Wartime environmental degradation impact on women and children in Ukraine

14 March 2022

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WOMEN'S DAY 2022



Introduction

• Armed conflicts threaten the livelihoods, health, and security of the population and reduce opportunities for sustainable development.

"Direct and indirect environmental damage, coupled with the collapse of institutions, lead to environmental risks that can threaten people's health, livelihoods, and security, and ultimately undermine post-conflict peacebuilding." (UNEP, 2009)



Introduction

- On February 24, 2022, Russia launched a war aggression against Ukraine
 - on land, at sea and in the air,
 - using units of the armed forces, heavy ground weapons, including long-range artillery, missiles, naval ships and military aircrafts.
- The invasion has already resulted in significant civilian casualties and damage to Ukraine's natural heritage.



Outline

1. What we know: hot spots for wartime environmental degradation in Ukraine

2. Impact on women and children



By My Dog Sighs in Cardiff, Wales, England.

Uncertainties

Unknown

- number of civilian casualties
- level of infrastructure damage
- extend of environmental degradation
- Secrets and ongoing war
 - Data collection
 - https://www.saveecobot.com/
 - https://t.me/EcoShkodaBot
 - https://chats.viber.com/saveecobot
- Survival is a priority



1. Main hot spots for wartime environmental degradation in Ukraine



War consequences on the environment and the well-being of humans

- Weapons used during armed conflicts
 - contaminate the atmosphere with smoke and fumes
 - pollute water bodies
 - damage buildings and infrastructure
 - destroy trees and forests, which serve as homes for biological diversity
 - create military debris





What we know: threats to nuclear and radiation safety

- 24/02/022 Russian troops seized the Chernobyl nuclear power plant and other nuclear facilities in the Chernobyl Exclusion Zone.
- 04/03/2022 Russian tanks entered the territory of Europe's largest **Zaporizhzhya** nuclear power plant and declared it as the property of Rosatom.
- Several smaller nuclear objects were hit and the monitoring system was lost/damaged, release of radionuclides into the environment and adverse effects on humans still unknown (2 in Kharkiv, Kyiv)





What we know: cities

• Volnovakha – founded in 1881 city of 24,647 has sized to exist.

Mariupol

- 2187 people have died since the Russian invasion as of March 13.
- At least 22 bombings of a peaceful city in 24 hours.
- About 100 bombs have already been dropped.
- 400,000 Mariupol residents are currently blocked in the city.





What we know: cities





What we know: oil fires

Oil depots

- 27/02/2022, Vasylkiv, Kyiv oblast. the Russian military fired a ballistic missile at an oil depot. 10 tanks of 2,000 m3 of gasoline and diesel fuel burned.
- 7/032022, Zhytomyr and Chernyakhiv, Zhytomyr oblast. The State Emergency Service put out the fire for more than 8 hours.
- 03/03/2022, Chernihiv. 6 tanks with a volume of 5,000 m3 each caught fire as a result of an artillery strike.

Thermal power plant

- 03/03/2022, Okhtyrka, Sumy oblast. Russian aircraft struck destroyed the thermal power plant and the city's district heating and electricity was cut off.
- Exempts to destroy thermal power plants in Kyiv and Kharkiv.



What we know: more fires

- 13/03/2022 Avdiivka, Donetsл oblast. Five shells hit the largest in Europe Avdiivka coke plant.
 - A large-scale fire broke out.
 - The thermal power plant was stopped.
 - Citizens do not have heat.



What we know: gas pipeline fires

- 27/02/2022, Kharkiv. Russian troops blew up a gas pipeline in Kharkiv, which led to a powerful explosion and shock wave, damaging buildings in residential areas.
- 10/03/2022, Svitlodarsk, Donetsk Oblast. Russian troops cut off a high-pressure gas pipeline. A large-scale fire broke out, leading to air pollution and uncontrolled greenhouse gas emissions.
- Dozens of other damages to gas pipelines in different parts of the country have also been reported.



What we know: industrial facilities

Warehouses

- 12/03/2022, Brovary district near Kyiv. Ukraine's largest warehouse of frozen products burned down because of a Russian missile hit.
- 03/03/2022, Chayky near Kyiv. A bomb hit a warehouse with polyurethane foam, and a fire broke out in the warehouse and the adjacent office building.

Poultry farm

• 02/03/2022, Kherson region. As a result of the shelling, the electricity supply to the large Chornobayivska poultry farm was interrupted. The farm was left without the opportunity to feed the birds and maintain sanitation. There were 3 million chickens there.





What we know: agriculture

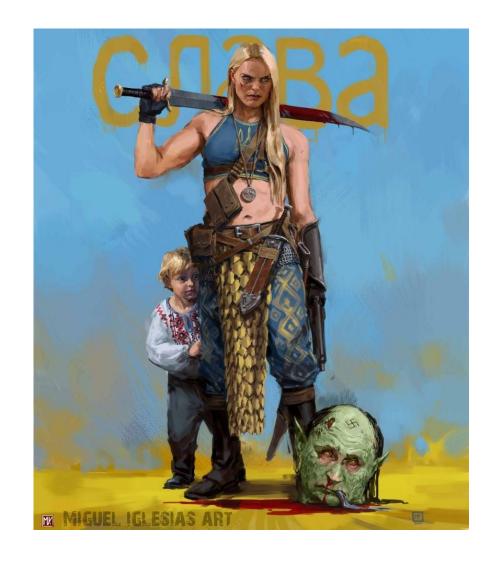
- Citizens report ammunition left after the shelling
 - cluster munitions from rocket-propelled grenade launchers
 - artillery and engineering munitions
 - aircraft bombs
 - anti-tank mines disguised in grass and soil
- This threatens the sowing campaign, which could lead to a global food crisis.
 - 400 million people in the Central East and North Africa consume Ukrainian grain (excluding corn and oilseeds).





https://biz.liga.net/ua/ekonomika/prodovolstvie/opinion/bez-edy-mogut-okazatsya-sotni-millionov-lyudey-kak-voyna-rf-protiv-ukrainy-povliyaet-na-mir

2. Effects of armed conflict-induced environmental degradation on women and children



Effect of children

- The war in Ukraine poses an immediate and growing threat to the lives and well-being of the country's **7.5 million children**.
- Humanitarian needs are multiplying by the hour as fighting intensifies
- Children have been killed
- Children have been wounded
- Children are exposed to the hazardous environment
- Children are malnourished and dehydrated
- Children are under phycological stress





https://www.unicef.org/emergencies/war-ukraine-pose-immediate-threat-children

Women and girls at risk

- Women and girls at heightened risk of violence
- Crisis and displacement put them at increased risk of sexual and physical violence and abuse.
- In for the last eight years, gender-based violence is a serious problem they know all too well.
- Some 75 per cent of women in the temporary occupied territories of Eastern Ukraine reported some form of violence since age 15 (UNFPA, 2019)
- One in three reported experiencing physical or sexual violence.





Childbirth

- An estimated 80,000 women will give birth in the next three months in Ukraine
- Many of them without access to critical maternal health care
- For some, childbirth will be a lifethreatening rather than a lifechanging experience





Health Issues

- Exposure to environmental hazards is a key factor that causes health issues in children.
- "Over 30% of the global burden of disease can be attributed to environmental factors" and "40% of this burden falls on children under five years of age." (WHO, 2006)
- Their susceptibility increases when this exposure occurs during armed conflicts.
 - severity of environmental destruction
 - the anarchy and confusion are subjected to
 - and the inadequate care they experience due to the loss of parents and relatives.





Health Issues

- Life in basements without basic hygienic conditions
- Air pollution from shelling, patrol storges burning and debris – risk to children with bronchitis and asthma
- Asbestos from destructed buildings covered by slate







Health Issues

- The health care system is considerably weakened as a result of armed conflict
- Due to an increase in diseases and injuries, health **care services** such as vaccination programs and maternal care **are disrupted**.
- The exposure of pregnant women to environmental hazards can result in complications during pregnancy and birth defects.







Contamination of Clean Water and Sanitation

- Sieged cities are without water
- Repair works are discontinued due to prolonged hostilities, insufficient spare parts, and inadequate maintenance
- Contaminated water can cause many lifethreatening diseases including diarrhea, hepatitis B, cholera, dysentery, and typhoid fever
- It is also difficult to maintain a clean environment without water



https://life.liga.net/istoriyi/article/ya-tebya-zaschischu-mama-kak-etu-voynuperejivayut-semi-s-malenkimi-detmi https://zaxid.net/diti_viyni_foto_n1537203

Inadequate Nutrition

- Inadequate nutrition is caused by drought, famine, and poverty, which are more prominent in armed conflict situations
- Children are highly susceptible to diseases due to inadequate breast milk or nutritious meals
- Under-nutrition reduces learning capacity and increases the rate of sicknesses in children by reducing their immune response





https://www.bbc.com/ukrainian/features-60684140 https://espreso.tv/diti-u-pidvalakh-bez-izhi-ta-vodi-denisova-zayavila-shcho-rosiyski-okupanti-sprichinyayut-u-vorzeli-gumanitarnu-katastrofu

Destruction of Public Institutions

- Destruction of public facilities like schools and hospitals
- Shelling of oil and energy infrastructure lead to the cuts in electricity and heat supply
- Waste disposal institutions may collapse, which affects the ability of authorities to respond to threats and dangers of waste pollution





Leisure and Play

- Environmental damage as a result of armed conflicts prevents children from having fun with their peers
- Many of them are scared of being blown up or wounded by landmines
- The inability to participate in leisure and play leads to feelings of loneliness and boredom
- Protracted conflicts means that the social lives of these children could be affected for the whole length of their childhood





https://zn.ua/ukr/UKRAINE/pid-zemleyu-bezlich-simey-donecka-zhivut-u-pidvalah-z-malenkimi-ditmi-178216_.html https://life.liga.net/istoriyi/article/ya-tebya-zaschischu-mama-kak-etu-voynu-

perejivayut-semi-s-malenkimi-detmi

Ukraine conflict affecting children's mental health

- Armed conflicts affect the mental health of boys and girls, causing nightmares, social isolation and panic attacks (UNICEF)
- After years of stress caused by shelling children developed diabetes as a result of conflict-related stress



Displacement and migration

- More than 1 million children have fled Ukraine as families desperately seek safety and protection
- Up to 5 million people could flee the country - making this the biggest humanitarian crisis in Europe since WWII
- Women and girls face particular and disproportionate risks – including of violence, exploitation and abuse during conflict and displacement





Everything will be Ukraine!



Seth Globepainter in Paris, France