¹⁵⁰

¹⁴⁸ E. C. Hsiao, ‘Interview with Peter Abach, Local Councilman (LC3), Karenga 19 April 2017’ (2017); Oryema, ‘Communications with UWA Community Conservation Ranger, Kidepo Valley National Park, 18-20 April 2017’.

¹⁴⁹ Hsiao, ‘Interview with Peter Abach, Local Councilman (LC3), Karenga 19 April 2017’, *supra* note 148.

¹⁵⁰ *Ibid.*

According to a local leader, the communities have been maintaining peace dialogues since 1998, developing their own version of the GVTC's multi-level, multi-institutional transboundary structure to draw upon.

“Different actors, we started as local government. We brought up local development partners. We had organizations like the church also contributed, the Catholic Church [...] and many others that I cannot mention, both in South Sudan and here. But we were all trying to mitigate the conflict and we have been able to mitigate at State level with State Ministers, at the county levels with county leadership and at karaal level with karaal leaders. We had all those interventions, even had the youth at the church level and had some exchanges about the youth across the borders.”¹⁵¹

A *greening* of the existing peace dialogues could address root causes of armed conflict, providing an interesting twist on environmental peacebuilding that is typically premised on a converse causal relationship whereby environmental cooperation strengthens human or inter-state relations and dialogue options for peace. The agro-pastoral conflicts of Karamoja are “[...] influenced by climatic variations and consequent drought and food crises [...]”, made worse by environmental degradation deteriorating agricultural productivity.¹⁵² Instead, inter-clan protected zone designations would be a peace process in and of itself, paving the way back to environmental cooperation and socio-ecological well-being. Stemming from the self-determination of indigenous or traditional systems, it should create a greater sense of ownership and thus enhance local efforts to protect protected zones from armed conflict.

TBPA agreements are rarely negotiated between or with non-state partners. A few exceptions are: (1) the Bjeshkët e Namuna/Prokletije Mountains TBPA between Albania and Montenegro, which is a cooperation between Local Action Groups; (2) the Balkan Transboundary Peace Park initiative between Albania, Montenegro, and Kosovo, which is represented by a coalition of civil society and local authorities; and (3) the Nawt-sa-Maat Alliance for the Salish Seas between

¹⁵¹ *Ibid.*

¹⁵² L. MacOpiyo, *Pastoralists' Livelihoods in the Kidepo Valley Area of Northern Uganda: A Desk Review of the Prevailing Livelihood Strategies Development Environment and State of Resource Management in the Kidepo Valley Area and Its Environment* (2011), 22.

Canada and the US by an alliance of First Nations.¹⁵³ It is more common for PAs authorities, who are signatories to TBPA agreements, to sign subsequent MoUs with community organizations or groups for resource-use, PA access, human-wildlife conflict interventions, etc. In the Kidepo Landscape, UWA could enter into MoUs with local leaders and partners to formalize existing transboundary peace processes under the Intergovernmental Steering Committee and Site Technical Committees called for by the 2007 MoU.¹⁵⁴ This would revitalize the existing transboundary agreement, operationalize functional systems of environmental peacebuilding, and potentially recalibrate the institutional pathway for conflict resilience. These endogenous processes may prove more effective for environmental protection in times of armed conflict, making non-State designations of protected zones especially important under the ILC Draft Principles.

Community approaches have their advantages. Research in Nepal has shown that strong community governance of natural resources improves both community resistance and forest resilience to occupation by armed insurgents.¹⁵⁵ In contrast, green militarization risks breaching Draft Principle 17's *in bello* protection. Although GVTC's partnership with ICGLR and CEPGL institutes a multi-prong approach to peace, through traditional security and economic development, respectively, the economic approach to peace or liberal peace has its critics, as do neoliberal approaches to conservation.¹⁵⁶ These case studies

¹⁵³ Local Action Group (LAG) of Albania and LAG of Montenegro, *Memorandum of Understanding Between The Local Action Group (LAG) of Albania and The Local Action Group (LAG) of Montenegro Concerning Cooperation in Environmental Protection, Tourism, Recreation and Sustainable Development in the Territories of the Two Communities Either Side of the International Border between Albania and Montenegro in the Bjeshkët e Namunal Prokletije Mountains, and Local Authorities of Municipalities/Districts of Shkodra, Bajram Curri, Plava, Rozaje, Peja and Decani, Letter of Good Intent for Cross-Border Local Authorities of Albania, Montenegro and Kosov'*, 15 November 2006, available at https://www.iucn.org/sites/dev/files/import/downloads/lags_alb_mne_mou.pdf (last visited 16 April 2020); *International Treaty to Protect the Salish Sea*, 21 September 2014.

¹⁵⁴ *Memorandum of Understanding Between the Government of Southern Sudan and the Government of Uganda On the Management of Transboundary Conservation Landscapes for Peace* (on file with author and WCS Uganda), *supra* note 78, Art. 3.

¹⁵⁵ N. Baral, *Institutional Resilience of Community-Based Conservation to the Maoist Insurgency in Nepal* (2009) 103; B. K. Karna, G. P. Shivakoti & E. L. Webb, 'Resilience of Community Forestry under Conditions of Armed Conflict in Nepal', 37 *Environmental Conservation* (2010) 2, 201-209.

¹⁵⁶ B. Büscher, *Transforming the Frontier: Peace Parks and the Politics of Neoliberal Conservation in Southern Africa* (2013) 17, 28-31; C. F. Gelpi & J. M. Grieco, 'Democracy, Interdependence, and the Sources of the Liberal Peace', 45 *Journal of Peace Research* (2008)

emphasize the importance of conflict sensitivity for conflict resilience. It is critical to support what works on the ground, including traditional and indigenous institutions and peace processes that offer non-coercive alternatives.

E. Conclusion

The Greater Virunga Landscape and Kidepo Landscape are unique and intertwined in many ways. Their experiences in developing legal frameworks for transboundary conservation and institutionalizing cross-border cooperation amidst armed conflict provide a number of lessons as well as questions. On Uganda's western border, expanding partnerships, including with the security sector, have facilitated *in bello* conservation in the Greater Virunga Landscape. The growing population of mountain gorillas is considered an indicator of its success.¹⁵⁷ On Uganda's northern border, armed conflict and lack of resources has hindered intergovernmental cooperation in the Kidepo Landscape, so more endogenous alternatives have emerged. Ongoing peace dialogues between traditional communities hosted by a faith-based institution provide an opportunity to reformulate transboundary institutional design in keeping with its original transboundary agreement.

Where armed conflict plagues TBPA, it is important to sustain PA-level support designed for conflict resilience and conflict sensitivity, and then to recognize these collaborations through agreements that provide longer-term stability to their ongoing efforts. It is especially critical for PA authorities to engage existing peace mechanisms and actors (whether security forces or cultural leaders) so that TBPA can experience enhanced protection during armed conflict. Engagement with the security sector or even armed groups may be necessary but needs to be sensitive of any contribution to violent conflict, long-standing injustices, or human rights violations. It is also critical that military activities in PAs do not breach Draft Principle 17 protected zone status. The ILC Draft Principles should clarify rules of engagement with armed groups and how protected zones should be protected under occupation, without stripping away *in bello* protection. It is exactly these kinds of PAs that most require protection in relation to armed conflict and this may require interaction with armed groups.

1, 17; See for an in-depth discussion, N. Heynen *et al.* (eds), *Neoliberal Environments: False Promises and Unnatural Consequences* (2007).

¹⁵⁷ J. R. Hickey *et al.*, 'Bwindi-Sarambwe 2018 Surveys: Monitoring Mountain Gorillas, Other Select Mammals, and Human Activities' (2019), 5, available at http://igcp.org/wp-content/uploads/Bwindi-Sarambwe-2018-Final-Report-2019_12_15.pdf (last visited 19 March 2020).

An alternative to militarization is increasing local participation. While cooperation between PA authorities in the Greater Virunga Landscape was initially the backbone of cross-border conservation, it is their alliance with other actors, especially NGOs and regional institutions, that enables their persistence in the landscape. In the case of Kidepo, other partners means traditional leaders or elders and religious groups. It is not clear whether such actors (including indigenous peoples) acting alone can designate protected zones and, as a norm of practice, they rarely participate in TBPA agreements as signatories. Instead, they can be brought in through inter-institutional agreements or as members of transboundary institutions. This puts environmental governance in the hands of local actors with a direct stake in the armed conflict impacting the TBPA. It also commits more stakeholders to the protection of PAs *in bello*.

Protecting PAs *in bello* provides some reprieve for conflict-afflicted wildlife in violent borderlands and migratory corridors that span States. When transboundary collaboration was difficult in the Greater Virunga Landscape due to insecurity, a wildlife refuge was the best that the PA authorities could try to maintain.¹⁵⁸ This illustrates the importance of protected zones for the protection of natural environments in relation to armed conflict. The ILC Draft Principles provide for protected zones of major environmental and cultural importance. This includes, *inter alia*, World Heritage Sites, some nationally designated PAs, and internationally protected areas or TBPAs. For TBPAs to be recognized as protected zones during armed conflict, they must be designated by agreement, and the agreement should not be materially breached *in bello*. If a TBPA agreement is to remain in good standing, it requires sustained cooperation towards PAs conservation and possibly even towards conflict resolution. When applying the ILC Draft Principles, states should consider a progressive interpretation of Draft Principle 17, incorporating all protected and conserved areas regardless of how they are designated (by agreement or otherwise).

It is one thing to designate and white-flag a PA and another to actually protect it from the day-to-day impacts of ongoing armed conflicts. This article provides examples from two TBPAs that have tried to maintain transboundary conservation during armed conflict when circumstances are uniquely challenging. These case studies demonstrate that a bottom-up approach to both international

¹⁵⁸ Kalpers, *Volcanoes Under Siege: Impact of a Decade of Armed Conflict in the Virungas*, *supra* note 31, 20-21; Kanyamibwa, 'Impact of War on Conservation: Rwandan Environment and Wildlife in Agony', *supra* note 31, 1399-1405, *supra* note 31; Plumptre, Masozera & Vedder, *The Impact of Civil War on the Conservation of Protected Areas in Rwanda*, *supra* note 31.

designations and transboundary institutional design are important for conflict resilience or sustained protection *in bello*. It is critical to engage with a diversity of stakeholders, including non-State and non-conservation actors, and this may necessitate engagement with armed groups. In such cases, engagement should be conflict sensitive and ensure that it does not breach protected zone status. These lessons may help other TBPA's seeking to design conflict resilient and conflict sensitive transboundary cooperation. Similarly, these lessons can be applied to any protected zone or natural environment struggling for protection against the impacts of armed conflict. Hopefully, this article can inform ongoing debates on the ILC Draft Principles on *Protection of the Environment in Relation to Armed Conflict* so that they can be most effective when most needed.

Annex

- 2004 Trilateral MoU¹⁵⁹
- 2005 Ministerial Declaration¹⁶⁰
- 2006 Revenue-Sharing MoU¹⁶¹
- 2008 Rubavu Declaration¹⁶²
- 2009 Board Minutes¹⁶³
- 2013 Headquarters Agreement¹⁶⁴
- 2014 MoU between ICGLR, CEPGL, and GVTC¹⁶⁵

¹⁵⁹ Office Rwandais de Tourisme et des Parcs Nationaux, Uganda Wildlife Authority & Institut Congolais pour la Conservation de la Nature, *Trilateral Memorandum of Understanding between the Office Rwandais de Tourisme et Des Parcs Nationaux the Uganda Wildlife Authority and the Institut Congolais Pour La Conservation de La Nature on the Collaborative Conservation of the Central Albertine Rift Transfrontier Protected Area Network* (2004), available at http://www.tbpa.net/docs/treaties_MOUs/TRILATERAL_Central_Albertine_Rift_MOU_2004-Eng.pdf (last visited 18 March 2020).

¹⁶⁰ The Democratic Republic of Congo, The Republic of Rwanda & The Republic of Uganda, Ministry of Environment, Nature Conservation, Water and Forests, DRC, Ministry of Commerce, Industries, Investments Promotion, Tourism and Cooperative, the Republic of Rwanda and Ministry of Tourism, Trade and Industry, the Republic of Uganda, *Tripartite Declaration On the Transboundary Natural Resources Management of the Transfrontier Protected Area Network of the Central Albertine Rift* (2005), available at https://www.tbpa.net/docs/treaties_MOUs/AlbertineRiftTripartiteDeclaration-English.pdf (last visited 18 March 2020).

¹⁶¹ Uganda Wildlife Authority, Office Rwandais de Tourisme et des Parcs Nationaux and Institut Congolais pour la Conservation de la Nature, *Trilateral Memorandum of Understanding Between the Uganda Wildlife Authority 'UWA', the Office Rwandais de Tourisme et Des Parcs Nationaux 'ORTPN' and the Institut Congolais Pour La Conservation de La Nature 'ICCN' on the Collaborative Monitoring of and Sharing Revenues From Transfrontier Tourism Gorilla Groups* (2006), available at <http://www.greatervirunga.org/IMG/pdf/agreement-iccn-ortpn-uwa-2.pdf> (last visited 18 March 2020).

¹⁶² Bureau of Oceans and International Environmental and Scientific Affairs, *Rubavu Ministerial Declaration for the Greater Virunga Transboundary Collaboration* (15 July 2008).

¹⁶³ Greater Virunga Transboundary Collaboration, *Transboundary Collaboration in the Greater Virunga Landscape Protected Area Network: Transboundary Strategic Plan 2013-2018*, *supra* note 75, 73.

¹⁶⁴ Greater Virunga Transboundary Collaboration & Government of the Republic of Rwanda, *Headquarters Agreement Between the Government of the Republic of Rwanda and the Greater Virunga Transboundary Collaboration* (2013).

¹⁶⁵ Greater Virunga Transboundary Collaboration, *Transboundary Collaboration in the Greater Virunga Landscape Protected Area Network: Transboundary Strategic Plan 2013-2018*, *supra* note 75, 81-103.

- 2015 GVTC Treaty¹⁶⁶

¹⁶⁶ Democratic Republic of Congo, Republic of Rwanda and Republic of Uganda, *Greater Virunga Transboundary Collaboration Treaty on Wildlife Conservation and Tourism Development (GVTCCT)*, *supra* note 35.