

MILITARISM AND THE ENVIRONMENT

Safeguarding the environment is a vital component of sustainable development. While recognizing the interlinkages between the 17 Sustainable Development Goals (SDGs), several of these goals are directly connected to protecting the environment.¹ For a sustainable planet, civil society organizations and peoples' movements in Asia Pacific are demanding more than environmental protection from pollution and degradation. They are demanding Development Justice,² of which a vital component is Ecological Justice

that stresses on the recognition of the historical responsibility of countries and elites within countries whose production, consumption and extraction patterns have led to human rights violations, global warming and environmental disasters and compels them to alleviate and compensate those with the least culpability but who suffer the most: farmers, fishers, women and marginalized groups of the global south. Militarism has historically been used as a tool for expropriation of resources and to enforce the current unjust and unsustainable global production and consumption systems. As such, addressing militarism is an important component in the pursuit of sustainable development.

Militarism is one of the most-overlooked causes of long-term environmental destruction in the region. Military-related operations are tucked away from public scrutiny under high levels of secrecy and with most countries not having adequate environmental laws that would regulate military facilities and practices. Chemical and nuclear waste pollution, destruction of ecosystems, and massive climate-altering green house gas emissions are some of the direct effects of militarism that need to be addressed, as impacts stretch over several generations and can severely alter the planet's ability to sustain life.

Chemical Waste Pollution

Military facilities and operations in Asia Pacific have released deadly chemical wastes in the air, water, and soil, affecting people in the vicinity of their operations, causing damage even long after the facilities have closed and military operations have stopped.

A large number of recorded cases of chemical waste contamination in Asia Pacific are caused by the United States' (US) military bases and operations in the region. The US has a worldwide network of between 700-800 military bases and installations. Some of these are located in Australia, New Zealand, Japan, South Korea, Marshall Islands, Turkey, Qatar, Bahrain, Saudi Arabia, and United Arab Emirates. Some of the facilities previously controlled by the US such as the Subic Naval Base and Clark Airbase in the Philippines can still be accessed by the US through military agreements. These two bases were important staging grounds for the US during the Vietnam War.

Effects of the massive chemical warfare launched by the US during the Vietnam War can still be felt to this day. Three generations affected by Agent Orange, veterans sprayed by the chemical and their descendants who inherited the contamination and those who still farm the contaminated lands, continue to suffer the debilitating effects.³ Children of those sprayed with the chemical are born with defects and communities suffer from cancers, goiters, skin disorders, and gastrointestinal diseases. Canada-based environmental scientists Hatfield Consultants conducted a research in the Aluoi Valley in Vietnam, where Agent

Orange was sprayed and stored, found that "the dioxin has remained in the ground... and spread to ponds, rivers and irrigation supplies, from where it has passed into the food chain, through fish and freshwater shellfish, chicken and ducks that store TCDD in fatty tissue."⁴

Similar cases of toxic waste contamination from US facilities and operations have been recorded elsewhere in the region: the Philippines, Japan, Iraq, Afghanistan, and Pacific Islands.



¹ 6: Clean Water and Sanitation, 7: Affordable and Clean Energy, 9: Industry, Innovation and Infrastructure, 11: Sustainable Cities and Communities, 12: Responsible Consumption and Production, 13: Climate Action, 14: Life Below Water, 15: Life on Land, 17: Partnerships for Goals

² Development Justice a transformative development agenda proposed by CSOs during the Post-2015 negotiations. It is composed of five (5) foundational shifts: Redistributive Justice, Economic Justice, Ecological Justice, Social and Gender Justice, and Accountability to Peoples. See <http://iboninternational.org/resources/13/12/02/development-justice>

³ Scott-Clark, C. & Levy, A. (29, March 2003). Spectre Orange. The Guardian. Retrieved from <https://www.theguardian.com/world/2003/mar/29/usa.adrianlevy>

⁴ Ibid.

In the Philippines, high incidence of kidney diseases and children born with abnormalities were recorded in communities surrounding the Clark Airbase and the Subic Naval base.⁵ Investigations have found that high amounts of toluene, benzene, methyl ethyl ketone, xylene, and trichloroethylene were left in the Clark Airbase, while mercury and asbestos were also dumped in Subic.⁶ In Okinawa, Japan which hosts more than 30 US bases, authorities conducted tests and found that the island has been contaminated with lead, asbestos, arsenic, depleted uranium, and polychlorinated biphenyls (PCBs).⁷ In South Korea, environmental lawyers and activists are demanding further investigation and clean up of the pollution caused by more than 84 oil spills between 1990-2015 inside the Yongsan US Army garrison in Seoul.⁸ Islands in the Pacific such as the Wake Island, Johnston Atoll, Guam, Marshall Islands and Northern Mariana have been used by the US military to dump PCBs, nerve and mustard gas, unexploded munitions, radioactive materials, and Agent Orange, posing immense danger to populations living on the islands, and damage to the surrounding environment.

Aside from the US-related facilities and operations, toxic wastes have also affected communities around military airfields in Australia. Thousands of people living near Williamtown RAAF base, near Newcastle in NSW, and the Army Aviation Centre at Oakey in southern Queensland have found out that perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), which have been linked with cancer, have contaminated their lands and drinking water.⁹

Nuclear Waste Pollution

After World War II, the United States and its French and British allies continued to test their nuclear weapons in Marshall Islands and French Polynesia. More than 60 years after, the effects of dropping an equivalent of 1.6 Hiroshima bombs in Marshall Islands daily for 12 years that decimated around three islands are still being felt.¹⁰ In 2012, special rapporteur Calin Georgescu, declared that the near-irreversible environmental contamination from the nuclear tests has led to the loss of livelihoods and many people continued to experience indefinite displacement.¹¹ A study in 2016 found that radiation levels in Bikini Atoll are as high as 639 mrem yr⁻¹, which is well above the established safety standard threshold for human habitation of 100 mrem yr⁻¹.¹²

A briefing paper developed by the International Peace Bureau points to the still unfinished business of cleaning up nuclear wastes. During the Cold War, the US and Soviet armed forces produced enormous amounts of hazardous wastes. As a result of naval accidents there are at least 50 nuclear warheads and 11 nuclear reactors littering the ocean floor. There are more nuclear reactors at sea than on land. The Pentagon generates five times more toxins than the five major US chemical companies combined. The US military is the largest single source of US environmental pollution. The cost of cleanup of military-related sites is estimated to be upwards of US \$500 billion. This is in addition to the bill for cleanup of former Soviet military activities – a bill still largely unpaid.

Weapons used in the wars in Afghanistan, Iraq, Syria, Palestine, and Yemen include depleted uranium munitions. Although significantly lower in radiation levels than actual uranium, exposure to depleted uranium munitions has been found by scientists and medical doctors to cause cancers and birth defects. In Iraq for example, the US utilized depleted uranium weapons since 1991. Medical doctors have recorded that childhood leukemia has doubled between 1993 and 2007.¹³ A 2004 report by the World Health Organization (WHO) found that “Iraq had the world’s highest rates of lymphoma and leukemia: 407 lymphoma and 325 leukemia cases for every 100,000 people. Afghanistan, which was invaded by the US in 2001, placed second, with 247 lymphoma and 236 leukemia cases.”¹⁴ From 2005-2009, researchers have found that Fallujah in Iraq is experiencing higher rates of cancer, leukemia and infant mortality than Hiroshima and Nagasaki did in 1945.¹⁵ With depleted uranium being currently used in Syria and Yemen, these two countries are likely to experience what the Iraqis in Fallujah are going through.

Women are disproportionately impacted by chemical and nuclear waste pollution due to effects on their reproductive systems, inequalities on access to healthcare, and the uneven burden of caring for affected children being left with them.

⁵ Ted, Regencia. (28, April 2014). Toxic trail shadows US-Philippine bases deal. Al Jazeera. Retrieved from <http://www.aljazeera.com/indepth/features/2014/04/toxic-trail-shadows-us-philippine-military-bases-deal-20144286574888208.html>

⁶ “Toxic bases in the Pacific”, APSNet Special Reports, November 25, 2005, <https://nautilus.org/apsnet/toxic-bases-in-the-pacific/>

⁷ Mitchell, J. (1, May 2016). Contamination at Largest US Air Force Base in Asia: Kadena, Okinawa. The Asia Pacific Journal. Vol. 14, Issue 9, No.1. Retrieved from <http://apjjf.org/2016/09/Mitchell.html>

⁸ Xinhua. (5, April 2017).

Pollution revealed inside US military base in central Seoul. China Daily. Retrieved from http://www.chinadaily.com.cn/cndy/2017-04/05/content_28793807.htm

⁹ Trask, S. (20, March 2017). Chemical crisis spreads to nation’s airports. The Canberra Times. Retrieved from <http://www.canberratimes.com.au/act-news/chemical-crisis-spreads-to-nations-airports-20170313-guxeq9.html>.

¹⁰ Ong, C. (29, June 2006). Legacy of US Nuclear Testing in the Marshall Islands. Retrieved from http://www.moruroa.org/medias/pdf/ONG_doc2.pdf

¹¹ Agence France Press. (2, March 2014). Bikini Atoll nuclear test: 60 years later and islands still unliveable. The Guardian. Retrieved from <https://www.theguardian.com/world/2014/mar/02/bikini-atoll-nuclear-test-60-years>

¹² Sumner, T. (June 6, 2016). “Bikini Atoll radiation levels remain alarmingly high”. Science News. Retrieved

¹³ Jamail, D. (16, March 2013). Iraq: War’s legacy of cancer. Al Jazeera. Retrieved from <http://www.aljazeera.com/indepth/features/2013/03/2013315171951838638.html>

¹⁴ Koepfel, B. (13, March 2017). More Evidence Suggests Radiation Caused Illness in U.S. War Zones. The Washington Spectator. Retrieved from <https://washingtonspectator.org/radiation-war-zones-koepfel/>

¹⁵ Busby, C.; Hamdan, M. & Ariani, E. (6, July 2010). Cancer, Infant Mortality and Birth Sex-Ratio in Fallujah, Iraq 2005–2009. Retrieved from <http://www.mdpi.com/1660-4601/7/7/2828/htm>

Destruction of Ecosystems and Biodiversity

The Spratlys Islands in South China Sea are at the center of the most biologically diverse marine ecosystems in the world. Currently, it also houses around 15 military facilities. China, Vietnam, Taiwan, Malaysia and the Philippines have all reclaimed land in the Spratlys, which can accommodate ships and aircraft. However, China's reclamation of more than 3,000 acres of land pose the highest dangers to the area's coral reefs and the marine life inhabiting them.¹⁶ Damage to these coral reefs can affect the region's source of larvae for fisheries that feed hundreds of millions of people.¹⁷

Military exercises are also known for negatively impacting ecosystems. In the Bay of Bengal, India's Defence Research and Development Organisation (DRDO) has been known to conduct missile tests in the middle of a turtle-nesting site within the Gahirmatha Marine Sanctuary and near Netrani Island, home to diverse fauna enlisted in the IUCN.¹⁸

Militarism is also used to facilitate environmentally damaging projects. Deployment of regular and private armies usually happens prior to the entry of extractive projects in communities. In the Philippines, for example, the government sends "investment defense forces" to communities with existing or proposed mining or plantation projects to suppress dissent. In Indonesia, a study conducted by the Center for East Asia Cooperation Studies at the University of Indonesia found out that military officers not only took bribes and received kickbacks for helping arrange logging permits in East Kalimantan, they also had direct investments in logging companies and developed ties with illegal loggers.¹⁹ Similar cases have also been reported in West Papua where the Indonesian military also protect logging and mining businesses. In both the Philippines and Indonesia, local indigenous populations are effectively prevented from practicing their own natural resource management when the military facilitates destructive projects in their communities.²⁰

Militarism and Climate Change

Military operations consume large amounts of fossil fuels and yet this fact has largely been ignored during climate negotiations. Green house gas emissions of fossil fuels used by the military are excluded in the reporting of countries. Although these emissions are massive and definitely contribute to the planet's fast rising temperatures, these are not counted in the emissions levels of countries. Nowhere in the Paris Agreement are commitments to reduce GHG emissions by eliminating militarism and wars. The exclusion of military emissions from accounting ledgers was successfully negotiated by the US during the creation of the Kyoto Protocol. Although the US eventually did not ratify the Kyoto Protocol, the exemption is applied to every signatory.

The United States has the highest military budget (USD 606 billion) among all countries. Because of the number of its foreign bases and wars it led since the war on terror, the US also has the highest amounts of GHG emissions from its military actions. The US military alone is the single largest user of petroleum in the world and has been the main enforcer of the global oil economy for decades.²¹

In 2006 alone, the US Army consumed 2.6 billion gallons of fuel, the same amount it used during the Second World War (1941-1945). According to Oil Change International, the US war on Iraq from 2003-2007 is responsible for at least 141 million metric tons of carbon dioxide equivalent (MMTCO_{2e}), which is the same as the emissions from putting 25 million more cars on the road in the US.²² In 2012, findings of a US Congressional report mentioned that the Department of Defense used a staggering 117 million barrels of oil in 2011.²³ These data do not take into account the amount of fossil fuels used by the Army's contractors and suppliers of weapons.

Wars waged by the US and its NATO allies have also been used to grab fossil-fuel rich territories and secure vital transportation lines for transporting fossil fuel, which further reinforces the fossil fuel driven economy instead of shifting resources towards

2016 US Military Spending Compared to the Next 5 Countries (in USD Million)

USA		606,233
China, P.R.	225,713	468,727
Russian Federation	70,345	
Saudi Arabia	61,358	
France	55,681	
India	55,631	

Source: SIPRI Military Expenditures Database

¹⁶ Asner, G. (30, March 2017). Military bases and submarines: What it's like to dive in the South China Sea.. CNN. Retrieved from <http://edition.cnn.com/2017/03/29/opinions/south-china-sea-coral-reef-destruction/index.html>.

¹⁷ Ives, M. (10, October 2016). The Rising Environmental Toll of China's Offshore Island Grab. Yale Environment 360. Retrieved from http://e360.yale.edu/features/rising_environmental_toll_china_artificial_islands_south_china_sea

¹⁸ Shakar, M. (14, April 2011). ENVIRONMENT: Military Debris Threaten Oceans. Interpress Service. Retrieved from <http://www.ipsnews.net/2011/04/environment-military-debris-threaten-oceans/>

¹⁹ Yale Environment 360. (29, January 2010). Corrupt Indonesian Military Closely Tied to Illegal Logging, Study Says. Retrieved from <http://e360.yale.edu/digest/corrupt-indonesian-military-closely-tied-to-illegal-logging-study-says>

²⁰ International Crisis Group. (13, September 2002). INDONESIA:

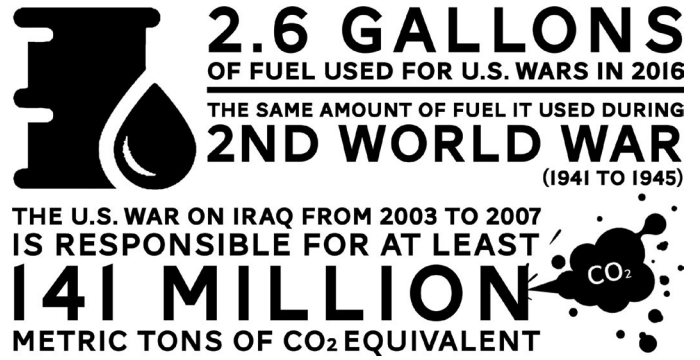
RESOURCES AND CONFLICT IN PAPUA. Retrieved from <https://d2071andvip0wj.cloudfront.net/39-indonesia-resources-and-conflict-in-papua.pdf>

²¹ Buxton, N. (19, November 2015). The elephant in Paris – the military and greenhouse gas emissions. New Internationalist. Retrieved from <https://newint.org/blog/2015/11/19/the-military-and-greenhouse-gas-emissions>

²² Oil Change International. (1, March 2008). A Climate of War: The War in Iraq and global warming. Retrieved from <http://priceofoil.org/2008/03/01/a-climate-of-war/>

²³ Ibid

developing renewable energy resources. In contrast to the USD 611 billion military spending in 2014, the US invested just USD 44.1 billion for new renewable energy. Other countries with large military budgets also spent much more for militarism and wars in the same year than on renewable energy – Japan: USD 41.16 billion vs. USD 36.2 billion, United Kingdom: USD 55 billion vs. USD 22.2 billion, India: USD 51 billion vs. USD 10.2 billion.²⁴ The current pullout of the US from the Paris Agreement and the attempts of the Trump administration to weaken the US government's programs to address climate change will definitely take the planet for a worse turn.



What Are We Demanding?

We demand development justice – a development framework that recognizes militarism as a threat to our democratic rights and an impediment to sustainable development. We demand an agenda that aims to foster environmental sustainability and global peace and security based on justice and protects communities from the devastating impacts of militarism and wars. Specifically, we are demanding to:

- 1) Re-channel military expenditure to social spending and for sustainable development, including spending for environmental protection and climate adaptation for communities in the global south;
- 2) End foreign occupation and recognize, respect and uphold peoples' sovereignty and the right to self-determination;
- 3) Ensure that all development and peace and security processes respect indigenous people's rights over their cultural heritage and natural resources and uphold their right to development and self-determination;
- 4) Provide reparations for countries and communities ravaged by militarism; and
- 5) Stop the use of military and paramilitary troops for 'development' projects.

WHAT CAN YOU DO?

The demand for ecological justice is vital toward achieving Development Justice. With the current development model allowing aggressive military policies as a legal recourse to aide profit accumulation, it becomes imperative for us to organize our ranks and resist the growing threat that is militarism. We need coordinated global actions and awareness-raising activities to get our message across.



SPREAD THE WORD

Help us spread the word by conducting awareness-raising activities in your area such as seminars, workshops and fora.



REACH OUT TO MEDIA

Share materials through print & social media and engage the press by writing an opinion piece or organizing a media conference



ORGANIZE ACTIONS

Reach out to and co-organize actions and protests with existing campaigns and platforms against militarism

For more information and to keep us informed about your work on militarism, please contact: secretariat@aprnet.org

²⁴Data from SIPRI Military Expenditures 2016 and from Buckley, T. & Nicholas, S. (January 2017). China's Global Renewable Energy Expansion. Institute for Energy Economics and Financial Analysis. Retrieved from http://ieefa.org/wp-content/uploads/2017/01/Chinas-Global-Renewable-Energy-Expansion_January-2017.pdf



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