



CLIMA Fund
RESOURCING GRASSROOTS CLIMATE SOLUTIONS

Image by Friends of the Earth International.

The environmental costs of armed conflict

A Thematic Brief for Funders

In 1995, the Nigerian military executed nine activists, widely known as the Ogoni Nine, for peacefully defending their territory.

Decades of oil extraction by Royal Dutch Shell had devastated farmlands, fisheries, and freshwater resources in the oil-rich Ogoni region of the Niger Delta. Grassroots movements organized to demand accountability from Shell and the state forces that enabled continued extraction. Their efforts were met with repression, including arrests and executions.

In 2021, after years of organizing and advocacy, a Dutch court recognized Shell's complicity in the environmental and human rights violations in the Niger Delta and held Shell's Nigerian subsidiary liable for oil pollution. This ruling set an important international precedent for holding multinational fossil fuel corporations accountable for environmental and social harm.

CLIMA Fund members have provided long-term flexible funding to grassroots movements, researchers, and environmental defenders [resisting extraction in the Niger Delta](#) since 2004. The court victory more than fifteen years later demonstrates the importance of sustained investment in movements advancing legal accountability and environmental remediation. Grassroots movements are addressing environmental harms while confronting systems that enable them, including the alignment of armed groups with extractive industries. Yet, this movement organizing takes place as global investment in militarism is expanding.

Environmental impacts of conflict and militarized action

The wealthiest countries spent \$9.45 trillion on military expansion between 2013 and 2021, far exceeding their climate commitments. In 2024, military spending reached \$2.7 trillion, a nine percent jump from the year before and the steepest increase since the Cold War. At the same time, wealthy governments are cutting human rights funding while expanding military spending.

Armed conflict and militarized action drive climate change through greenhouse gas emissions, ecosystem degradation, and long-term contamination of land and water. Since Russia began its invasion of Ukraine in February 2022, Ukraine's national emissions have risen by over 230 metric tons of carbon dioxide equivalent (CO₂e)—roughly matching the annual emissions of several mid-sized European countries combined. Military action has damaged over one million hectares of natural and protected landscapes in Ukraine, threatening biodiversity and critical carbon sinks.

Environmental impacts of militarism extend far beyond active conflict. The entire lifecycle of weapons, from mining to manufacturing and disposal, is destructive to the planet. Yet, emissions arising from the weapons lifecycle are often excluded from national climate reporting, obscuring the true climate impact of heavily militarized countries.

Military emissions are significantly undercounted

The military sector is responsible for an estimated **5.5% of annual global greenhouse gas (GHG) emissions**.

However, this estimate does not include the emissions from armed conflict, which can reach up to **2.5 tonnes of CO₂e per week**.

Over a year, emissions from a single war could equal those of the **84 lowest-emitting countries combined**. **If militaries were a country, their combined emissions would rank fourth globally.**

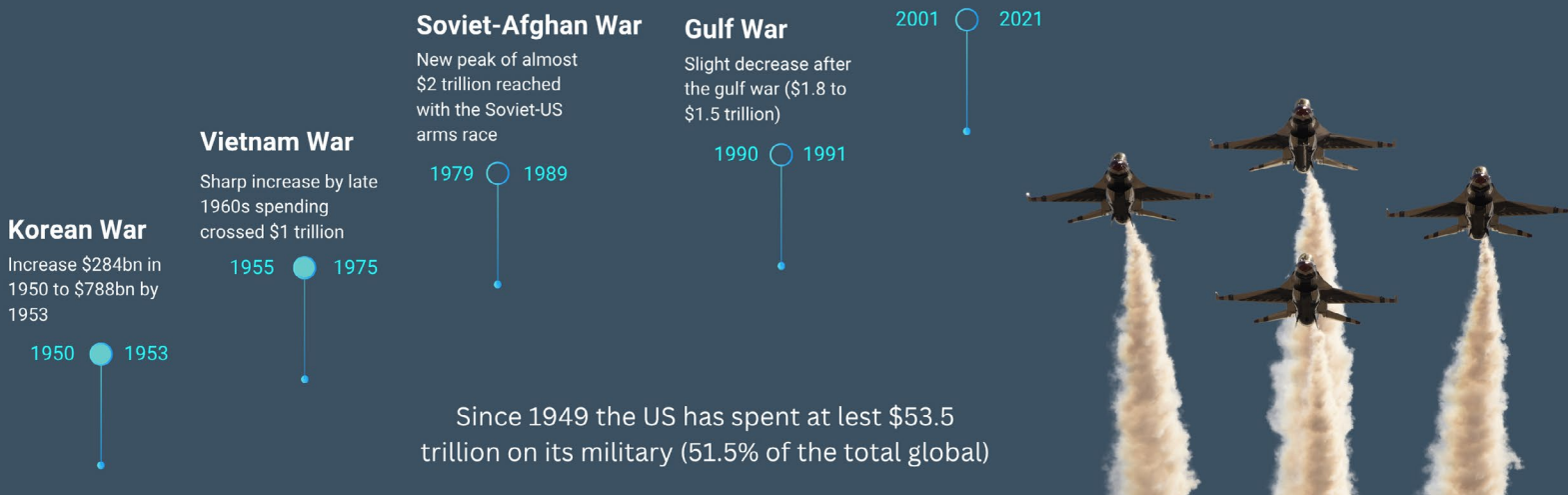
Explosive munitions release CO₂ and other pollutants upon detonation. Military aircraft burn thousands of liters of fuel per operation.

Rocket launches for satellite deployment pollute the upper atmosphere, causing disproportionate warming. Explosive residues contaminate soil and water with heavy metals and other toxic chemicals, reducing soil fertility and agricultural productivity.

Reconstruction following conflict is carbon-intensive and causes additional emissions. Researchers estimate that **61 million tons of debris** would need to be collected before Gaza can be rebuilt.

Al Jazeera, 2026

POST-WARS increase in military spending United States





Militarized action enables extractive industries

Militarism drives the climate crisis by enabling resource extraction.

Military expansion, fossil fuel development, and corporate power are mutually reinforcing. Revenue from fossil fuel extraction helps finance military spending, while military and paramilitary forces play a role in [securing access to land and resources](#) for extractive industries.

In Nigeria, [military action allowed Shell to operate with impunity](#), further degrading farmland, fisheries, and freshwater sources. In Colombia, state and non-state armed actors have facilitated land grabs for mining, logging, and agribusinesses, displacing communities

and degrading ecosystems. The impacts of militarism are disproportionately borne by communities already facing political and economic marginalization, particularly Indigenous Peoples. Militarized violence and environmental contamination are associated with heightened safety and health risks for women. From the Niger Delta to the Amazon and Palestine, communities defending ecosystems are treated as threats to development or national security rather than as the rightful stewards.



Militarism and reprisals against environmental defenders

Governments and extractive corporations frequently use coordinated surveillance, criminalization, and militarized policing to secure extractive projects and suppress community opposition.

Natural resource defenders experience the highest levels of violence among human rights defenders because protecting land and water directly challenges extractive industries. Environmental defenders opposing resource extraction and agribusiness are routinely subjected to intimidation and violence from both state and corporate actors.

Military and surveillance systems justified in the name of national security are frequently used to police communities resisting environmental and human rights violations.

In response, grassroots movements are strengthening collective protection through security trainings, legal defense funds, and rapid response networks. Movements have also successfully pushed back against repression through coordinated public pressure campaigns and strategic litigation that have secured the release of detained activists and increased public scrutiny of state actors. Philanthropic support is critical to sustaining this work. It enables movement actors to mount legal defense, relocate when necessary, access medical care and psychosocial support, and strengthen digital security.

Alternatives to militarism

Food sovereignty

Armed conflict and militarized action undermine food sovereignty by damaging farmland and disrupting production.

Ukraine, often called the breadbasket of Europe, has suffered soil contamination, reduced yields, and damage to farmland and equipment as a result of the war. As Ukraine is a major grain exporter, the conflict has contributed to volatility in the global food market. In Haiti, political instability and conflict have limited food production, increasing the country's dependence on imported, less nutritious food. This dependence leaves communities more vulnerable to price fluctuations and supply disruptions. In the Marshall Islands, decades of nuclear testing have left lasting environmental damage that limits agricultural production. Combined with increasing sea levels and soil salinity, these legacies have made the country reliant on food imports.

Food insecurity is also created through warfare. Economic sanctions and blockades can weaken local food systems by restricting access to fuel, agricultural inputs, and essential infrastructure.

For instance, sanctions imposed on Cuba and Venezuela have constrained people's access to food, medicines, and fuel, heightening vulnerabilities in food and energy systems. Across multiple conflict zones, civilian populations bear the burden of foreign sieges, blockades, sanctions, and restrictions on humanitarian access. In Palestine, Yemen, and Sudan, deliberate starvation and repeated attacks on food supply demonstrate how hunger is weaponized for war.

In the face of militarized threats to agriculture, grassroots movements are advancing durable, resilient solutions. The Peasant Movement of Papaye (MPP) has planted over 50 million trees to restore Haiti's eroded countryside. Their agroecology training programs help farmers restore soil fertility, increase biodiversity, and reduce reliance on chemical inputs. The movement distributes native tree seedlings and provides extensive training in natural farming practices that prevent soil erosion and improve crop resilience.



Energy sovereignty

Militarism shapes energy production, distribution, and access. Armed actors often protect fossil fuel infrastructure, with research directly linking conflict and forced displacement to energy poverty.

Armed conflicts damage power plants, transmission infrastructure, and fuel supply chains, thus reducing availability and increasing energy costs. Conflicts in the Middle East have exposed critical fuel and energy dependencies and vulnerabilities in global energy systems. Reconstruction efforts often reinforce existing fossil fuel dependence rather than supporting more resilient alternatives.

These dynamics of dependence and disruption highlight the importance of energy sovereignty. Community-controlled renewable systems reduce dependence on vulnerable supply chains, lower emissions, and improve reliability. Because they are decentralized, locally

governed systems are better able to withstand and respond to shocks. Energy sovereignty directly addresses the environmental and structural vulnerabilities created by militarized energy systems.

Indigenous families in Malaysia who opposed a large dam built a micro-hydropower (MHP) renewable energy system with assistance from local civil society organizations, including CLIMA Fund partner SAVE Rivers. Since 2019, the completed MHP installation has provided affordable, community-controlled electricity. The village no longer depends on diesel generators or large-scale projects that threaten local ecosystems.

Grassroots movements are addressing militarized climate harm

Grassroots movements are challenging the structures that produce climate harm across regions impacted by conflict and military-aided extraction.

Movement organizing often combines documenting violations, legal advocacy, ecosystem restoration, and building community-governed energy infrastructures.

In Fiji, grassroots movements have integrated anti-nuclear organizing into their climate advocacy and secured the ratification of the Treaty on the Non-Proliferation of Nuclear Weapons. Movement groups across the Pacific are resisting [nuclear testing and dumping](#). Grassroots movements, including CLIMA Fund partner [Pacific Network on Globalisation](#), are showing that climate resilience requires confronting militarized environmental harm, not just adapting to its consequences.

In 2021, a jet fuel leak at the Red Hill fuel storage facility, operated by the United States military, caused a large amount of petroleum to spill into the main water supply on O'ahu, Hawaii, affecting thousands of residents. As a result of CLIMA Fund partner [O'ahu Water Protectors'](#) direct action and advocacy on Capitol Hill, the United States Department of Defense established a task force to ensure the safe and expeditious defueling of Red Hill, helping protect access to clean water for residents.

These examples demonstrate that addressing militarized environmental impacts requires sustained investment in locally-led movements capable of securing accountability while advancing community-controlled alternatives.





Conclusion

Militarism is an often overlooked driver of climate change and ecological degradation. Military operations—during and beyond conflict—create significant greenhouse gas emissions, disrupt food systems, and undermine energy access. Militarized policing and repression weaken the civic space necessary for frontline communities to defend their land and resources.

Grassroots movements are responding to these challenges by securing legal accountability, restoring ecosystems,

strengthening community-governed food and energy systems, and resisting the expansion of extractive industries. Movements understand militarism, extraction, and democratic erosion are interconnected and mutually reinforcing. Philanthropy cannot afford to address these issues in silos. Investing in grassroots movements confronting militarised environmental harm protects ecosystems and strengthens community-controlled resource management systems.

To learn more about funding grassroots climate justice movements, write to us at community@climasolutions.org.



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