

# **The Green Helmets Initiative (GHI): The International Dimensions**

## **Technical Note (1) by Dr. Rémy-Claude Beaulieu**

### **1. Introduction**

This Technical Note intends to respond to some of the questions raised by the Concept Paper first written in 2021 and reviewed since then.<sup>1</sup> The Green Helmets Initiative (GHI) has a national component related to the role of the Canadian Armed Forces (CAF), which would include “civil defence” in the case of natural disasters in Canada and the world. The GHI also has an international component suggesting putting in place a system, potentially at the United Nations, to assist vulnerable countries facing natural disasters. The current Technical Note addresses the international aspects of the Green Helmets Initiative.

It is now well documented that climate change increases the frequency and scope of natural disasters, which now have much more impact than they did in the past.

Here are some of the questions which appear in the conclusion of the Concept Paper:

- i) What positive and feasible role could the Armed Forces play in addressing the challenges posed by climate change and natural disasters?
- ii) Which countries or regions of the world could be beneficiaries or providers of such interventions?
- iii) What kind of expertise would be needed, and what kind of training should members of the armed forces receive to undertake such a mandate?
- iv) What types of equipment would be needed to ensure quick and appropriate responses: Canadair planes, motorboats, road and bridge building materials, sandbag machinery, water-filtering systems, etc.?
- v) How could the Armed Forces manage such interventions, which by definition have an unpredictable character: Centre of research and communications, Centre of logistics in the Eastern and Western part of the world?

This Technical Note will try to provide preliminary responses to these questions and others that have been raised since the Concept Paper issuance. However, the Technical Note is speculative given that there is no agreement or approval of the Green Helmet Initiative.

### **2. Positioning of the GHI**

It is obvious in our mind that the Green Helmets Division should be positioned within the United Nations. Should it be within UNEP, or in parallel to the UN Peace-Keeping forces? This must be determined.

Should it be a division of the Blue Helmets UN Departments or should it be set up separately? The question remains to be addressed by the relevant authorities. However, while there could be some rationale for positioning it separately, in another department of the United Nations given the very different role of the Blue Helmets (peacekeeping) and the Green Helmets (responding to natural disasters), there could be some advantage to combining the two forces.

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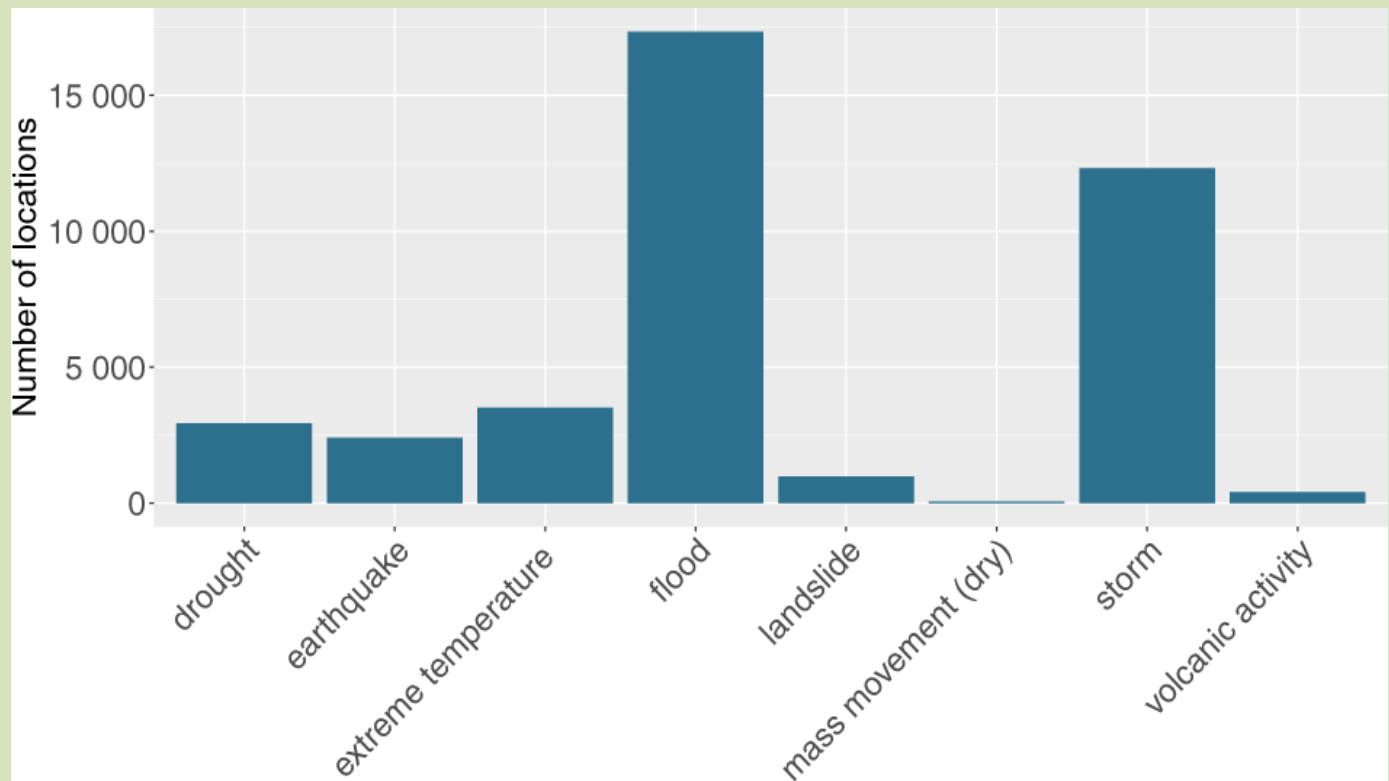
<sup>1</sup> The Green Helmets Initiative (GHI): Concept Paper, A New Role for the CAF in Canada and the World (2024, last version), by Dr. Rémy-Claude Beaulieu, 5 pages

GHI could be a subdivision with a new role, functions and different kind of expertise. For example, the Green Helmets Division should have experts with knowledge and experience in different fields, such as climate analysis and humanitarian assistance. The specialized staff of the Green Helmets Division should work in close collaboration with the UN World Meteorological Organization and any other institutions that have the capacity to identify and follow the progression, when feasible, of natural disasters in order to be able to get involved in early planning of any intervention. Later in this document, we will be analyzing which areas could be covered based on the existing knowledge of climate change and natural disasters.

### 3. The Role of the Green Helmets

Although the first motivator for the Green Helmets comes from the increase in natural disasters, due to environmental issues and climate change, we do not think that the role of the Green Helmets should be limited to environmental considerations but address more broadly a variety of natural disasters. As an example, we could take in consideration volcanic eruptions on land or in the ocean creating tsunamis, which have a devastating impact on populations around the world.

You will find below a table which identifies the most frequent “natural disasters”:<sup>2</sup>



<sup>2</sup> Source: Geocoded disaster locations (administrative areas: districts, provinces or states) by type, 1960–2018. This graph was created by combining spatial information in GDIS with matching data on disaster type from EM-DAT, according to the Global Data Base.

According to the Global Data Base, the most frequent natural disasters are floods and land slides, often related, which affected almost 18,000 administrative areas (districts, provinces or states) between 1960 and 2018. These are followed by storms, including hurricanes and monsoons, which affected almost 12,000 administrative areas. The droughts, extreme temperatures and mass movements, which can be linked, and earthquakes and volcanic activities, including tsunamis (which the table probably places under ocean volcanic activity) have more limited frequency, but often devastating impacts. We could add to the list forest and urban wildfires, which have affected countries like Canada and states like California in recent times.

This creates five groupings for potential interventions: i) Floods and landslides; ii) Storms, including hurricanes and monsoons; iii) Droughts, including extreme temperatures and mass movements; iv) Volcanic activities, including earthquakes and tsunamis; v) Large scope wildfires, in forests (Canada) and urban areas (California).

This analysis leads us to potentially identify the countries to be assisted and the countries that could assist.

#### **4. Countries to be assisted**

First, we may establish as a principle that all countries of the world could be assisted countries, based on the level of exposure to natural disasters.

Based on the Climate Change and Disaster Risk Assessment, “The Americas is the continent with the highest disaster risk (Hurricanes and volcanic eruptions). Asia is in second place (Monsoons), followed by Africa (Drought) and closely after that Oceania (Tsunamis). Europe has by far the lowest risk in a global comparison. The continent with the highest overall vulnerability is Africa. 13 of the 15 most vulnerable countries in the world are located there.”<sup>3</sup> It also indicates that “China has the highest exposure, followed by Mexico and Japan. The most vulnerable country in the world is Somalia, followed by Chad and South Sudan.”<sup>4</sup>

So, we have to distinguish between the countries “with the highest risk,” from “the most vulnerable countries” and finally those “with the highest exposure.” The highest risk comes from the frequency of natural disasters. For example, in the Americas floods, earthquakes and hurricanes are the most common. While African countries are the most vulnerable given their weak response capacity. China, Mexico and Japan are considered to have the “highest exposure,” given the scope of the disasters (mostly volcanic eruptions) which could be devastating.

Maybe the Green Helmets could prioritize responding to the needs of the most vulnerable countries, such as Somalia, Chad and South Sudan, although these three countries raise the issue of potential interventions of the Blue Helmets, involved in conflict resolution, and the Green Helmets, which would be involved in disaster management.

#### **5. Assisting countries**

First, we may establish as a principle that all countries of the world could be assisting countries. When we look at the experience of the Blue Helmets, we can see that many developing countries have contributed, providing their armed forces. We can take as an example the MINUSTAH in Haiti, whose mandate started in 2004 led by Brazil, assisted by various Latin American countries such as Argentina, Chile,

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<sup>3</sup> Source: World Risk Report 2022, RUHR Universitat, Bochum, Germany, 2022, 75 pages

<sup>4</sup> Source: World Risk Report 2022, RUHR Universitat, Bochum, Germany, 2022, 75 pages

Bolivia, Ecuador and Uruguay. Then followed a period led by Tunisia, with forces from Indonesia, Sri Lanka and Bangladesh. A total of 10,000 soldiers from 45 different countries, mostly developing countries from Asia, Africa and Latin America, but also from developed countries including Canada, the United States, France and Italy.

We could be surprised that in the case of the MINUSTAH in Haiti, countries like Israel, Jordan and Egypt, as well as Russia and China contributed, demonstrating that assistance can sometimes forgive political differences. The MINUSTAH was also affected by the “cholera controversy” brought, according to some reports, by the Nepalese forces. Assuming that the Green Helmets require a certain level of expertise, the most capable countries may not be the richest or most developed ones. For example, although Canada has contributed to numerous Blue Helmet interventions (Canada served in over 50 peacekeeping missions with more than 125,000 Canadians serving in international peacekeeping operations, and approximately 130 Canadians having died during these operations), it may not be well equipped to intervene in the case of hurricanes, monsoons or volcanic eruptions, which rarely if ever happen in the country. Why would Canadian Armed Forces develop expertise in these areas? However, flooding and fires are frequent in Canada, justifying potential interventions in vulnerable countries affected by such calamities.

Which countries could be best positioned to respond to earthquakes in Central America and South Asia? Which countries would be best equipped and have the best expertise in responding to hurricanes?

We can see that answering the question of who the best potential responding country is is not obvious. This also raises the question of who would pay for what?

## **6. Who pays the bill?**

In the case of the Blue Helmets, the country providing armed forces assumes the salary of the men and women who are appointed to a given peacekeeping intervention, while the extra costs are covered by the Blue Helmets Division of the UN and voluntary donations.

Could this system work for GHI? In the case of the Green Helmets, it would probably be quite costly to mobilize a contingent specialized in flooding, for example. First, the contingent could not be in small numbers. Taking again the case of the MINUSTAH, countries like Madagascar contributed two persons, DR of Congo: two persons, Italy: four persons, Oman: two persons, Togo: five persons. This would not be manageable in the case of Green Helmets interventions when the personnel appointed would need to be knowledgeable and experienced, able to intervene quickly in urgent situations, well coordinated and with the appropriate equipment. Such personnel would need to communicate in the local languages with communities and local authorities.

All these requirements would suggest that the Green Helmets should come in larger contingents, originating from a few countries, with personnel trained and supported with appropriate equipment. All these elements have costs which cannot all be assumed by the assisting country(ies). This would mean that the contributions from the pooled fund of resources would need to be much greater to divide the costs of urgent interventions among various countries and alleviate the costs to the assisting country(ies).

## **7. Green Helmets Humanitarian Assistance Funds**

According to data from the OECD-DAC in 2023, developing countries received 258 billion US\$ of bilateral and multilateral assistance. That year, the humanitarian assistance provided by the DAC members totalled 21.1 billion US\$. Of that number 19.3 billion US\$ were for emergency response, 1.06 billion for

reconstruction & rehabilitation and 668 million were for disaster prevention preparedness. In the category of multi-sector, 4.8 billion were for environmental protection.<sup>5</sup>

The question to be raised is what portion of the pool of resources could be redirected toward the Green Helmets? Currently, these resources go either to the countries that are affected by natural disasters, or to multilateral organizations such as UNHCR, UNICEF, WFP, WHO, etc., which provide useful services such as temporary shelter, food, health, and others. They are also used to support non-governmental organizations such as OXFAM, CARE, Save the Children, Médecins sans Frontières, etc. who have developed expertise in responding to natural disasters and have the reputation of being efficient given their knowledge of the local contexts and populations.

Therefore, could the extra resources come from NATO countries? Those countries already spend enormous amounts on defence. Based on NATO information, in 2024, the NATO countries were spending 1.185 billion US\$, of which 755 billion came from the USA and 480 billion came from other NATO members. The NATO request that each of its members contribute 2% of their GDP to defence spending. The good news is that the NATO definition already includes humanitarian and disaster relief spending in its defence spending:

“If expenditures for operations, missions, engagements and other activities are appropriated under the defence budget, they are included in the NATO definition. Expenditures for peacekeeping and humanitarian operations, paid by the Ministry of Defence or other ministries, the destruction of weapons, equipment and ammunition, and the costs associated with inspection and control of equipment destruction are included in defence expenditures.”

According to the NATO fact sheet on defence spending, European countries as a whole have reached the target of 2% of GDP with 380 billion US\$ in 2024. However, individually, seven European countries have not reached the target (Croatia, Portugal, Italy, Belgium, Luxembourg, Slovenia and Spain), to which we can add Canada. We have calculated that, if these eight countries were to reach the NATO target in 2025, this would constitute an investment of 42.5 billion US\$.<sup>6</sup>

In the context of the Green Helmets Initiative, if it was adopted by the NATO countries, could there be a new target, let's say of 2.5% of GDP for defence spending, including assistance in the case of natural disasters in the NATO countries themselves and abroad? If such a target was set this would mean that the NATO countries (except the USA which already spends more than 2%) could invest an extra 120 billion US\$ per year (480 divided by 2, multiplied by 2.5 equals 600 billion US\$) in humanitarian assistance to face natural disasters in their own countries and abroad, exceeding the amount currently spent by the OECD-DAC countries for humanitarian assistance by 100 billion US\$. These are gigantic numbers to initiate the Green Helmet Initiative.

## **8. Positioning of the Green Helmets Expertise Centres**

One of the characteristics of the Green Helmets' interventions would be their capacity to respond quickly. Delays could often mean hundreds, if not thousands, of lost lives.

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<sup>5</sup> Source: OECD-DAC <https://public.flourish.studio/story/2786612/>

<sup>6</sup> Source: [https://www.nato.int/nato\\_static\\_fl2014/assets/pdf/2024/6/pdf/240617-def-exp-2024-en.pdf](https://www.nato.int/nato_static_fl2014/assets/pdf/2024/6/pdf/240617-def-exp-2024-en.pdf)

According to OXFAM, climate hazards are natural events in weather cycles.<sup>7</sup> “We have always had hurricanes, droughts and wildfires, flooding and high winds. However, we are currently witnessing a scale of destruction and devastation that is new and terrifying. The last year alone has seen a series of **devastating climate disasters in various parts of the world** such as Cyclone Idai, deadly heatwaves in India, Pakistan, and Europe, and flooding in South-East Asia. From Mozambique to Bangladesh millions of people have already lost their homes, livelihoods, and loved ones as a result of more dangerous and more frequent extreme weather events.”

According to OXFAM, the evidence is overwhelming, and the results are devastating. We are facing a growing trend of more destructive climate disasters:

- The number of climate-related disasters has tripled in the last 30 years.
- Between 2006 and 2016, the rate of global sea-level rise was 2.5 times faster than it was for almost all of the 20th century.
- More than 20 million people a year are forced from their homes by climate change.
- The United Nations Environment Programme estimates that adapting to climate change and coping with damages will cost developing countries \$140–300 billion per year by 2030.

Therefore, it is worth raising the question: Should there be Green Helmets forces positioned in areas prone to natural disasters? Could there be forces specialized in hurricanes located in one of the Caribbean countries?

Could there be forces specialized in earthquakes stationed in Central America or South Asia? Could there be forces located in Africa, although drought may not require such urgent assistance. This goes against the idea of contingents coming from a country to assist one other country needing assistance, but if the forces in a special area are regrouped, this does not take anything away from the contributing country. This just means that a given country would have “green forces” located outside its own border in specialized Green Helmets Centres. Such regional Centres could even become training facilities, which could then benefit all countries positioning forces on a temporary basis in a given Centre.

Those Centres could be equipped with the equipment needed for specific types of interventions. What type of equipment, for what type of natural disasters? I guess there are experts in each of these fields of activity (flooding, volcanic eruptions, hurricanes, wildfires, etc.) who are better positioned to answer such questions.

Based on such an approach, the Green Helmets could become a source of expertise in various areas regarding natural disasters. What a contribution to the world’s overall capacity to respond to climate changes and natural disasters!

## 9. Legal and Conflict Litigation and Mitigation

While developing the GHI Concept Paper, we have been made aware by the judge Louise Otis that “legal mitigation” could be one of the areas of expertise that would be necessary and useful to the Green Helmets given that litigation often arise when natural disasters take place, especially in cross-border disasters.<sup>8</sup> We could use as an example the situation of the Rohingyas displaced and settled in the border regions of Myanmar and Bangladesh, an area often affected by monsoons and flooding.

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<sup>7</sup> Source: <https://www.oxfam.org/en/5-natural-disasters-beg-climate-action>.

<sup>8</sup> Environmental Mediation in the Age of Climate Crisis, by Louise Otis, Canada, 2025, 10 pages



The IUCM would provide high level experienced mediators who are familiar with international climate change. These experts would work and travel in real time to complete the negotiations. The IUMC will consist of two types of mediators:

1. **Governance mediators** to assist climate negotiations.
2. **Field mediators** assisted by scientists to help resolve conflicts generated by the displacement of people and populations following floods, cataclysms and desertification.

Their tasks would be made more complex and urgent given the contexts of climate change. They may assist the Green Helmets and authorities in the affected countries in determining where, when, with whom and how assistance may be provided.

The initiative called International Unit for Climate Mediation (IUCM)<sup>9</sup> could be implemented in conjunction with the Green Helmets Initiative (GHI), or independently.

## **10. Canada and the Security Council**

In the context of the discussion regarding this initiative, some have suggested that if presented by Canada at the UN General Assembly, such an initiative could earn Canada a seat at the UN Security Council.

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Judge Louise Otis is a Canadian and international active judge, arbitrator and mediator in administrative and commercial matters. She is President of the Administrative Tribunal of the Organization for Economic Co-operation and Development (OECD). She is President of the Administrative Tribunal of the Organization Treaty of Atlantic North (NATO).

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<sup>9</sup> NEW: International Unit for Climate Mediation (IUCM), by Louise Otis, Canada, one page.