

UTJECAJ RATA NA OKOLIŠ

THE IMPACT OF WAR ON THE ENVIRONMENT

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ABSTRACT

This paper analyzes the impact of wars on the environment. The status display is presented through analysis of wars being conducted on multiple continents of this planet and the consequences of these for the environment. The paper highlights the importance of the war throughout the history of civilization. At the end a conclusion is given in which it is emphasized that war has a destructive effect on the development of civilization and the environment with unpredictable long-term consequences.

Keywords: war, environment, civilization

1. INTRODUCTION

Human history has about 15,000 wars and military conflicts in which approximately 4 million people died. The modern way of life, conceived in 1776, when James Watt perfected the steam engine, it changes the coexistence of man and its environment. The man is placed in the center of all. It was believed that all nature, animate and inanimate goods were only there to serve man, and natural resources are inexhaustible with it. It is known as Grotius doctrine that natural resources of the sea are inexhaustible, no matter how often and how many times we have hunted the fond. This, as the expert called homocentric system (the man in the middle), ruled the human species up to the 60-ies of the 20th century, when they began noticing harmful consequences. The homocentric system is no longer a modern one. It is the developmental vision of the centrically system that is increasingly emphasized, where the starting point is the ecosystem, the totality of living and non-living organisms on Earth that exchange the matter, energy and information between themselves on their own. Simulations

show that it is no longer possible to continue with the expansion of production, consumption and waste and that nature is not permanently damaged. You should not look at industrial growth at the expense of nature only, but growth in harmony with nature and its possibilities. At the bottom line – it will say that impoverishment of the nature is human impoverishment as well, because most of the substances needed for life are taken from nature itself, so that it is also an economic interest of man to preserve natural resources - in order to remain available to us and for generations to come. With the support of scientific and technical discoveries and global economic and media connectivity, wars have grown out the planetary happenings and according to many of its characteristics entered into a period that is trying to be called the "technological era". It is a period when the civil societies militarism rises again, when the warrior ethos is infiltrated and when a military mentality develops, while at the same time the theoretical interpretation of peace is defined as a temporary situation between the state of two wars. Studies of some historians have shown that during roughly 3500 years of human history known peace on earth lasted only two hundred years. "Peace assumes war not only historically but also genetically," they will say in the spirit of belizma ethnologist Wilhelm E. Mühlmann (War and Peace, Zagreb 1943.). "Thank for peace and prepare for war," a slogan that is followed by numerous modern states. But the law theories of war must be admitted a merit. They have cleared with all forms of historical wars and brought to light the real concept of war: armed conflict of equal opponents, where none of the opponents must be thought human, racial, moral etc. less valuable. The idea of war, by this term often means the duel or the fight of two opponents, implies human, morally and legally equal opponents. Consideration of attempting the political establishment has shown that it is very difficult to keep war shut down only into the political sphere. It breaks through it and searches different roots. It is good if war, whatever its origin was, tries to be kept inside the political framework. Only if the war is politicized it is civilized. But what could non political or over political origins of war be.(Klausewitz, Schmitt). Faster pace in the arsenal of war was enabled by the industrialization process, whereby the production of weapons has become a very profitable investment due to the development of science and technology. For this reason war achievements confirm overall insecurity of the contemporary world. Global vulnerability means that areas and territories are losing the meaning of shelter and security they had. According to Wright, modern war is simultaneously cause and consequence of changes in social, political and religious life. In a world that is based on profit, the monopoly over the energy resources and quality ores which are of special significance in this context, war appears as a way and means of achieving dominance and control over natural resources.

2. THE CHRONOLOGY OF WARS

In the chronology of the wars the wars fought on the planet from the first World War to the present wars being fought today and the consequences for the environment of these wars will be analysed.

2.1. First World War

The First World War lasted from 1914 to 1918 and over 9 million people died in this war, most of the Spanish flu. Harmfulness to the environment is already manifested in digging trenches and thereby destroying grass, plants, animals and forests. Another adverse effect is the use of poison gas with harmful consequences for people and the evaporation of these gases into atmosphere. A significant amount of various types of unexploded munition remained scattered over big areas, which significantly hampered access to many areas and the exploitation thereof. The removal of these mines demanded much time, resources and specialists.

2.2. Second World War

It lasted from 1939 to 1945. Environmental damages are the following ones:

- Millions of people in gas chambers were killed,
- Destruction of agricultural land,
- Destruction of crops and forests in areas of the USSR, Poland, Norway and other European countries,
- Flooding in the lowlands and fertile areas (about 17% of arable land flooded with sea water in the Netherlands),
- Radioactive contamination of Hiroshima and Nagasaki,
- Collapse of the system on many islands of the Pacific Ocean,
- Increased use of natural resources due to war needs and survival of the population,
- It is estimated that about 54% industry and 36% of agricultural resources have been destroyed,
- About 22.6 million km² were affected by war activities,
- Incalculable long-term consequences for humans, animals, the flora
- Urban areas of Japan were completely destroyed because they were built from wood.

2.3. Wars in Africa

Many wars fought for liberation from colonialism. They are fought in densely populated regions through division of scarce resources such as fertile arable land, the effects on fishing and refugee camps.

2.3.1. War in Congo

The war lasted from 1998 to 2003. The war was fought because of water resources, agricultural areas rich in minerals and for political purposes. Over 3 million people died from disease and hunger. Only 45% of people have access to safe drinking water. National Parks were threatened because of various natural resources exploitation. Big wildlife hunting in order to sell meat and to survive. A WWF research showed that the number of hippos in a national park decreased from 29,000 to only 900 in thirty years.

2.3.2. The war of Ethiopia and Eritrea

The war lasted from 1998 to June 2000. Over 150,000 Eritreans and hundreds of thousands Ethiopians were killed and there were more than 750,000 refugees. During the war there was a serious draught, efforts were made to act on the disruption of agricultural production, changes in habitats. A special danger to the agricultural industry were mines.

2.3.3. Civil war in Rwanda

The war was fought in 1994 among several tribes. More than 2 million people lost their homes. About 95% of the population lives in rural areas with emphasis on agriculture. Rwanda has a very rich environment with basic resources which resulted in subsequent genocides. Refugees returning home led to a harmful effect on biodiversity and the destruction of forest complexes in the mountainous areas where the gorillas live, whose habitats are not protected by legislation.

2.3.4. Civil war in Somalia

Led in Somalia in 1991 because of fishing. Somalis failed to adhere to international protocols regarding fishing, for they have illegally hunted down the fish stock with weapons and other means. In this way they have caused a significant damage to the ecology of the region.

2.3.5. Civil war in Sudan

Led by tribes in the period between 1983 to 2006 with interruptions and large massacres of the population. Due to the conflict and displacement agricultural production has been deserted to a large extent which caused hunger in the country. This has contributed to occurrence desertification and land erosion. There was a big conflict between farmers and the rebel groups because of the closure of many roads and areas for pastoralists. Because of difficulties with the production and supply for food and because of hunger it often came to abduction of food.

2.4. America

In the Second World War America had a conflict with Japan because of the ignition of ships and planes. During the war battles there were huge fireballs formed that produced thick toxic smoke which had a harmful effect on human health. By the terrorist attacks in 2001 on the two World Trade Center buildings in New York more than 90,000 gallons of jet fuel have been burned at a higher temperature range of 10000C. The buildings are made of fibers with presence of asbestos particles in the range from about 0.8 to 3. 0% of the total mass. Particles composed of toxic materials such as asbestos, dioxins, PCBs, hydrochloric acid and other harmful materials had a longer and harmful influence on the people who lived and worked around the building. It is believed that the consequences of the disastrous effects on the human health are still present.

2.5. Asia

2.5.1. Civil war in Cambodia

It started in 1967 with the revolt in the rich province where the landowners lived. It is believed that about 35% of the forest resources were destroyed during the Maoist regime. Because of deforestation there have been large floods and the destruction of rice crops which thereby led to hunger. In 1993 deforestation was prohibited in order to prevent further spread of floodplains. The rest of the numerous mines seriously threatens further development of agriculture still in the 80-ies.

2.5.2. The consequences of the use of nuclear weapons on Japan

Bombs were dropped on Hiroshima on August 6th 1945 and August 9th 1945 on Nagasaki. There appeared a bright light with a big heat wave. All living world within half mile from the explosion was destroyed and many buildings were destroyed as well. Six weeks after the explosion there were still fires in cities because there was no water. It is estimated that approximately 400.00 people died there. There have been numerous consequences for the environment.

Clouds of radioactive dust were everywhere. A few months later many plants and animals were still destroyed due to radioactivity. Surface waters have been polluted, agriculture has been destroyed. There are long term ecological consequences.

2.5.3. The war of Iraq and Kuwait

The Gulf War was one of the dirtiest wars in environmental issues. Out of 730 oil wells Iraqis have burned 630, causing a plague on wildlife, groundwater contamination with contamination of about 400 km of coastline and a huge amount of smoke that was released into the atmosphere. It is estimated that around 25,000 migratory birds disappeared. Many fires followed by acidic rains have been caused, a large layer of soot that has accumulated in the deserts with deleterious effects on the flora. Fire fighting with sea water resulted in an increase of salinity in the areas of oil wells. Some boreholes were closed down after nine months. The water of the rivers was polluted due to the destruction of numerous dams and

sewers. With the destruction of chemical companies dangerous substances polluted water streams. This led to a tenfold rise of typhoid fever and other diseases. Moving armored machinery and other heavy machinery through the desert caused ground erosion.

2.5.4. War in Iraq

The war in Iraq started with the attack of the U.S. during 2003. Large damage to the environment was caused by munitions based on white phosphorus. Because of the massive bombing there has been great damage to the water cleaning system caused, which caused extensive pollution of the river Tigris. Plastic containers of uranium stolen from a nuclear power station were used as containers for water, food and other needs of the population with unpredictable long-term consequences. There was a similar situation with milk. The ignition of sources of oil caused large fires which have had harmful effects on air pollution and the groundwater. Heavy armored and transport machinery destroyed a large part of the ground.

2.5.5. The war between Israel and Lebanon

Started in July 2006 with big consequences for the environment. By bombing the electric power plant in Beirut over 20,000 tons of oil leaked out into the Mediterranean Sea which affected more than 90 km of coastline. This endangered the habitats of the green sea turtles and the fish stock. The beaches of Beirut were covered with mud, with the possibility of spreading to Syria. Large forest fires in northern Israel destroyed about 9,000 hectares of forest and the fires threatened the Ornithological reservation.

2.5.6. The war between Russia and Chechnya

The first war began in 1994 and finished in 1996. In 1999 Russia again invaded Chechnya, where the situation is still not finished today. It is estimated that approximately 30% of Chechen area is contaminated and 40% does not satisfy the environmental standards for living. The main environmental problems are radioactive waste and radiation, leaking oil in the ground because of the bombing of installations and refinery. Thereby contamination of ground and surface waters has occurred. It is supposed that a considerable part of radioactive waste is buried in Chechnya. Research shows that the radiation in some areas of Chechnya are up to ten times higher than permitted levels. Most of the agricultural land is contaminated and cannot be used for this purpose. In some areas there is no river fish stock and the flora and fauna have been destroyed.

2.5.7. The war in Vietnam

The war in Vietnam lasted from 1945 - 1975. In Vietnam the U.S. applied a massive herbicidal program for destruction of forests and thereby they disabled the guerrillas from hiding and left farmers without food production. By spraying about 14% of forest areas was destroyed, the agricultural production was significantly reduced, the seeds for agricultural needs have been destroyed. It is believed that about 15,000 square kilometers of land were destroyed. It is estimated that during the war about 13,000 livestock was killed. On Vietnam about 72 million liters of chemical substances were thrown, including Agent Orange with dioxin ingredients which is especially harmful to water, ground and vegetation. It is estimated that about half a million children were born with dioxin which still threatens human health today. Furthermore, a special problem for the agriculture of Vietnam is the presence of about six million unexploded ordnances which are not removed because of political misunderstandings.

2.5.8. War in Afghanistan

In this war, which is being fought even today, there has been great damage done to the environment. It is estimated that about 10,000 villages were destroyed. The water is contaminated and rivers and groundwater are polluted by a significant part of the waste disposal sites near the source. Due to the consequences of war there remained around 2% of the forest in the country. The number of birds decreased by 85% and many animals were killed for meat and fur trade. A number of mines which represent a further threat to humans and animals remained.

3. CONCLUSION

The aim of this paper was to analyze selected wars and their effects on the environment. From the analysis of wars it can be assumed that the environment in wars can be used as tool of threats and blackmail, as well as it can be used in desperate situations and as a vindictive act towards the other parties, regardless of possible consequences. Therefore, in environmental terms it can be qualified as ecocide. In all analyzed wars destruction of the environment with negative consequences and immediate effects on the environment can be noticed. The application of scientific - technological advances in military technology and the environmental consequences of the application of these confirm the need for further races in the modernization of military technology and the increasing destruction of natural resources, which question the basic factors of living conditions on this planet (pollution of air, water and ground). From this point of view war can be qualified as a global risk for the future of life on this planet. The consequences of war activities on environment are extremely high for all, especially as there are some long term consequences and many natural resources are useless and dangerous for life. Finally, let us remind ourselves on the decision of the UN General Assembly declared 6th November of every year as a day for preventing the destruction of the environment in war and armed conflicts, because there can be no lasting peace if we destroy the natural resources. Finally, let us remember the message of the Secretary General of the UN, Ban Ki - Moon, who says, "And let them confirm our commitment to sustainable management of natural resources as a critical element of lasting peace and security."

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