



How the Nuclear Weapons Ban Treaty Helped Expose Disarmament's Weakness on the Environment

Doug Weir, July 2017

The successful adoption of the Treaty on the Prohibition of Nuclear Weapons in July 2017 was a significant step forward for efforts to stigmatise, and ultimately ban, the final weapon of mass destruction not addressed by a specific legal prohibition. Much has, and will continue to be written on the treaty's potential impact on ossified state-centric debates about nuclear security. The Humanitarian Initiative on Nuclear Weapons intentionally posed a direct challenge to the rarefied world of nuclear experts and think tanks, particularly those captured by, and actively participating in, the prevailing state security discourse. However, beyond the conflict between the state and human security advocates, there was another story playing out, and it was a story that highlighted the fact that disarmament doesn't really do "the environment" as effectively as it should. Addressing this weakness would strengthen future humanitarian disarmament initiatives.

Environmental Context of the Humanitarian Initiative on Nuclear Weapons

The Humanitarian Initiative leading to the ban coincided with a period of renewed interest in addressing the environmental causes and consequences of armed conflicts, as well as the environmental impact of military activities. This is being fueled by a number of complementary and inter-related factors. Foremost, are the growing understanding of the environmental dimensions of armed conflicts – and their aftermath,¹ and the consensus view that legal protection for the environment in relation to armed conflicts lags far behind that expected, and found, in peacetime.² Other catalysts include the fast-developing field of environmental human rights,³ the global

¹ Since 1999, the UN Environment Programme has been undertaking increasingly detailed post-conflict environmental assessments since 1999, for an overview of their scope and effectiveness see: D. Jensen. 2012. *Evaluating the impact of UNEP's post-conflict environmental assessments*:

https://environmentalpeacebuilding.org/assets/Documents/LibraryItem_000_Doc_061.pdf

² UNEP (2009) Protecting the Environment during armed conflicts - an inventory and analysis of international law: http://postconflict.unep.ch/publications/int_law.pdf

³ See for example, the reports of John H. Knox, UN Special Rapporteur for the United Nations Mandate on Human Rights and the Environment <http://srenvironment.org/>

acceptance that environmental quality is a key determinant of human health,⁴ and the path towards attainment of the Sustainable Development Goals.⁵

This interest in conflict and the environment is expressed across multiple arenas. Practitioners working in conflict-affected areas now have a growing body of experience and research to help inform their programmes,⁶ as do humanitarian responders,⁷ who are beginning to have rapid access to environmental risk data in their areas of operations.⁸ In the political sphere, states that have experienced the direct and derived consequences of wartime environmental degradation have led calls for greater protection and improved post-conflict response.⁹ In a number of countries, and under pressure from domestic environmental laws, militaries are increasingly conscious of the impacts that training and operations have.¹⁰ Finally, the complex and ineffective legal frameworks intended to provide protection for the environment are themselves under review. The United Nations' International Law Commission (ILC) is five years into a long-term project to examine and clarify the legal principles relevant to environmental protection before, during and after armed conflicts.¹¹ Meanwhile, the International Criminal Court recently announced plans to consider cases of environmental damage.¹²

Collectively, these and other initiatives are fueling the debate over the extent to which the environment, and those who depend on it, should be protected from the harm or abuse associated with conflicts and military activities. In addition to measures to minimise harmful practices, the systems through which international organisations and states respond to damage are also on the table. As there is no individual weapon more capable of environmental destruction, whether on a local, regional or global scale,¹³ there was optimism that the nuclear weapons ban treaty could also contribute to this debate.

⁴ See for example, the WHO and UNEP Health and Environment Linkages Initiative (HELI) <http://www.who.int/heli/en/>

⁵ For a full list of the SDGs, see: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

⁶ The research platform operated by Environment Peacebuilding shares experiences and lessons from managing natural resources in conflict-affected settings: <https://environmentpeacebuilding.org/about/about/>

⁷ See for example, UN OCHA (2014) Environment and humanitarian action- Increasing effectiveness, sustainability and accountability: https://www.unocha.org/sites/unocha/files/EHA%20Study%20webfinal_1.pdf

⁸ See for example, UN-Habitat's mapping and data portal monitoring urban changes during and after the campaign to liberate Mosul, Iraq: http://unhabitatiraq.net/mosulportal/wp-content/uploads/2017/06/170515_Environmental-Hazards.pdf

⁹ See for example, the UNEA-2 resolution *Protection of the environment in areas affected by armed conflict*, which was tabled by Ukraine and co-sponsored by the DRC, Jordan, Iraq, South Sudan and Lebanon, among others: http://www.trwn.org/wp-content/uploads/2016/09/UNEP_EA2_RES_15_E.pdf

¹⁰ See for example, the proceedings of the European Conference on Defence and the Environment <http://www.ecde.info/speakers>

¹¹ Analytical Guide to the Work of the International Law Commission, *Protection of the environment in relation to armed conflicts*: http://legal.un.org/ilc/guide/8_7.shtml#mandate

¹² For an analysis of the court's decision as it pertains to conflict and the environment, see: Tara Smith, Why the International Criminal Court is right to focus on the environment, *The Conversation*, 23rd September 2016: <https://theconversation.com/why-the-international-criminal-court-is-right-to-focus-on-the-environment-65920>

¹³ Liska et al (2017) Nuclear Weapons in a Changing Climate: Probability, Increasing Risks, and Perception. *Environment: Science and Policy for Sustainable Development* Vol. 59, Iss. 4. <http://www.tandfonline.com/doi/full/10.1080/00139157.2017.1325300>

Nuclear Weapons and the Environment

As with all weapons, understanding the environmental footprint of nuclear weapons requires a lifecycle approach.¹⁴ For nuclear weapons, this begins with uranium mining, the legacy of which blights communities worldwide.¹⁵ Once mined, radioactive waste is produced by the processes of uranium enrichment, and conversion, even before the impacts of testing or use are considered.¹⁶ Managing stockpiles also carries with it environmental risks, as does the eventual demilitarisation and destruction of the weapons. Setting aside the environmental consequences of the detonation of weapons, through accidents, deliberate first use or in reprisal, each point in their lifecycle already carries with it a cost to the environment, and potentially to human health.

Because of the potential for gross environmental destruction associated with the use of nuclear weapons, they have long distorted the development of international humanitarian law's (IHL) provisions for environmental protection. For example, during negotiations on Additional Protocol I of the Geneva Conventions, which resulted in Articles 35(3) and 55,¹⁷ both of which provide some protection to the environment, the nuclear weapon states argued that they did not apply to nuclear weapons. This was not a view shared by all but which was nevertheless reflected by France and the UK at ratification.¹⁸

The environmental consequences of nuclear weapons use was also a major element of the 1996 International Court of Justice's Advisory Opinion on nuclear weapons, which found that the articles above were general in character and did not exclude the effects of particular weapons. More recently, the long shadow cast by nuclear weapons has fallen on the ILC's work on the *Protection of the environment in relation to armed conflicts* (PERAC), with the UK and others arguing that PERAC should not address the effects of particular weapons and that Article 55's prohibition on reprisals against the environment – for example through the use of a nuclear counterstrike – has not attained customary status.¹⁹ Nuclear weapons have appeared to exist outside the norms of environmental protection in times of war – or rather the nuclear weapons states have ceaselessly promoted this view, doubtless because their use would inevitably be contrary to them.

¹⁴ Weir, D (2015) Lifecycle versus the law – defining the environmental impact of weapons, Toxic Remnants of War Project: <http://www.toxicremnantsofwar.info/lifecycle-versus-the-law-defining-the-environmental-impact-of-weapons/>

¹⁵ See for example, African Arguments (2017) A forgotten community: The little town in Niger keeping the lights on in France: <http://africanarguments.org/2017/07/18/a-forgotten-community-the-little-town-in-niger-keeping-the-lights-on-in-france-uranium-arlit-areva/>

¹⁶ See for example, Huff Post Global (2017) Survivors Speak Out As UN Negotiates Nuke Ban http://www.huffingtonpost.com/entry/survivors-speak-out-as-un-negotiates-nuke-ban_us_58dd5552e4b0fa4c0959872b

¹⁷ Article 35 <https://ihl-databases.icrc.org/ihl/WebART/470-750044?OpenDocument>; Article 55 <https://ihl-databases.icrc.org/ihl/WebART/470-750070?OpenDocument>

¹⁸ Gaudreau, J. (2003) The reservations to the Protocols additional to the Geneva Conventions for the protection of war victims. International Review of the Red Cross, No. 849, pp. 143-184: https://www.icrc.org/eng/assets/files/other/irrc_849_gaudreau-eng.pdf

¹⁹ UNGA (2015) Statement by the United Kingdom in the Sixth Committee on the report of the ILC on the protection of the environment in relation to armed conflicts: <http://statements.unmeetings.org/media2/7655107/united-kingdom.pdf>

How Did the Nuclear Weapons Ban Treaty Do on the Environment?

Given their potential for harm, the resurgence of interest in conflict and the environment, and this chequered history of interactions between nuclear weapons and international humanitarian and environmental law, there was an expectation that the ban treaty would address the environment in a meaningful way.²⁰ So how did it do?

It did “OK”. In the text’s preamble, which establishes the case for the prohibition and activities in support of it, “the environment” is cited in paragraph four, with the potential climatic impacts of nuclear war presented as risks to “food security”. In paragraph nine, which focused on the principles of IHL, language in an early draft that focused on Articles 35 and 55 of Additional Protocol I was modified during the negotiations to create a general overview of IHL principles. This was understandable but should this process have encouraged the inclusion of a standalone paragraph on the environment? It was hoped that paragraph eight, which deals with compliance with the “applicable international law” might be modified to mention international environmental law alongside IHL and human rights law but this didn’t materialise. Ironically this question of applicability forms the central plank of the current work of the ILC on PERAC and, instead of making this explicit, the text suggests only that it can be interpreted as applying.

There was more success in the operative part of the treaty; in particular in Article 6 on victim assistance and environmental remediation. It obliges state parties to take “necessary and appropriate measures towards the environmental remediation of areas contaminated by the use and testing of nuclear weapons”. The obligation parallels those for clearance in the Mine Ban Treaty and Convention on Cluster Munitions.²¹ However the final text didn’t specify what actions affected state parties should take towards achieving this objective, nor did it introduce a time limit. It will therefore be beholden on civil society and international organisations to closely monitor how this is implemented in future, for example through national action plans. The obligations in Article 6 are supported by Article 7 on international assistance and cooperation, in which state parties have the right to seek and receive assistance to implement the treaty, and which calls on parties to provide technical, material and financial assistance to affected states.

One topic that isn’t addressed in the text is environmental standards in the destruction of stockpiles or in the conversion of former nuclear weapons facilities. The Biological Weapons Convention contains an implementing provision requiring that “all necessary safety precautions shall be observed to protect populations and the environment” during the destruction of stockpiles.²² This wasn’t properly addressed by the Chemical Weapons Convention, which excluded buried or sea-dumped weapons from its scope, but because its disposal obligations do apply when abandoned weapons are recovered, it has nevertheless been a longstanding issue for parties.²³ During the last 30 years the US

²⁰ United Nations Treaty on the Prohibition of Nuclear Weapons (full text): <http://www.icanw.org/treaty-on-the-prohibition-of-nuclear-weapons/>

²¹ Text of the Mine Ban Treaty: <https://www.apminebanconvention.org/overview-and-convention-text>; text of the Convention on Cluster Munitions: <http://www.clusterconvention.org/the-convention/convention-text>

²² Article II Biological Weapons Convention: <http://www.opbw.org/convention/conv.html>

²³ Article 17 Chemical Weapons Convention: <https://www.opcw.org/chemical-weapons-convention/articles/article-iv-chemical-weapons/>

alone has spent between \$2.5 billion and \$30 billion on dealing with recovered chemical weapons.²⁴ The Chemical Weapons Convention leaves national authorities to decide on the appropriate environmental standards – although forbids sea dumping, land burial and open-pit burning on environmental grounds – but requests their inclusion in technical plans for stockpile destruction and facilities management.²⁵ As with the modalities of environmental remediation and victim assistance programmes in the ban treaty, this is a further area that will require scrutiny once it enters into force.

What Does the Nuclear Weapons Ban Treaty Tell Us about How Disarmament Does the Environment?

Firstly, we should not underestimate the significance of Article 6. The inclusion of an obligation to address environmental remediation necessitated by the testing or use of weapons – and not just in relation to stockpile destruction – in an international disarmament agreement is a major step forward. This was possible for nuclear weapons because addressing the contamination they cause is necessary for minimising harm to human health, just as clearing mines or explosive remnants of war is vital to prevent harm.

Since the Mine Ban Treaty, the most effective disarmament measures have been driven by a humanitarian, rather than state security narrative. The nuclear weapons ban treaty is perhaps the most dramatic embodiment of this to date, challenging as it did 65 years of state-centric discourse on nuclear disarmament. While it didn't perform quite as well as it could on the environment, what it did do is underscore the fact that protecting human health also means protecting the environment, and that the humanitarian and environmental imperatives for disarmament can be linked.

Which is not to say that this hasn't been demonstrated before; for example ENMOD – the convention on environmental modification techniques – merged humanitarian and environmental considerations as far back as 1977.²⁶ But it is also the case that recent humanitarian initiatives have been dependent on the ability of campaigns to clearly articulate and demonstrate the unacceptable harm that particular weapons pose to civilians, which for the purposes of the nuclear ban treaty also includes communities affected by testing. This is comparatively straightforward for the victims of explosive weapons, but grows more complex for the longer term health consequences for the victims of environmental contamination or damage from weapons.

One such case is that of depleted uranium (DU) weapons, which when used create hotspots of radioactive and toxic contamination.²⁷ The UN General Assembly has now passed six resolutions calling for measures to address contamination and study the health risks of affected communities

²⁴ National Academy of Sciences (2012) Remediation of buried chemical warfare materiel, Committee on Review of the Conduct of Operations for Remediation of Recovered Chemical Warfare Materiel from Burial Sites: <https://www.nap.edu/read/13419/chapter/3#12>

²⁵ OPCW, The work of the Organisation for the Prohibition of Chemical Weapons, Environmental Concerns and Provisions: <https://www.opcw.org/our-work/demilitarisation/environmental-concerns-and-provisions/>

²⁶ Preambular paragraph 6, Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques: <http://www.un-documents.net/enmod.htm>

²⁷ For an introduction to depleted uranium weapons, see: Weir, D (2012) Precaution in Practice - Challenging the acceptability of depleted uranium weapons: <http://www.bandepleteduranium.org/en/docs/195.pdf>

but little progress has been made towards either objective.²⁸ In part, this is because the disarmament community – which includes diplomats, campaigners and the narratives they employ – is so attuned to the immediacy of harm from explosive violence that it makes it difficult to advance arguments based on the concepts of risk or precaution. In this, advocacy around DU has long been based as much on environmental principles as it has on disarmament advocacy.

For example, in an ideal world, DU campaigners would be able to follow up the health outcomes of 20,000 people living in proximity to DU contaminated sites for 20 years, test them for exposure and document cancer rates or other health outcomes. But this simply isn't feasible in insecure, post-conflict settings, particularly when the users of the weapons are so reluctant to release targeting data to national authorities or UN agencies. The realities of documenting health outcomes from toxic exposures linked to armed conflicts or military activities are a poor fit for the advocacy models utilised by campaigns on explosive violence, which typically rely on data on unacceptable harm being transported from the field to the conference chamber.

Yet the ban treaty could perhaps be seen as helping to bridge this conceptual gap between explosive violence and the many forms of “slow violence” that result from conflict and military activities.²⁹ Not just for DU, but also for other toxic remnants of war (such as Agent Orange, oil spills and pollution from industrial or military facilities) and other forms of environmental degradation linked to conflicts.³⁰ This idea is given further credence by going beyond the text of the treaty itself and interpreting its obligations utilising international environmental law's normative framework.³¹

For example the no-harm rule, whereby a state is duty-bound to prevent, reduce and control the risk of environmental harm to other states. Or the principle of prevention, whereby preventing environmental harm is cheaper, easier, and less environmentally dangerous than reacting to environmental harm that already has taken place. By seeking to stop the future use of nuclear weapons, and with it potentially severe environmental or climatic effects, the ban also echoes the precautionary principle, where in cases of threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. The concepts of polluter pays and common but differentiated responsibilities were reflected in the negotiations over state responsibility and international assistance for environmental remediation. And finally the principles of public participation and intergenerational equity should guide the implementation of victim assistance and environmental remediation programmes.

²⁸ ICBUW (2016) UN General Assembly recognises ongoing concerns over health risks from depleted uranium <http://www.bandedpleteduranium.org/en/un-general-assembly-recognises-du-health-concerns>

²⁹ The concept of slow violence, as advanced by Rob Nixon, relates to the violence wrought by climate change, toxic drift, deforestation, oil spills, and the environmental aftermath of war, and which takes place gradually and often invisibly.

³⁰ For an introduction to toxic remnants of war, see: Kellay, A (2014) Pollution Politics – power, accountability and toxic remnants of war, Toxic Remnants of War Project: http://www.toxicremnantsofwar.info/wp-content/uploads/2014/06/TRW_Pollution_Politics_Report.pdf

³¹ A good overview of the core principles of international environmental law can be found in the Club des Juristes, IUCN, UNEP initiative to promote a “global pact for the environment”: <https://www.iucn.org/sites/dev/files/content/documents/draft-project-of-the-global-pact-for-the-environment.pdf>

However, the fact that all these principles are implicit, rather than explicit, in the final nuclear weapons ban treaty text is a reminder that humanitarian disarmament may be missing a trick by not mainstreaming environmental thinking in both its conceptual models and in its advocacy.

Environmental impacts are humanitarian impacts. And if humanitarian disarmament campaigns can learn to articulate the environmental dimensions of the issues they work on more effectively, they will not only help strengthen their own campaigns but they might also help to create the space for progress on those topics that lack the immediacy of explosive violence.

It remains to be seen how effective the ban treaty's environmental obligations will be in practice, particularly as many affected states already have some environmental and health policies in place. But for many of the diplomats and campaigners involved, many of whom have been, and continue to be active on campaigns on explosive violence, the debate on the environmental consequences of nuclear weapons may just encourage greater acceptance of the environment's place in humanitarian disarmament.

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