

ANALYSIS OF ENVIRONMENTAL INJURIES SUSTAINED BY ARMED CONFLICTS

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ABSTRACT

War is a catastrophic event that affects the environment in several ways. The use of weapons and military equipment causes extensive damage to natural resources, ecosystems, and biodiversity. The impact of war on the environment is significant and can lead to long-term environmental degradation, affecting the health and well-being of local communities. The use of weapons and military equipment during war can cause air and water pollution, leading to adverse health effects on local communities. The destruction of forests during war can lead to long-term environmental degradation, affecting local communities; livelihoods and the biodiversity of the region. The use of heavy machinery during war can cause significant soil erosion, affecting agricultural productivity and food security. The use of weapons and military equipment can cause the loss of biodiversity, leading to a decline in the number of species and affecting the ecological balance of the region. International law recognizes the environmental impact of armed conflict and provides a legal framework for environmental protection during armed conflict. Geneva Conventions of 1949, The Hague Convention of 1907, The International Criminal Court (ICC) has recognized the environmental impact of armed conflict as a war crime. The measures that can be taken to mitigate the environmental impact of war include Environmental Impact Assessments, Sustainable Development, Environmental Management Plans and International Cooperation. The legal framework for environmental protection during armed conflict provides rules for the protection of the environment during conflict. The mitigation of the environmental impact of war requires a comprehensive approach that considers the social, economic, and environmental impacts of conflict.

Keywords: War and environment, Use of weapons and biodiversity, Air and Water Pollution by war, Climate Change and conflict, Deforestation and war

INTRODUCTION

War is a destructive and violent event that causes widespread human suffering and destruction of infrastructure, resources, and natural habitats. War and the environment have an intricate and inseparable relationship. The environment is affected by war, and war is influenced by the environment. The environmental impact of war is significant and can lead to long-term environmental degradation, affecting the health and well-being of local communities. The impact of war on the environment is often catastrophic and long-lasting, leaving behind environmental degradation, destruction, and contamination. Conversely, environmental factors can have a significant impact on the causes, conduct, and outcome of wars. The use of weapons, the destruction of infrastructure, and the displacement of populations can cause severe damage to natural resources, ecosystems, and biodiversity. The impact of war on the environment is a complex issue that requires a comprehensive understanding of the environmental and social impacts of conflict. This article examines the relationship between war and the environment, the impact of war on the environment, and the environmental factors that affect the causes and conduct of wars.

DESTRUCTION OF BIODIVERSITY

War has a substantial negative effect on biodiversity and can cause long-term environmental damage which includes the destruction of natural habitats. Armed conflict and the deployment of military hardware can result in biodiversity loss, which lowers the number of species and upsets the ecological balance of the area. War can cause widespread environmental degradation, destruction, and contamination, affecting air, water, soil, and biodiversity.¹ The impact of war on the environment is both direct and indirect. Direct impact includes damage to infrastructure, destruction of ecosystems, and contamination of the environment due to the use of weapons and military equipment. Indirect impact includes the disruption of social and economic systems, leading to deforestation, overgrazing, and other forms of environmental

degradation. One of the most significant environmental impacts of war is the destruction of ecosystems. During war, ecosystems can be destroyed by bombing, shelling, and other military activities.ⁱⁱ For example, during the Vietnam War, the United States military used Agent Orange, a defoliant, to destroy forests and crops, leading to long-term environmental damage and health problems for local communities.ⁱⁱⁱ Similarly, during the Gulf War, oil spills from Iraqi oil fields caused significant environmental damage to marine and coastal ecosystems in Kuwait.^{iv}

AIR AND WATER POLLUTION

The use of weapons and military equipment during war can cause air and water pollution, leading to adverse health effects on local communities. The burning of fuel and explosives releases toxic chemicals, such as carbon monoxide, nitrogen oxides, and sulfur dioxide, into the air, causing respiratory problems and other health issues. The contamination of water sources due to the dumping of waste and chemicals can also lead to waterborne diseases and other health problems. For example, the use of depleted uranium (DU) in weapons during the Gulf War and the Iraq War caused contamination of air, water, and soil, leading to long-term health problems for local communities and military personnel.^v The environmental impact of war can also be long-lasting. For example, unexploded ordnance (UXO) left behind after a war can pose a long-term threat to the environment and local communities. UXO can cause soil contamination, disrupt ecosystems, and pose a risk to human health and safety.^{vi} Environmental Factors that Affect the Causes and Conduct of Wars Environmental factors can have a significant impact on the causes, conduct, and outcome of wars. Environmental factors include natural resources, climate change, and environmental degradation.

Natural resources, such as oil, gas, and minerals, are often a cause of conflict. Control over natural resources can be a source of power and wealth, leading to competition and conflict between countries or within countries.^{vii} For example, the conflict in the Democratic Republic of Congo (DRC) is fueled by competition for control over the country mineral resources, including cobalt, copper, and gold.^{viii}

CLIMATE CHANGE

Climate change can also be a cause of conflict. Climate change can lead to environmental degradation, food and water scarcity, and displacement of people, leading to conflict and instability.^{ix} For example, the conflict in Syria has been linked to a severe drought that caused widespread crop failure and displacement of people. Environmental degradation, such as deforestation, overgrazing, and soil erosion, can also be a cause of conflict. Environmental degradation can lead to resource scarcity, competition, and conflict between communities or countries. For example, the conflict in Darfur, Sudan, was fueled by competition for scarce resources, including water and grazing land.^x

DEFORESTATION & SOIL EROSION

The destruction of forests during war can lead to long-term environmental degradation, affecting local communities; livelihoods and the biodiversity of the region. The use of explosives, bulldozers, and other heavy machinery during war can cause significant damage to forests, leading to soil erosion, loss of habitat, and a decline in biodiversity. It affects agricultural productivity and food security. The erosion of soil can also lead to the loss of topsoil, affecting soil fertility and the ability of the land to support vegetation.^{xi}

NUCLEAR WEAPONS

The most devastating, brutal, and indiscriminate weapons ever made are nuclear bombs. A city can be destroyed and the majority of its inhabitants killed by a single nuclear weapon. Tens of millions of people would perish in a series of nuclear explosions over contemporary cities. Ionising radiation is a long-term byproduct of nuclear weapons that causes cancer and genetic damage in addition to killing or injuring those who are exposed to it. Ionising radiation also contaminates the environment. They have had terrible long-term effects as a result of their pervasive use in atmospheric testing. It could disrupt the global climate and threaten as many as two billion people with starvation in a nuclear famine in the long-term. The detonation of

thousands of nuclear weapons could result in a nuclear winter, which would destroy our fragile ecosystem.^{xii}

LEGAL FRAMEWORK FOR ENVIRONMENTAL PROTECTION DURING ARMED CONFLICT:

International law recognizes the environmental impact of armed conflict and provides a legal framework for environmental protection during armed conflict. The Geneva Conventions of 1949 and the Additional Protocols I and II provide rules for the protection of the environment during armed conflict.^{xiii}

The Hague Convention of 1907 and the Convention on Certain Conventional Weapons of 1980^{xiv} prohibit the use of weapons that cause unnecessary suffering or have indiscriminate effects, including those that cause widespread, long-term, and severe environmental damage.

The International Criminal Court (ICC) has also recognized the environmental impact of armed conflict as a war crime.^{xv} The Rome Statute of the ICC includes provisions that prohibit the intentional destruction of the environment during armed conflict.^{xvi} The mitigation of the environmental impact of war requires a comprehensive approach that considers the social, economic, and environmental impacts of conflict. The measures that can be taken to mitigate the environmental impact of war include the following:

Environmental Impact Assessments (EIAs): EIAs are an important tool for identifying and assessing the potential environmental impacts of conflict. EIAs should be conducted before, during, and after conflict to identify and mitigate potential environmental impacts.

Sustainable Development: Sustainable development should be promoted during conflict to reduce the environmental impact of war. Sustainable development can include the use of renewable energy, sustainable agriculture, and the conservation of natural resources.

Environmental Management Plans (EMPs): EMPs can be used to mitigate the environmental impact of conflict. EMPs should be developed before conflict to identify potential environmental impacts and to develop strategies to mitigate these impacts.

Environmental Restoration: Environmental restoration can be used to restore ecosystems that have been damaged during conflict. Environmental restoration can include reforestation, wetland restoration, and the restoration of water resources.

International Cooperation: International cooperation is essential for mitigating the environmental impact of war. International organizations such as the United Nations (UN) and the International Committee of the Red Cross (ICRC) can play a key role in promoting environmental protection during armed conflict.

CONCLUSION

War and the environment have an intricate and inseparable relationship. The impact of war on the environment is significant and far-reaching, leading to environmental degradation, destruction, and contamination. Affecting the health and well-being of local communities. The use of weapons and military equipment can cause extensive damage to natural resources, ecosystems, and biodiversity. The legal framework for environmental protection during armed conflict provides rules for the protection of the environment during conflict. The mitigation of the environmental impact of war requires a comprehensive approach that considers the social, economic, and environmental impacts of conflict. Measures to mitigate the environmental impact of war include environmental impact assessments, sustainable development, environmental management plans, environmental restoration, and international cooperation.

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ENDNOTES

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