About the Author:

Anne Most

Anne Most holds a B.A. (Hons) in International Relations and International Organisation from the University of Groningen (NL). During her minor at Queen's University (Canada), she deepened her knowledge of crisis management and Arctic politics, which shaped her research interest at the intersection of climate change and international security. She will continue to explore this field in her Master's in International Security at Sciences Po Paris. In addition, she gained experience in the field of sustainability through an internship at the State Parliament of Baden-Württemberg.

About the publication:

3 Main Points:

How do military post-disaster operations illustrate the role and consequences of militaries as actors in climate governance? The intensity of Hurricane Melissa led to the involvement of foreign militaries in disaster relief. Disaster relief operations provide an entry point for militaries as actors in climate governance, and the responses to Melissa demonstrated how militaries can act as temporary actors in relief operations by leveraging their rapid deployment and logistical capacities.

Highlight Sentence:

"The increasing use of armed forces in disaster response marks an important point in climate governance and raises questions about the boundaries between humanitarian action and security policy."

Definition:

Humanitarian Assistance and Disaster Relief (HADR) refers to coordinated activities aimed at alleviating suffering, saving lives and restoring basic living conditions after (natural) disasters.

Hurricane Melissa and Climate Disaster Governance – How military engagements in post-disaster situations shape climate governance

In October 2025, the Caribbean was hit by Hurricane Melissa, one of the most severe hurricanes ever recorded in the region. Due to the severe damage and loss of life across the region (UN News, 2025a; World Bank, 2025), various countries sent their troops to provide disaster relief. The military response to Hurricane Melissa reflects a broader trend in disaster management. As hurricanes, floods, wildfires and other extreme weather events increase in frequency (WMO, n.d.), the demand for rapid, large-scale disaster responses is growing. This has strengthened the position of armed forces as key actors in emergency relief and climate-related governance. Yet, their involvement in disaster response remains contested and has sparked a debate over the appropriateness, scope and long-term implications of military

involvement in what has traditionally been considered a civilian domain (Jayaram & Brisbois, 2021).

Drawing on these recent post-disaster military engagements, this brief examines the role of militaries in climate governance and seeks to address the question of how military post-disaster relief operations following Hurricane Melissa illustrate the role of militaries as actors in climate governance. It argues that the responses to Hurricane Melissa demonstrated how militaries can act as temporary actors in relief operations by leveraging their rapid deployment, logistical capabilities and knowledge. Thus, disaster relief operations provide an entry point for militaries as actors in climate governance. However, it also raises concerns about the risks of armed forces in spaces traditionally occupied by humanitarian actors and the militarisation of climate governance. In light of advancing climate change, a discussion of what role the military should play in climate governance is necessary.

To advance this argument, this brief first examines Hurricane Melissa and military post-disaster relief as means of climate governance. The following section explores the aspects of why the military has become a more prominent actor in this field and its contributions to climate governance beyond providing disaster relief, before lastly looking at the implications of including the military in climate governance and the criticisms thereof.

Canadian and US military disaster relief after Hurricane Melissa

Between October 25th and 26th, Hurricane Melissa rapidly intensified before making landfall in Jamaica on October 28, 2025, as a Category 5 hurricane. With winds of 295 kilometres per hour and a pressure of 892 millibars, it was the strongest hurricane to hit Jamaica to date. The intensity of the storm was a consequence of above-average sea surface temperatures in the Caribbean during that time of year, which enhanced atmospheric instability and the formation of a low-pressure system, leading to stronger sustained winds (Climate Central, 2025; Hagan & Poynting, 2025). The hurricane caused damage across the Dominican Republic, Haiti, Jamaica, Cuba and the Turks and Caicos Islands, among which Jamaica, Haiti and Cuba suffered extensive damage and loss of life (UN News, 2025b).

To address the damages and help coordinate humanitarian disaster response, foreign militaries were sent to the region. Among those countries were the United States and Canada, which focused their relief on Jamaica, considering it was the most severely affected country by the storm. Canada provided seven million in funding for recovery support, stronger resilience and “shared priorities for sustainable development” (Government of Canada, 2025a). Alongside this, the Canadian Armed Forces (CAF) deployed 77 members to its operational support hub (OSH) for Latin America and the Caribbean (LAC), located in Kingston. OSHs do not constitute military bases but rather semi-permanent logistical facilities designed to support rapid deployment and coordination. Among the tasks of the OSH-LAC are the support of rapid missions by facilitating the movement of CAF members into the region and the provision of humanitarian assistance and disaster relief operations (Government of Canada, 2023). By reactivating the hub, the CAF “enable[d] follow-on support for humanitarian assistance and disaster relief operations“ (Pugliese, 2025) as instructed by Global Affairs Canada. While on the ground, the CAF contributed to a comprehensive assessment of on-the-ground needs. Apart from immediate logistical and humanitarian support from Canada, the hub also facilitated the coordination of the “movement of foreign military disaster assistance teams“ (Government of Canada, 2025a). The US military was also on site with its Joint Task Force (JTF) Bravo and the 22nd Marine Expeditionary Unit, which, similar to the CAF, provided assessments on the needs of the affected areas, coordination of logistics and airlift support to get critical humanitarian assistance, including “emergency food, water, shelter material and other relief supplies” (Norman & Schanda, 2025), to the areas in need.

Military disaster relief as an entry point into climate governance

After providing an overview of Hurricane Melissa and the post-disaster military responses, this section explores additional tasks fulfilled by militaries in disaster relief and the reasons why the military has become a relevant actor in disaster relief operations. While the engagement of Canada and the US highlights the coordination of logistics and personnel, the assessment of the situation on the ground and the

provision of emergency materials, militaries are also engaged in other aspects of humanitarian assistance and disaster relief (HADR), such as search and rescue missions, rebuilding infrastructure and communication systems or providing medical support (Ogredik, 2026).

Militaries have become an increasingly prominent actor in post-disaster governance for various reasons related to their structure and specialised capabilities. A factor strengthening the presence of armed forces in disaster response related to extreme weather events is their capacity to support civilian and humanitarian actors, which might become overwhelmed by the scale, speed and complexity of such climate-related emergencies (Malešič, 2015). In such situations, militaries can temporarily fill gaps that arise by providing, among other things, their personnel, equipment, platforms for cooperation, logistical capacities and knowledge. While not replacing civilian leadership, their involvement can stabilise the situation in critical early post-disaster phases, which grants civilian institutions the time needed to re-establish operational capacity (Ogredik, 2026).

Secondly, militaries provide a cost-effective and rapidly deployable solution for disaster management, considering that personnel and equipment are to a large extent already funded, trained, maintained and employed and therefore only need to be redirected to the location in need in times of crisis (Brzoska, 2015). This significantly reduces response times and allows for operations in contexts where civilian agencies may face logistical or capacity constraints. In the case of Hurricane Melissa, the US managed to have a response team on the ground in Jamaica within 72 hours after Hurricane Melissa's initial landfall (Norman & Schanda, 2025), while Canada's OSH is another indicator of the ability of armed forces to rapidly scale and coordinate disaster response. In line with the element of cost-effectiveness, militaries benefit from larger budgets than other actors engaged in disaster relief (Jayaram & Brisbois, 2021), which provides access to specialised capabilities to address the situation. For instance, military reconnaissance capabilities can help in mapping affected areas and identifying their needs. Militaries are well-trained to assess damage on the ground, support or restore critical infrastructure and leverage their ability to plan, operate and coordinate amid uncertainty, which becomes increasingly

relevant as climate events become more frequent and less predictable. Applying these elements to the context of HADR means that they can not only react to but also contribute to anticipatory disaster management (Jayaram & Brisbois, 2021). It is nonetheless important to note that the military training background and approach to disaster relief are among the most criticised aspects of military engagement in disaster relief, which this brief discusses further in the last section (Jayaram & Brisbois, 2021).

Beyond the narrow view that the military acts solely as a player in disaster relief in the field of climate policy, its growing involvement in climate change and knowledge production also contributes to its status as an emerging actor in climate governance. Through damage assessments on the ground, the collection of operational data, scenario planning, futuring and war games, militaries can provide information and insights to inform future disaster preparedness and influence decisions on climate governance (Jayaram & Brisbois, 2021). Furthermore, the developments of the Global Military Advisory Council on Climate Change, the International Military Council on Climate and Security and the NATO Climate Change & Security Centre are further indicators for the growing incorporation of the military in discussions on climate change in global policy councils.

Implications for climate governance and security policy

Greater involvement of the military as an actor in climate governance affects both climate governance and security policies. Despite the operational contributions and expanding roles of armed forces, the implications of greater military involvement present structural challenges and concerns about the militarisation of climate change.

By directing more resources to the provision of disaster relief and strengthening resilience to climate-related hazards across countries, as highlighted in Canada's Defence Climate and Sustainability Strategy 2024-2025 (Government of Canada, 2025b), armed forces need to adjust their personnel and equipment planning. However, as disaster relief is not the main task of armed forces, increasing

engagement in such activities partially shifts the focus and resources away from its initial tasks and may further require “changes in force structure“ (Brzoska, 2015).

This increasing use of armed forces in disaster response also marks an important point in climate governance and raises fundamental questions about the boundaries between civilian authority, humanitarian action and security policy. From the climate perspective, there are concerns about a shift in focus away from climate change itself towards responses to climate-related risks shaped by security institutions. Such militarisation and securitisation of climate change may favour short-term stability and crisis management interests over long-term climate justice. Such a development could narrow the scope of climate governance.

On top of that, militaries are institutionally oriented around combat situations rather than providing HADR and consequently may “not be appropriately trained or resourced for large-scale disaster response“ (Jayaram & Brisbois, 2021), which traditionally falls within the remit of civilian and humanitarian actors. With the military stepping into the picture, humanitarianism becomes militarised, and the previous responsibilities and roles of actors are renegotiated (Ogredik, 2026). This can create frictions in civil-military relations, as the operational logics and command structures of the military may conflict with the principles of impartiality, neutrality and independence that underpin humanitarian assistance (ICRC, n.d.), as well as the ideals of participation and openness that shape climate governance (Jayaram & Brisbois, 2021; Tinti, 2024). Unlike humanitarian organisations, armed forces are not in a position of neutrality, considering their affiliation with specific countries. These concerns lead to questions about the suitability of armed forces for disaster responses following extreme weather events. To address the shortcomings of military engagement in climate governance, some countries, including Canada, have defined standards for the duration and tasks of such relief operations, as well as measures to strengthen the participatory elements of climate governance through frequent civil-military cooperation (Government of Canada, 2019; Mamuji, 2012).

This section has shown that military engagement in disaster relief goes beyond providing relief in disaster situations and also has implications for security aspects and climate governance itself. Concerns about the militarisation of the

climate governance field may seem secondary; however, it is necessary to take them into account when discussing the implications of incorporating the military in the field of climate governance. This includes the need to honestly discuss whether the military can be considered a suitable actor for such situations and then define the scope of its involvement. This could be through a similar approach to that taken by Canada.

Conclusion

Military engagement in governing post-disaster situations, as seen in the case of Hurricane Melissa and the presence of foreign armed forces, is becoming more relevant as climate change intensifies and extreme weather events become more frequent. Intervening in disaster response offers an opportunity for the military to emerge as an actor in climate governance, but there are also other ways the military has become engaged in climate governance. The reasons for such development can be found in the unique structure and available resources of the military, which allow them to contribute to such situations. Nonetheless, such involvement is not undisputed, as it raises concerns over the militarisation of climate governance, which requires a discussion about the role and extent of military engagement in this area.

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