

General Assembly First Committee Topic 1: Addressing the Environmental Effects of War 1

30 September, 2013

Every year from 1816 to 2010, there was at least one interstate or civil war. Since World War II, there have been more than 236 wars in 150 locations. More than half of those have occurred since 1988.² From 1990 to 2000, there were 118 wars that killed approximately six million people. In 1999, more than two thirds of armed conflicts had lasted more than five years and "almost one third had lasted more than 20 years."³

Although armed conflict is a recurring feature of the global landscape, little effort has been made to limit the environmental effects of war. As scholars Ken Conca and Jennifer Wallace explain, when war breaks out, "humanitarian relief, security, economic reconstruction, and political reconciliation" consistently take priority.⁴

Within countries torn apart by conflict, agencies charged with protecting the environment are usually weak, if they exist at all, and the government as a whole is consumed with restoring its security from international attack or civil uprising. Similarly, international organizations such as the UN tend to focus on improving human and regional security. When external actors do wish to intervene to limit or mitigate environmental damage, they face a problem of authority. At present, the only way for outsiders to legally intervene in a country is for the UN Security Council to pass a resolution authorizing intervention by UN member states. But environmental security has not traditionally been considered in Security Council decisions.

In recent years, it has been suggested that the International Criminal Court (ICC) and the International Court of Justice (ICJ) could address crimes against the environment caused by armed conflict. For example, in 1996, in its Advisory Opinion on the "Legality of the Threat or Use of Nuclear Weapons," the ICJ (also known as the World Court) wrote that "the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings." In another case, the ICJ determined that "an attack on a military objective

¹ This document was written by Karen Ruth Adams, Montana Model UN Faculty Advisor, Kedra Hildebrand (2010) and Nicholas Potratz (2013), with contributions from Samantha Stephens (2010). Copyright 2013 by Karen Ruth Adams.

² Karen Ruth Adams, "The Causes of War," in Robert Denemark et. al. eds. *The International Studies Compendium Project* (Oxford: Wiley-Blackwell and International Studies Association, 2010). The data cited here are from Kristian Skrede Gleditsch, "Expanded War Data version 1.52," 2007, available at http://privatewww.essex.ac.uk/~ksg/expwar.html, and Nils Petter Gleditsch *et al.*'s Armed Conflict Dataset of the Uppsala Conflict Data Program (UCDP) and the International Peace Research Institute, Oslo (PRIO), available at http://www.pcr.uu.se/gpdatabase/search.php

³ World Resources Institute, *World Resources 2002–2004: Decisions for the Earth: Balance, Voice, and Power* [online edition] (Washington D.C.: World Resources Institute, 2003), p. 25, available at http://pdf.wri.org/wr2002_fullreport.pdf.

⁴ Ken Conca and Jennifer Wallace, "Environment and Peacebuilding in War-torn Societies: Lessons from the UN Environment Programme's Experience with Postconflict Assessment," *Global Governance*, 15(2009), p. 485.

⁵ World Resources Institute World *Resources 2002–2004: Decisions for the Earth: Balance, Voice, and Power*, pp. 26-27.

⁶ Yoram Dinstein, *The Conduct of Hostilities Under the Law of International Armed Conflict* (New York: Cambridge University Press, 2004), p. 176.

must be desisted from if the effect on the environment outweighs the value of the military objective." The ICJ has also stated more generally in the *Gabcíkovo-Nagymaros Project* case (Hungary v. Slovakia) that a state's natural environment is of its "essential interest." As a result, it is possible that states will begin to sue one another environmental damages sustained in war. 8

Despite these advances, many observers argue that international law has not yet "developed to the point where adequate protection is provided for the environment during wartime." In part, this is because some UN member states have been unwilling to join the ICC, while others have ignored ICJ decisions. Moreover, non-state actors such as insurgents and terrorists have not historically been part of such organizations and agreements. Perhaps the most fundamental problem, however, is the challenge of avoiding environmental damage in the first place instead of imposing costs for it when a war is over. As the World Resource Institute explains:

Amid war's brutality, death, and deprivation, the environment may seem a minor casualty. Yet, the destruction of the environment, along with the demolition of democratic, informed decision-making, can prolong human suffering for decades, undermining the foundation for social progress and economic security. ¹⁰

What could the GA-1 do to help and encourage UN member states, non-state actors, and international organizations to avoid and reverse the environmental effects of war?

History and Current Events

War has affected the environment for as long as conflicts have been fought. According to archeologists, warring Mesopotamian city-states about 3,000 BC breached dikes to flood their enemies' fields. Similarly, the Hebrew Bible records stories of armies salting fields to make it impossible to grow crops. In the 20th and 21st centuries, World Wars I and II and the Korean, Vietnam, Arab-Israeli, Cambodian, Colombian, Kosovo, Iraq, Afghanistan, Congo, Syrian, and other wars have all degraded the environment in some way.

How Armed Conflict Harms the Environment

In 2001, in recognition of the threat war poses to the environment, the General Assembly (GA) established the Post Conflict Management Branch (PCMB) of the UN Environmental Progamme (UNEP). Through its Disasters and Conflicts Sub-programme, the PCMB assesses the effect of armed conflict on the environment, provides environmental recovery, and works on building environmental cooperation. Among the countries in which the PCMB has worked are Afghanistan, Sudan, South Sudan, Iraq, Lebanon, Pakistan, Indonesia, and Sri Lanka. 12

According to the PCMB, armed conflict affects the environment in five ways. First, refugees escaping war cause "natural resource depletion, irreversible impacts on natural resources, impacts on health, impacts on social

⁷ Dinstein, The Conduct of Hostilities Under the Law of International Armed Conflict, p. 177.

⁸ International Committee of the Red Cross, "Rule 44. Due Regard for the Natural Environment in Military Operations," available at http://www.icrc.org/customary-ihl/eng/docs/v1 rul rule44#refFn 13 1, accessed 15 July 2013.

⁹ Dinstein, The Conduct of Hostilities Under the Law of International Armed Conflict, p. 196-97.

¹⁰ World Resources Institute, *World Resources 2002–2004: Decisions for the Earth: Balance, Voice, and Power*, p. 27.

¹¹ Sarah DeWeerdt, "War and the Environment," World Watch, 21(1), (Jan/Feb 2008), p. 14.

¹² UN Environment Programme Division of Environmental Policy Implementation, "Post-Conflict and Disaster Management Branch," United Nations, available at http://www.unep.org/disastersandconflicts/, accessed 15 July 2013.

conditions, impacts on the economy, and social impacts on local populations." In 2012, 45.2 million people worldwide lived away from their homes due to forcible displacement. Most were in the developing world, which hosts four-fifths of the world's refugees. 14

Second, toxic hazards from bombardment, oil fires, and conflict in industrial areas create areas of contamination. ¹⁵ For example during the war in Kosovo in 1999, NATO bombed oil refineries in the Serbian cities of Pancevo and Novi Sad. This caused toxic chemicals to leak into the Danube River and affected water and soil in both Serbia and its neighbors." ¹⁶

Third, war often causes deforestation, either as an unintended side-effect of combat operations or as an intended effect. In addition to examples of direct deforestation (such the U.S.'s action in the Vietnam War), the genocide in Rwanda led to indirect deforestation, as displaced people felled large sections of forests for resources like firewood in refugee and returnee camps.¹⁷

Fourth, landmines, unexploded ordinance, and weapons made of depleted uranium disseminate toxic materials, displace people to more fragile ecosystems, and disrupt resource management and ecotourism. ¹⁸ In 2003, according to the UN, there were more than "100 million unexploded landmines in more than 60 countries." ¹⁹ Over the past decade, states have removed just 3 million (1%) of them. Addressing this problem is costly. Although it takes just three US dollars to make a landmine, it takes several hundred dollars to dismantle one. Thus weapons often remain in erstwhile conflict zones long after the fighting is over. ²⁰

Fifth, armed conflict creates pollution and other forms of waste, which affect a society's water supply, sanitation, and public health.²¹ For example, during the Kosovo war in 1999, the influx of refugees to Albania strained its waste management facilities "beyond capacity." Eleven years later, in 2008, the effects of the war were still felt, with the facilities continuing to pose "dangerous risks to human health and the surrounding environment." ²³

¹³ Conca and Wallace, "Environment and Peacebuilding" p. 490.

¹⁴ United Nations High Commissioner for Refugees, "Global Trends 2012, Displacement the New 21st Century Challenge," 2013, available at http://unhcr.org/globaltrendsjune2013/UNHCR%20GLOBAL%20TRENDS%202012 V05.pdf.

¹⁵ Conca and Wallace, "Environment and Peacebuilding," p. 490.

¹⁶ UN Environmental Programme, "From Conflict to Sustainable Development: Assessment and Clean-up in Serbia and Montenegro," 2004, available from http://postconflict.unep.ch/publications/sam.pdf.

¹⁷UN Environmental Programme, "Rwanda: From Post-Conflict to Environmentally Sustainable Development," 2011, available at http://postconflict.unep.ch/publications/UNEP Rwanda.pdf.

¹⁸ Conca and Wallace, "Environment and Peacebuilding," p. 490.

¹⁹ Ibrahim Debbas, "Lebanon and Landmines," *Inventory of Conflict and the Environment*, 2003; [journal online]; available at http://www1.american.edu/ted/ice/lebanon-landmine.htm.

²⁰ Landmine and Cluster Munition Monitor, "Landmine Monitor 2012," International Campaign to Ban Landmines, November 2012, available at http://www.the-monitor.org/lm/2012/resources/Landmine Monitor 2012.pdf.

²¹ Conca and Wallace, "Environment and Peacebuilding," pp. 490-491.

²² UN Environmental Programme, "Post-Conflict Environmental Assessment-Albania," 2000 14, available from http://postconflict.unep.ch/publications/albaniafinalasses.pdf.

²³ UN Environmental Programme, "Post-Conflict Environmental Assessment-Albania," p. 10.

Today, Syrian refugees are posing similar environmental challenges. In Jordan alone, Oxfam predicts that the number of Syrian refugees will reach 1.2 million by the end of 2013. Even with the estimates of around 700,000 existing refugees, Jordan is already using its water resources at full capacity. Also, as a result of poor systems of solid waste management in places like Amman, "the environmental sanitation situation has worsened due to the increased volume of waste."

The Effects of Nuclear and Other Weapons of Mass Destruction

Nuclear weapons are among the greatest threats to the environment, from production to storage and, especially, battlefield use. ²⁵ Although they have been used just twice in wartime, we know they have severe and long lasting consequences for the environment. When the United States bombed Hiroshima and Nagasaki in 1945, the blasts did not simply kill and injure the majority of each city's populations. ²⁶ They also caused air pollution from dust particles and radioactive debris to fly in all directions, poisoning water supplies. Agriculture was damaged, and dead rice stalks were visible seven miles from ground zero. ²⁷ Damage from future nuclear attacks would be even more extensive. The uranium bomb exploded over Hiroshima in 1945 was 13 kiloton (kt). Contemporary US and Russian strategic nuclear weapons are approximately 150 kt. ²⁸

It has been estimated that if a nuclear war broke out between India and Pakistan and if each country used 50 Hiroshima-sized weapons, 20 million people would die, and there would be enough smoke to block sunlight and cool the planet. At a minimum, this which would shorten growing seasons by a couple of weeks. For crops that need a whole season to grow, this would mean a complete loss of yield. ²⁹ On top of these agricultural losses would be the blast effects of the weapons on buildings, dams, roads, and other structures, as well as their long-term radiological effects on populations, food, and water. ³⁰

Chemical and biological weapons also have the potential to be weapons of mass destruction.³¹ Until the recent use of sarin nerve gas as a chemical weapon in Syria,³² one of the most widely-known chemical weapons was Agent Orange, which was used extensively during the 1960s by the United States to defoliate the jungle in Vietnam to spot and kill insurgents. During the war, the United States sprayed millions of gallons of herbicides, especially

²⁴ Oxfam, "Integrated Assessment of Syrian Refugees in Host Communities," ReliefWeb [OCHA], 31 March 2013, available at http://reliefweb.int/report/jordan/integrated-assessment-syrian-refugees-host-communities-march-2013.

²⁵ Paul Carr, "Shock and Awe' and the Environment," Peace Review, 19(3), (July-Sept 2007), p. 340.

²⁶ According to the US Strategic Bombing Survey (1946), 30 percent of Hiroshima's population of 245,000 was killed and another 30 percent was seriously wounded. For more recent estimates, see Global Peacemakers, "Counting the Dead," http://atomicbombmuseum.org/3 health.shtml

²⁷ "Hiroshima, Nagasaki, and Subsequent Weapons Testing," World Nuclear Association, May 2010, available from http://www.world-nuclear.org/info/inf52.html.

²⁸ Karen Ruth Adams, "Weapons of Mass Destruction," *International Encyclopedia of Political Science* (New York: CQ Press and American Political Science Association, 2010).

²⁹ Eben Harrell, "Regional Nuclear War and the Environment," Time, January 22, 2009, available at http://www.time.com/time/health/article/0,8599,1873164,00.html.

³⁰ Adams, "Weapons of Mass Destruction."

³¹ Adams, "Weapons of Mass Destruction."

³² BBC, "Syria crisis: UN report confirms sarin 'war crime'," 16 September 2013, http://www.bbc.co.uk/news/world-middle-east-24113553

Agent Orange, over southern Vietnam. About 14% of Vietnamese forests were destroyed as a result.³³ Since the departure of US troops in 1975, the forests and the wildlife in Vietnam have struggled to renew themselves, and specialists speculate that many species will never be able to return to the area.

Nuclear and other weapons of mass destruction pose challenges in their development, storage, and destruction, as well as in their use. For example, although the US has promised to destroy all of its chemical weapons, domestic opposition to burning and burying chemicals near populated areas has slowed progress.³⁴ Similarly, no state has been willing to receive and dispose of Syria's chemical weapons.³⁵

Environmental Effects of Recent Conflicts

In the 1990s, conflicts in both Rwanda and the Democratic Republic of the Congo (DRC) damaged local ecosystems through mass deforestation and poaching. In 1991, for example, the Rwandan army cleared a swath of vegetation up to 100 meters wide along a key trail to reduce the threat of ambush. Similarly in 1999, the Congolese army clear-cut a corridor that ran through a national park to prevent insurgent factions from advancing unseen. During and in the aftermath of these wars, Rwanda and the DRC experienced an increase in poaching of protected animals, as militant leaders killed and sold animals to fund their operations. This has continued in the DRC, where reports from 2013 reveal that the Lord's Resistance Army has poached elephants to collect and sell ivory in an effort to garner monetary support for its efforts.

During the first Gulf War in 1991, the World Resources Institute reported that Iraqi forces ignited approximately 600 oil wells. The oil from the fires spewed into the Persian Gulf and killed more than 25,000 birds. According to scientists, the damage may last for more than 100 years. The oil spread in all directions for up to 1,200 miles, saturating agricultural lands and leading to food shortages. The fires from the oil leaks released half-a-billion tons of carbon dioxide that will remain in the atmosphere for more than a century.

Since 2001 and 2003, the wars in Afghanistan and Iraq have caused extensive damage to the environment. According to the UN Environmental Programme and the Council of Europe, bombing has damaged the Iraqi and Afghani ecosystems, causing, among other things, desertification, erosion, depleted water sources, and increased dust storms. Moreover, during the Iraq war, coalition forces used depleted uranium in both its weapons and defensive materials. This has led to contaminated soil and water that have been blamed for increased rates of cancer and birth defects.⁴⁰

³³ Seth Mydans, "Researchers Raise Estimate on Defoliant Use in Vietnam War," *New York Times*, 17 April 2013; [Newspaper online]; available at http://www.nytimes.com/2003/04/17/world/researchers-raise-estimate-on-defoliant-use-in-vietnam-war.html, accessed 16 July 2013.

³⁴ William J. Broad and David E. Sanger, "Chemical Disarmament Won't Be Easy," *New York Times*, 23 September 2013, http://www.nytimes.com/2013/09/24/science/decades-of-disarmament.html?pagewanted=all

³⁵ Reuters, "Russia ready to help guard Syria chemical sites, will not import arms," 26 September 2013, http://www.reuters.com/article/2013/09/26/us-syria-crisis-russia-chemical-idUSBRE98P0N820130926

³⁶ Tara Mitchell, "ICE Case:Rwanda," The Inventory of Conflict and the Environment, Spring 1997; [journal online]; available at http://www1.american.edu/ted/ice/rwanda.htm.

³⁷ DeWeerdt, "War and the Environment."

³⁸Kara Moses, "Lord's Resistance Army funded by elephant poaching, report finds," *The Guardian*, 4 June 2013; [Newspaper Online]; available at http://www.guardian.co.uk/environment/2013/jun/04/lords-resistance-army-funded-elephant-poaching#start-of-comments, accessed 16 July 2013.

³⁹ Carr, "Shock and Awe' and the Environment," p. 338.

⁴⁰ Parliamentary Assembly of the Council of Europe, "Armed Conflicts and the Environment," Council of Europe, October 2011, available at http://reliefweb.int/sites/reliefweb.int/files/resources/Full Report 2660.pdf. See also

The conflicts in Sudan and between Sudan and the new state of South Sudan have had numerous direct and indirect effects on the environment. According to the UNEP, direct damage from military attacks, such as bombings, have been negligible, but unexploded landmines have endangered Sudanese wildlife. In addition, militia groups have destroyed water infrastructure and eradicated forests. Indirectly, the greatest threat to the environment has been resource depletion from the 5 million Sudanese displaced due to conflict.⁴¹

Previous Work on this Topic

National environmental regulations were first developed in the 18th and 19th centuries due to concerns about the effects of pollution and poor sanitation on public health. Similarly, international regulation was first conceived when international trade was threatened by toxic spills in the Mediterranean. This anthropocentric (human-centered) approach to environmental protection has continued into the modern era. Protecting humans from the environmental effects of armed conflict has become more urgent as weapons have evolved and economic interdependence has spread.

One of the challenges of addressing the environmental effects of war is deciding whether to give priority to human life and environmental health, on the one hand, or state security and military gains, on the other. According to many observers, rules must "pass the military test: the …requirements of realism and practicality on the battlefield."

In 1972, the General Assembly (GA) addressed this issue in the Stockholm Declaration, which states that that, "man and his environment must be spared the effects of weapons of mass destruction and that States must strive to eliminate such weapons." According to Principle 21 of the Declaration, states have the right to use their environments as they see fit, but they also have the responsibility to protect the environment when they actions affect others. Article 74 of the UN Charter, which proposes good-neighborliness to be the basis for state responsibility, reinforces this concept. Similarly the 1982 World Charter for Nature declares that "nature shall be secured against degradation caused by warfare and other hostile activities."

In 1976, the UN General Assembly adopted the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD). Article I of the Convention states:

Martin Chulov, "Research links rise in Falluja birth defects and cancers to US assault," Guardian [UK], 30 December 2010, http://www.theguardian.com/world/2010/dec/30/faulluja-birth-defects-iraq

⁴¹ AMIS, "Sudan: Post-Conflict Environmental Assessment," United Nations Environment Programme, June 2007, available at http://postconflict.unep.ch/publications/UNEP_Sudan.pdf.

⁴² Karen Hulme, *War Torn Environment: Interpreting the Legal Threshold* (Boston: Martinus Nijhoff Publishers, 2004), p. 6.

⁴³ Hulme, War Torn Environment, p. 16.

⁴⁴ Alice Louise Bunker, "Protection of the Environment During Armed Conflict: One Gulf, Two Wars," *RECIEL*, 13(2), 2004, p. 203.

⁴⁵ United Nations Environmental Programme, *Stockholm Declaration* "Principle 21," 1972, available at http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503, accessed 27 July 2010.

⁴⁶ United Nations, *Charter of the United Nations*, "Chapter XI: Declaration Regarding Non-self-governing Territories, Article 74," 1945, available at http://www.un.org/en/documents/charter/chapter11.shtml, accessed 27 July 2010.

⁴⁷ Bunker, "Protection of the Environment," p. 203.

Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as a means of destruction, damage or injury to any other State Party. 48

The International Court of Justice (ICJ) has yet to rule on whether or not ENMOD applies to the use of nuclear weapons. States that have nuclear weapons (such as the US and UK) have argued that it should not since the intended purpose of nuclear weapons is not to destroy the environment, while other states (including Iran) have argued that nuclear weapons should fall within the limitations of this convention because of the indiscriminate nature of their destruction. 49

The 1977 Additional Protocols to the 1949 Geneva Conventions also include provisions that directly address the relationship between conflict and the environment. These provisions came about in reaction to US actions in Vietnam. Article 55(I) states that "[c]are shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage." Article 55 (2) adds that "[a]ttacks against the natural environment by way of reprisals are prohibited." ⁵¹

In the 1982 Rio Declaration on Environment and Development, UN member states condemned environmental destruction caused by military conflict. According to Principle 24, "[w]arfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development as necessary." The 2012 Rio+20 outcome, entitled *The Future We Want*, simply states that "countries in situations of conflict also need special attention" in regard to their environments and sustainable development. ⁵³

In 1982, the GA began work on the United Nations Convention on the Law of the Sea (UNCLOS), which entered into force for the states that have signed it on November 16, 1994. UNCLOS is one of the only environmental treaties to include any mention of the military. Yet in Article 236, which details provisions regarding the protection of the marine environment, it is stated that such regulations do not apply to "any warship, naval or auxiliary, other vessels or aircraft owned by the State and used for the time being only on government non-commercial service." Instead, states that have ratified the Convention are simply obliged to "ensure that such vessels and aircraft act in a manner consistent, so far as is reasonable and practicable, with this Convention." Most states have ratified this convention; the US has not.

The United Nations Compensation Commission (UNCC), established by the UN Security Council in 1991, was created to address the compensation and losses resulting from Iraq's invasion of Kuwait during the Gulf War. The Security Council determined in Resolution 687 that: "Iraq...is liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources..." The decision was the first and

⁴⁸ Dinstein, "Protection of the Environment and International Armed Conflict," p. 526.

⁴⁹ Erik Koppe, Studies in International Law: The Use of Nuclear Weapons and the Protection of the Environment during International Conflict, Vol. 18 (Oxford: Hart Publishing, 2008), p. 134.

⁵⁰ International Committee of the Red Cross (ICRC), *Protocol Additional to the Geneva Conventions of 12 August* 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), "Article 35 (3) and 55 (I)," 8 June 1977, available at http://www.icrc.org/ihl.nsf/full/470?opendocument, accessed 27 July 2010.

⁵¹ ICRC, *Protocol I*, "Article 55 (2)."

⁵² Bunker, "Protection of the Environment," p. 204.

⁵³General Assembly, "The Future We Want," United Nations, 11 September 2012, available at http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N11/476/10/PDF/N1147610.pdf?OpenElement.

⁵⁴ Bunker, "Protection of the Environment," p. 204.

⁵⁵ Bunker, "Protection of the Environment," p. 202.

only time that a state responsible for environmental damage caused during war was held accountable by the Security Council. According to the UNEP, environmental reparation cases account for many of the cases that the UNCC has yet to resolve. 56

On November 5, 2001, the General Assembly declared the 6th of November of each year as the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict. According to the GA, "damage to the environment in times of armed conflict impairs ecosystems and natural resources long after the period of conflict, often extending beyond the limits of national territories and the present generation."⁵⁷

In January 2013, during the 67th session of the General Assembly, Member States adopted A/RES/67/37, "Observance of environmental norms in the drafting and implementation of agreements on disarmament and arms control." The resolution calls for states to consider the environment in "the application of scientific and technological progress within the framework of international security, disarmament and other related spheres." It also adds a sub-agenda item for the 68th session to discuss environmental protection in drafting and implementing agreements on disarmament and arms control.⁵⁸ Member States adopted the resolution unanimously.⁵⁹

The Rome Statute of the International Criminal Court (ICC) entered into force on July 1, 2002, and created a permanent institution with the power to try individuals for genocide, crimes against humanity and war crimes. The statute leaves room for the possibility of prosecuting individuals for damage to the environment, but no such cases have been tried. The ICC did consider bringing charges of genocide against President Omar AL-Bashir of Sudan, but all of the judges except one chose not to pursue the charges. ⁶⁰

Even the International Court of Justice (ICJ), which has existed since 1945 and rules on lawsuits between states, has only heard two cases directly related to environmental effects of war. These cases concerned Iraq's incineration of its oil fields and the legality of the threat or use of nuclear weapons. In addition, in a 2005 case on the overall legality of Uganda's occupation of the Democratic Republic of the Congo (DRC)'s Ituri region, the ICJ imposed reparations on Uganda for failing to prevent the exploitation of the DRC's natural resources. ⁶¹

In the Convention on the Prohibition of the Development, Production, Stockpiling and use of Chemical Weapons and on Their Destruction, most recently revised in 2005, State Parties also agree to take the environment into consideration. State Parties are expected to "assign the highest priority to ensuring the safety of people and to protecting the environment" in carrying out the document's obligations, such as destroying chemical weapons⁶²

⁵⁶UN Environmental Programme, "UNEP and the United Nations Compensation Commission (UNCC) sign cooperation deal in the Persian Gulf Region," 5 August 2002, available at http://www.unep.org/Documents.Multilingual/default.asp?DocumentID=263&ArticleID=3113&l=en.

⁵⁷ United Nations General Assembly, "International Day for Preventing the Exploitation of the Environment in War and Armed Conflict," November 6, 2001, available at http://www.un.org/depts/dhl/environment_war/index.html.

⁵⁸ UN General Assembly Resolution 67/37 (2013), available at http://www.un.org/en/ga/67/resolutions.shtml.

⁵⁹ Department of Public Information, "General Assembly, In Wake of High-Stakes Debate in First Committee that Championed Common Positions But Fell Short of Bridging Divides, Adopts 58 Texts," United Nations, 3 December 2012, available at http://www.un.org/News/Press/docs//2012/ga11321.doc.htm.

⁶⁰ United Nations Environmental Programme (UNEP), "Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law," pp. 31-32.

⁶¹ UN Environmental Programme, "Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law," November 2009, available at http://postconflict.unep.ch/publications/int_law.pdf.

⁶² Convention on the Prohibition of the Development, Production, Stockpiling and use of Chemical Weapons and on Their Destruction. Organization for the Prohibition of Chemical Weapons, 29 July 2005, available at http://www.opcw.org/index.php?eID=dam frontend push&docID=6357.

Conclusion

As British law professor Karen Hulme points out, "Man cannot disassociate himself from the environment; he is dependent on the environment for his very life and health." Yet the states, militant groups, and individuals whose conflicts cause environmental damage are rarely held accountable. Moreover, the environmental effects of war linger long after the fighting stops, reducing individual security and economic development for generations.

What can and should the General Assembly First Committee do to ensure that the UN and UN member states more effectively address the environmental effects of war? In developing your country's position on this issue, consider the following questions:

- -- Is or has your country or region been involved in a war? If so, what have been its environmental effects? How is your country or region addressing these problems? Is the UN involved?
- -- Does your country have nuclear weapons or other weapons of mass destruction?
- -- Has your country signed and ratified the environmental agreements mentioned above? Why or why not? If so, does it adhere to their requirements?
- -- How should environmental destruction be measured, and by whom? Should developing countries be held to the same standards as developed countries? What should the punishment be?
- -- Is your state a party to the International Criminal Court and International Court of Justice?

 Would it be willing to have these courts try more cases related to the environment and war?
- -- Are there countries and regions in which your country has an interest in assisting with post conflict reconstruction and environmental cleanup? What resources or expertise can your country offer? Where is it involved already, and what has it learned from this experience?

Recommended Reading

Conca, Ken and Jennifer Wallace. "Environment and Peacebuilding in War-torn Societies: Lessons from the UN Environment Programme's Experience with Postconflict Assessment." *Global Governance*. 15 (2009).

This article explains in detail how conflict directly and indirectly affects the environment.

International Committee of the Red Cross. "War and the Natural Environment." Available at http://www.icrc.org/eng/war-and-law/conduct-hostilities/environment-warfare/index.jsp (Accessed 17 July 2013).

The ICRC website provides an overview of treaty law, customary law, and a number of references with background information on how war harms the environment. It als features articles from researchers in the field, who discuss gaps in the present system, areas that need improvement, and methods for advancing international law.

Stockholm International Peace Research Institute (SIPRI). "Armed Conflicts and Conflict Management" and "Arms Control and Disarmament Documentary Survey." Website. Available at http://www.sipri.org/

SIPRI is a prominent non-governmental organization that provides detailed information on the number, types, and locations of contemporary wars; the military forces, expenditures, and agreements of various states; the status of arms control treaties; and contemporary security challenges. It is an excellent resource for learning about many issues related to conflict and security.

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⁶³ Hulme, War Torn Environment, p. xxxii.

United Nations. "International Day for Preventing the Exploitation of the Environment in War and Armed Conflict." http://www.un.org/en/events/environmentconflictday/index.shtml (accessed 17 July 2013).

This website has information and numerous links to sources regarding conflict and the environment. These include, inter alia, a documentary, international agreements, UN reports, and guidance reports on addressing the challenges of the impact of war on the environment.

United Nations Environmental Programme (UNEP). "Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law." November 2009. Available at http://postconflict.unep.ch/publications/intlaw.pdf.

This report evaluates the relationship between the topic and international law and treaties, providing an evaluation of Member States' responsibilities regarding environmental degradation during conflict.

United Nations Environmental Programme (UNEP) Post-Conflict and Disaster Management Branch. "Current Programs." Available from

 $\underline{http://www.unep.org/disasters and conflicts/Country Operations/UNEPs Current Activities/tabid/54617/Default.aspx.}$

This site gives access to the UNEP's post-conflict assessments and desk studies, such as those on Sudan, Palestine, Kosovo, Somalia, and Iraq.

United Nations Treaty Collection (UNTC). "Convention on the prohibition of military or any other hostile use of environmental modification techniques." [ENMOD] New York. 10 December 1976. Available at http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg no=XXVI-1&chapter=26&lang=en

This site lists the states that have and have not agreed to be bound by ENMOD and explains the conditions (if any) that they have put on their adherence. On the UNTC site, you can also find out your country's position on UNCLOS, the Additional Protocols of the Geneva Conventions, and the International Criminal Court.

World Resources Institute, "Environmental Governance Today," Chapter 2 in World Resources 2002–2004: Decisions for the Earth: Balance, Voice, and Power [online edition] (Washington D.C.: World Resources Institute, 2003), p. 25, available at http://pdf.wri.org/wr2002fulltxt_023-046_chap02.pdf.

This article provides a succinct and poignant explanation of why the environment is an important issue to consider during conflict (see especially box 2.1 Armed Conflict: Killing Governance).