

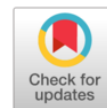


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BOOK REVIEW



War and Ecology: Defence, Climate Change and Environmental Impact, by Adrien Estève, 2026, Edward Elgar Publishing, pages vi + 222, \$145.00/£105.00, (hardback) ISBN: 978-1-0353-5909-7

Sometimes human aggression results in war. This may be prolonged and lead to widespread violence with the resulting ecological disaster lasting even longer. Destruction of landscapes, poisoning of soil and water, and loss of habitats and ecosystems are some well-known outcomes that take generations to repair. Weather has not always been factored in for campaign planning; e.g., Napoleon (and Hitler) against Russia, Napoleon before Waterloo, and the Japanese in their retreat from Burma. The environment has often been regarded merely as a variable in the battlefield with deterioration overlooked in the strategic thinking (p. 3). From a philosophical viewpoint, both *ecology* (scientific study of how living organisms and their environment interact) and *strategy* (plan to achieve something) are radically opposite.

The book is rich in information on ecological issues, defence policies, government approaches, sustainability, strategy, and climate change. The author moves widely across these topics from antiquity onward. Since the efforts of France form a miniscule part of the book, the author could have provided this discussion as a single unit for clarity and improved understanding. Similarly, use of abbreviations in place of repeated use of full forms could have been helpful to the reader. In places repeated information without referencing the earlier discussion complicates understanding.

In an effort to move beyond theoretical oppositions between ecology and strategy by analysing practices and policies, Adrien Estève examines how environmental and climatic issues are problematized in the defence of a country, a concern area that arose only in the 1980s (p. 2). To bolster his argument, Estève discusses various efforts of the United States (US) and France in this regard over the years. The author identifies *three* environmental and climatic responsibilities attributed to the defence system. These include: responsibility to prevent destruction and pollution resulting from defence activities; to save energy during military interventions; and to anticipate and prevent risks posed by climate change (p. 6). These three also form the three sections of this book. The data have been drawn from semi-structured interviews, archives, directives, internal reports,

and government documents as part of a fieldwork study conducted between 2017 and 2019 in the two countries by civilian and military officials working with the defence forces or their think-tanks (p. 7).

One notices that incorporating ecological issues into defence policies depends on how environmental and climate responsibility is defined or assigned to the armed forces. The *first* way is the environmental defence policy which aims to limit destruction and pollution during wartime (p. 158). Owing to national security concerns, these have been overlooked and not enshrined in the codes of the armed forces of either France or the US (p. 99). The *second* is the sustainable defence policy that aims to use limited force by use of effective technology (p. 80) and equipment powered by renewable energy (p. 137) which unfortunately is still not a part of the defence doctrine as they are still in the development stage. The *third* is synthesis of ethics for climate adaptation and strategic anticipation which represents the responsibility that is best suited to existing defence policies and can encourage use of defence forces in creating climate resilient societies (pp. 150-1, 166-7). It highlights the importance of studying different definitions and visions of environmental problems in national and international environmental policies (pp. 90, 95).

In the 1970s when nature protection was side-lined, industries and businesses associated with defence could still be confronted with environmental footprints (pp. 107-113). Later when development was given priority over ecological theories in the 1990s, the military was able to adapt to constraints without compromising on their overseas operations. Still later, in the 2000s, when adaptation and resilience replaced mitigation, the defence system attached importance to efforts preventing effects of global warming. These changes show changes in strategic thinking (p. 172), which has resulted in lighter footprints, moderate use of force, training of local militaries (p. 118), geostrategic foresight to international security issues (p. 176), and inclusion of climate change in defence foresight.

Thus, the book complements classical theories of responsibilities under international humanitarian law in particular (p. 116). In addition, it focuses on sustainable defence policy by use of precision standards during conflict to achieve sustainability. To achieve these standards, both classical and environmental economies need to be strengthened to meet the demand of defence equipment, innovation, and development (pp. 80-1); not using certain types of weapons considered unjust (such as napalm and Agent Orange) (pp. 23-34); and shift from ecological justification to sustainable accountability driven by new sources of energy (pp. 101-2), and their lasting effect on the world's ecosystem display another form of responsibility. Achieving mitigation targets through adaptation by monitoring, analysing, and forecasting by defence (p. 147) empowers and legitimizes the armed

forces in anticipating and managing consequences of global climate change on societies through rescue missions and managing migration flows caused by climate degradation. The author sees the International Military Council on Climate Change (IMCC), established in 2019, as a possible way forward to create space for discussion and exchange between military and security communities about climate change and to campaign for defence on discussions about global warming (p. 214). If so, the work is seldom apparent.

Nevertheless, what stands out is the fact that economic considerations have always ruled over environmental considerations; political masters promote their personal understandings and beliefs (pp. 136, 187, 195). Whenever national security has been a priority, defence has been given leeway to overlook environmental considerations (p. 99). The inherent discipline and conscientious approach of the military has ensured that they embark on a path of sustainability through reforestation and land conservation (p. 13), recommending use of renewable energy for forward Bases (pp. 101, 134, 135), funding studies for greener energy (p. 137), and more [1] without being driven by external directives. The shift from regular troops to private contractors and NGOs during rebuilding of a nation (pp. 131-3) as employed regularly by the US in recent times may serve the light footprint policy of the US but does not discourage environmental degradation as the work of private contractors remains of variable quality [2].

The progressive shift from mitigation, to resilience, to adaptation has improved how climate change is being addressed. Since the concept of adaptation is not well defined and can be achieved only by adjustment, transformation, and reforms, for the military to include climate change in their work requires major changes. These changes need to be in expanding strategic thinking from battlefield to geography; an earlier and longer strategic anticipation; and diversification of objects of study (p. 171). The policy-makers need to see causal links between climate change and national security (p. 207) before any favourable viewpoint can be expected from them. ‘War and Ecology’ are intertwined, and recent conflicts between Russia-Ukraine, Israel-Hamas-Houthis, Israel-US-Iran are proof that environmental deterioration is being faced globally on land, in water, and the air [3].

When comparing the approach of the US and France, one notices that for the US, climate change is a ‘threat multiplier’ but for France it is a ‘risk multiplier’. Although the US approach against climate change is more towards security and that of France is broader by looking at risks, their approach towards resilience converges towards strengthening present capabilities to respond to the climate change crisis (p. 191). In the US, the initial studies on climate change were driven by a National Academy of Sciences (NAS) report on adaptation by Schwartz and Randall which was received with caution, but helped initiate thinking on climate foresight (p. 192). Two forward looking reports of

2003 proposed a model for climate change by considering the entire world and showed that the Arctic would open soon and the US Navy was not ready for this (p. 192). Bush and Trump met the approach towards climate change with indifference or hostility; banning inclusion of environmental conservation or climate change in any defence doctrines or official document.

Trump, however, focused on resilience and hence 10 Bases likely to be influenced by climate change were identified with a primary aim of protecting civilian infrastructure from climate risks (p. 203). As for climate change, for the US Army it was limited to desertification and drought. The USAF focused on extreme weather events, drought, forest fires, and marine submersion. For the USN it was submersion, drought, and extreme weather events. On the other hand, in France, studies by the Institut de recherche stratégique de l'École militaire (IRSEM) (a strategic think-tank of the French Ministry of the Armed Forces) highlighted risk zones from floods, cyclones, and droughts. Lack of institutional support ensured that climate change was not discussed in the White Paper of 2013 (p. 195). But, the Paris Conference of 2015 allowed involvement of the defence system and discussion of implications of climate change for defence (p. 206). This resulted in regionalization of climate to increase awareness amongst senior Ministry officials who resisted acceptance till a causal link between climate change and security was established (p. 207).

In the 1990s, Homer-Dixon linked climate change to security by observing that when resources become scarce, they increase population movement and economic decline, spread violence, lead to loss of legitimacy of governments, and eventually kindle tensions at a global scale. This indicates a need for new organizations and modes of assessment to produce more timely and apt responses to the security impacts of climate change (p. 177). Human and environmental security has been discussed in the UN Security Council since early 2007, and also in NATO as part of their doctrine in 2010 (p. 187). Today, Antarctica is the only geographical space that has special protection from defence activities for ecological reasons. Biodiversity is rich in the Korean Demilitarized Zone and the Green Line between the two parts of the island of Cyprus (p. 19). If adequate efforts are made to negate military activities, the planet will recover its environmental health and push back climate change which is driven by anthropogenic activities [4] and is not a 'hoax' or a 'scam' as perceived by some.

References

- [1] Agarwala, N., Chhabra, S., & Rana, R. K, 2024, Naval sector and decarbonisation using Industry 4.0, *Conference Proceedings of International Naval Engineering Conference and Exhibition (iNEC 2024)*, <https://doi.org/10.24868/11167>

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- [2] Hoppe, C., 2008, Passing the Buck: State Responsibility for Private Military Companies, *European Journal of International Law* **19**(5), 989–1014, <https://doi.org/10.1093/ejil/chn074>
- [3] Agarwala, N., 2025, Oil Spills and Ecosystem Threats: Environmental Consequences of the Houthi Operations in the Red Sea, *Natural Built Social Environment Health* **1**(2), <http://dx.doi.org/10.63095/NBSEH.25.897731>
- [4] Agarwala, N. & Polinov, S., 2021, Curtailing Anthropogenic Carbon Dioxide to Meet the Targets of the Paris Agreement using Technology Support Mechanisms, *Journal of Human-centric Research in Humanities and Social Sciences* **2**(1), 1-24, <http://dx.doi.org/10.21742/jhrhss.2021.2.1.01>

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