# CLIMATE CHANGE AND NATIONAL RESILIENCE

# Use of military assets to address climate-related civilian emergencies

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2 October 2025

NATO Climate Change & Security Course

NATO STO Centre for Maritime Research and Experimentation
La Spezia, Italy
September 28 to October 3, 2025

# THE CONTEXT

- Dramatic surge in recent decades in the frequency and intensity of extreme weather events, such as wildfires, floods, and hurricanes.
- The rate of climate impacts is outstripping the current adaptive and response capacity of countries and regions, representing an **accelerating systemic crisis**.
- **Increasingly, militaries are called on to support civil defence authorities to fill critical gaps**.
- Yet there has been **no systematic, cross-national data on military involvement in climate-related civilian emergencies**, making it difficult to assess the extent and evolution of civil-military cooperation in addressing such emergencies.
- This presents a major challenge for militaries and policymakers alike needing to plan and prepare for varied missions and ultimately protect their people.

# JUST BRING IN THE TROOPS?

Key international guidelines,
like the Oslo Guidelines,
traditionally suggested military assets be used
*as a "last resort".*
However, escalating climate emergencies
increasingly challenge this principle,
leading to a de facto
*normalization of military involvement.*

# Project CASA

- Project CASA = Climate and Security Action through Civil-Military Cooperation in Climate-Related Emergencies
- A global collaboration launched in 2023 to address the need for coherent data on military involvement in natural disasters and thus help improve civil-military response.
- Preceded by the M4CE (Militaries for Civil(ian) Emergencies) Project of FOGGS with support from NATO's Public Diplomacy Division.
- Project CASA has been supported by the Canadian Department of National Defence through its Mobilizing Insights in Defence and Security program, the NATO Climate Change and Security Centre of Excellence, and the NATO Science for Peace and Security Programme.

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*The views expressed in Project CASA outputs are those of the individual authors, contributors and any persons cited and not necessarily the views of their organizations, the publisher, or all the project partners, members or sponsors. Opinions expressed by any persons engaged in the project who are external to the Government of Canada do not reflect the opinions or positions of the Government of Canada.*

# PROJECT CASA PARTNERS

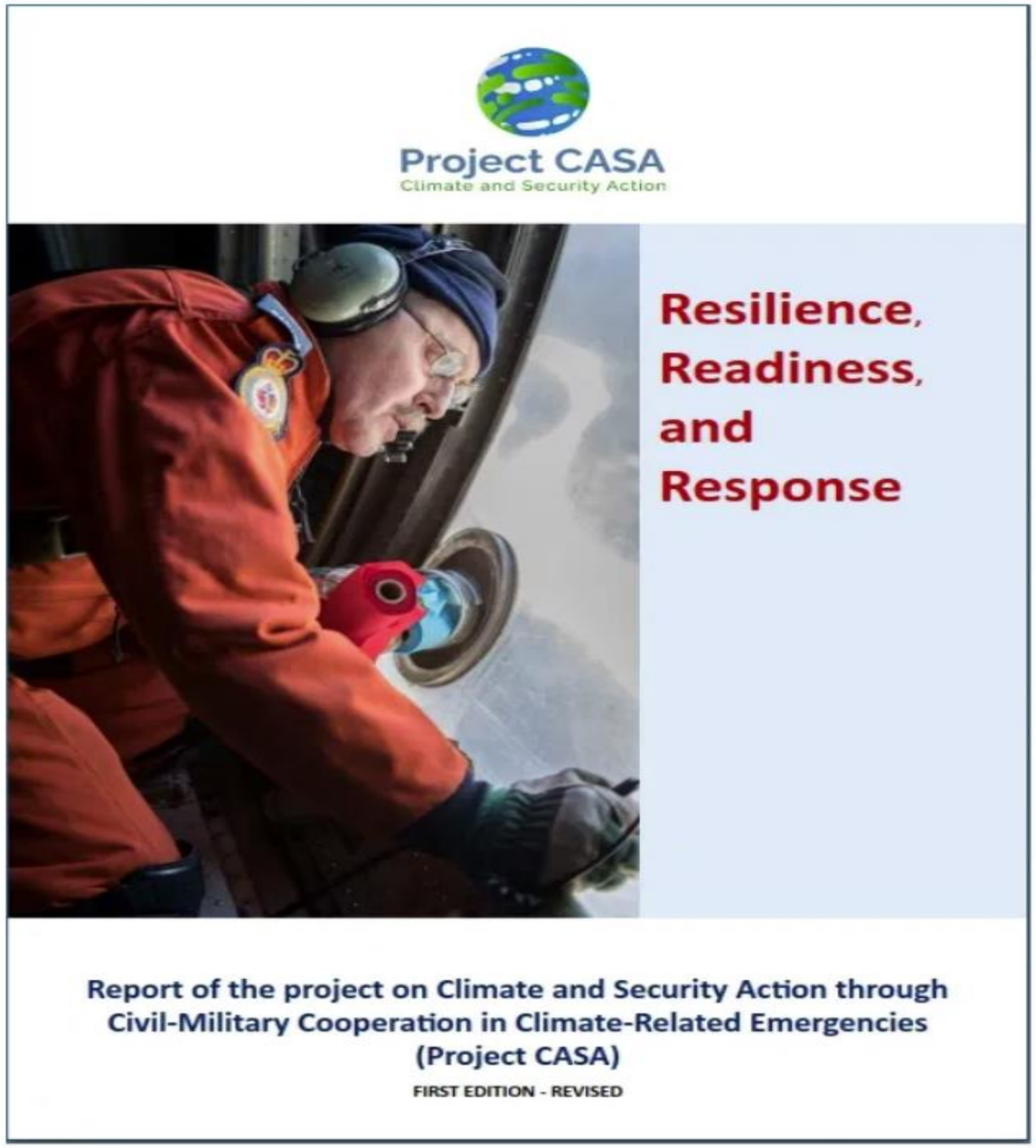
- Collaboration between five partner organizations across military, government, academic, and civic institutions in Project CASA's Coordinating Group:
  - the Climate Security Association of Canada (CSAC)
  - the Crisis Management and Disaster Response Centre of Excellence (CMDR COE)
  - the Environment & Development Resource Centre (EDRC)
  - the Foundation for Global Governance and Sustainability (FOGGS)
  - the Global Military Advisory Council on Climate Change (GMACCC)

# PROJECT CASA FOCUS

- Project CASA seeks to **help fill the perceived data gap regarding military involvement in climate-related civilian emergencies** by assessing the nature, extent, and impact of such involvement across a range of countries.
- It has done so by **consulting with government and military officials** in countries in NATO and beyond.
- The project's **country profiles and dataset** includes information on countries':
  - current legal and policy frameworks,
  - operational frameworks,
  - military training,
  - delineation of military and civilian roles, and
  - international coordination.
- The aim is to **understand the increasing demands placed on national militaries amid expanding climate emergencies globally** and to share the range of approaches countries are using to manage these.

# PROJECT CASA REPORT

## JULY 2025



# BENEFITS OF MILITARY INVOLVEMENT



- **Rapid mobilization and deployment:** Militaries can quickly move personnel and equipment to affected areas.
- **Logistical and engineering capacity:** Militaries possess significant resources for transportation, infrastructure repair, and setting up temporary facilities.
- **Operating capacity in austere conditions:** Militaries are trained to function effectively in difficult terrain and high-stress environments.
- **Positive public perception and morale:** Military involvement in disaster response boosts public trust in the military and enhances troop morale, as responses provide direct support to populations in a time of need.
- **Skills sharpening:** These operations can refine core military skills like command and control and interagency coordination in a real-life, non-combat setting, thus potentially increasing military readiness.

# DRAWBACKS TO MILITARY INVOLVEMENT



- **Diversion from core missions:** Increased military involvement in climate emergencies diverts resources and personnel and thus risks undermining the military's primary responsibility for national defence.
- **Strain on personnel and equipment:** Frequent deployments can lead to fatigue, stress, and wear and tear on both human and physical resources, thus potentially decreasing military readiness.
- **Potential for critical gaps:** Over-reliance on the military could create vulnerabilities if the military is deployed for other national defence missions and civilian agencies are not adequately prepared to handle major disasters independently.
- **Civilian agencies offer distinct advantages:** Including closer ties to local communities, specialized expertise in social services and psychosocial support, and a longer-term perspective focused on prevention, preparedness, reconstruction, and economic development. Citizens themselves are also seen as a critical "first line of defence" when it comes to preparing for and responding to a range of emergency situations.

# PROJECT CASA KEY ACTIVITIES

- **Country Profiles on Civil-Military Cooperation in Climate-Related Emergencies** *include details on each country's legal, funding, and operational frameworks and related policies, procedures, or guidelines on military involvement in climate-related emergencies.*
- **Profiles of International / Intergovernmental Organizations (IGOs) and Mechanisms** *contain brief descriptions of their work related to climate and security and preparing for and responding to climate related emergencies.*
- **A Dataset on Military Involvement in Climate-Related Emergencies** *with information on the responder (country, military branch), recipient (country, subnational locations), disaster (type, description, disaster number), and response (requesting agency, start and end dates, type, description, funding total, personnel total).*
- **The Project CASA Website** *that includes the project Overview, Climate and Security Action News, Resource Guide and Project Reader, Research Section.*
- **Project events and representations**

# COUNTRY PROFILE ELEMENTS

- **Funding Framework**
- **Policies and Practices**

*(including legal framework; military policies, procedures and guidelines)*

- **Operational Framework**

*(including military branch(es) involved in civil protection and their main civil protection tasks; civilian authorities involved in civil protection and their main tasks; standard operating procedures for civil-military cooperation in civil protection)*

- **Training and Tools**

*(including coordination mechanisms)*

- **Analysis**
- **Further Reading**

Profiles of 14 NATO countries and 5 non-Nato countries appear in the **Project CASA Report - First Edition**.

NATO Country Profiles

Other Country Profiles

***North America***


***Europe***


***Asia***


***South America***


***Aftica / Middle East***


***Oceania***

# INDICATIVE PROJECT FINDINGS

Table 2.1. Legal Frameworks for Military Involvement in Climate Emergencies

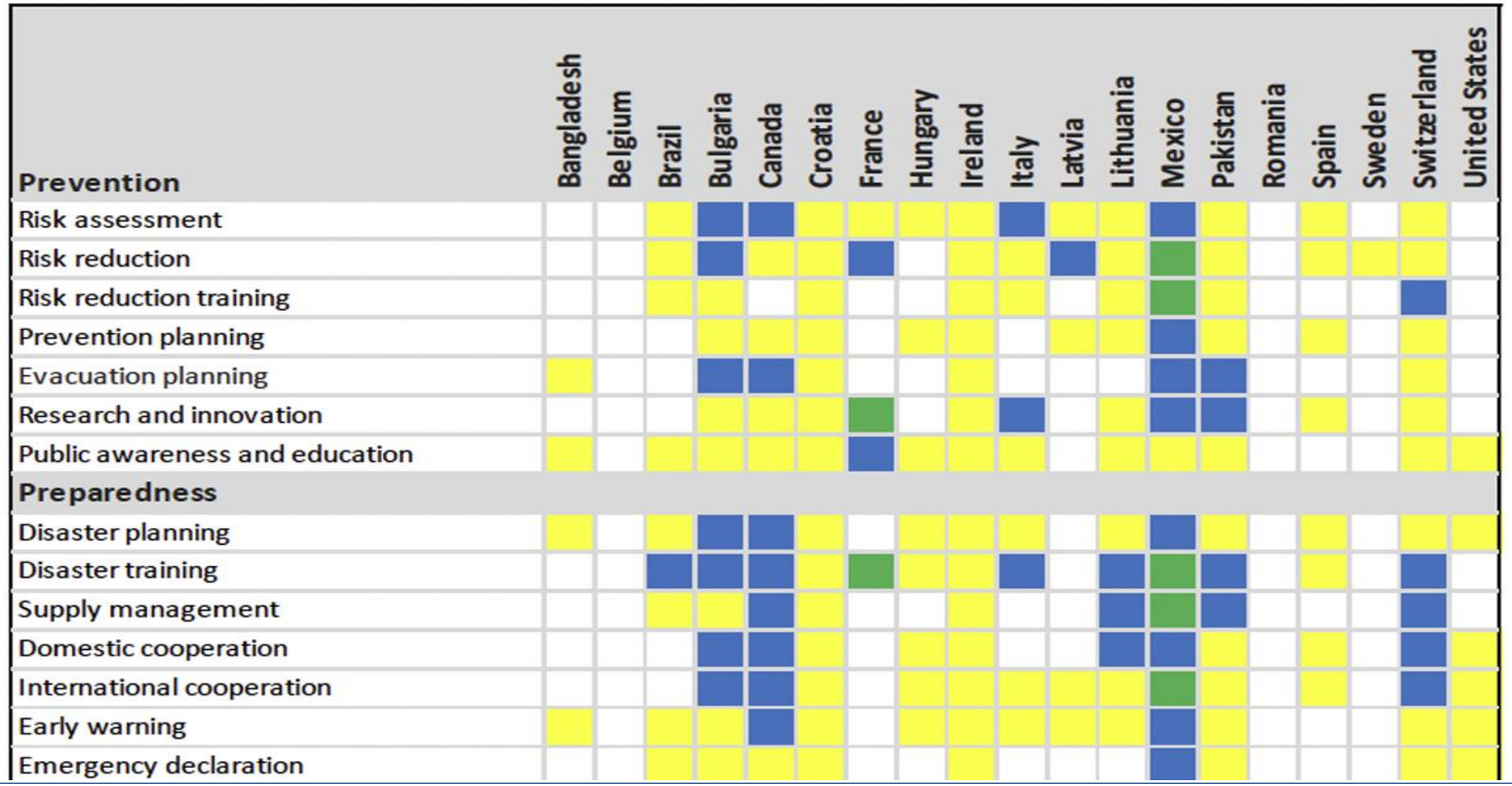
| Legal Frameworks | Bangladesh | Belgium | Brazil | Bulgaria | Canada | Croatia | France | Hungary | Ireland | Italy | Latvia | Lithuania | Mexico | Pakistan | Romania | Spain | Sweden | Switzerland | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laws or regulations on civil protection | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Laws or regulations on military role in civil protection | | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ |
| Military guidelines on climate change mitigation | | ■ | ■ | ■ | ■ | | ■ | | | | ■ | ■ | ■ | | ■ | ■ | | ■ | ■ |
| Military guidelines on climate change adaptation and resilience | | ■ | ■ | ■ | ■ | | ■ | | | | ■ | ■ | ■ | | ■ | ■ | | ■ | ■ |
| Military guidelines on disaster prevention | | | ■ | ■ | ■ | | | | | | | ■ | ■ | | | | | ■ | ■ |
| Military guidelines on disaster response | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | | | ■ | | ■ | ■ |
| Military guidelines on disaster recovery | | | | ■ | ■ | ■ | | | | ■ | | ■ | ■ | | | | | ■ | |
| Military guidelines on equitable disaster response implementation | | | | ■ | | | | | | | | | ■ | | | | | | |

■ Legal framework present in the country

Source: Country profiles in EDRC, *Resilience, Readiness, and Response*, ch. 2.2.

# INDICATIVE PROJECT FINDINGS

Table 2.2. Military and Civilian Agency Activity in Civil Protection

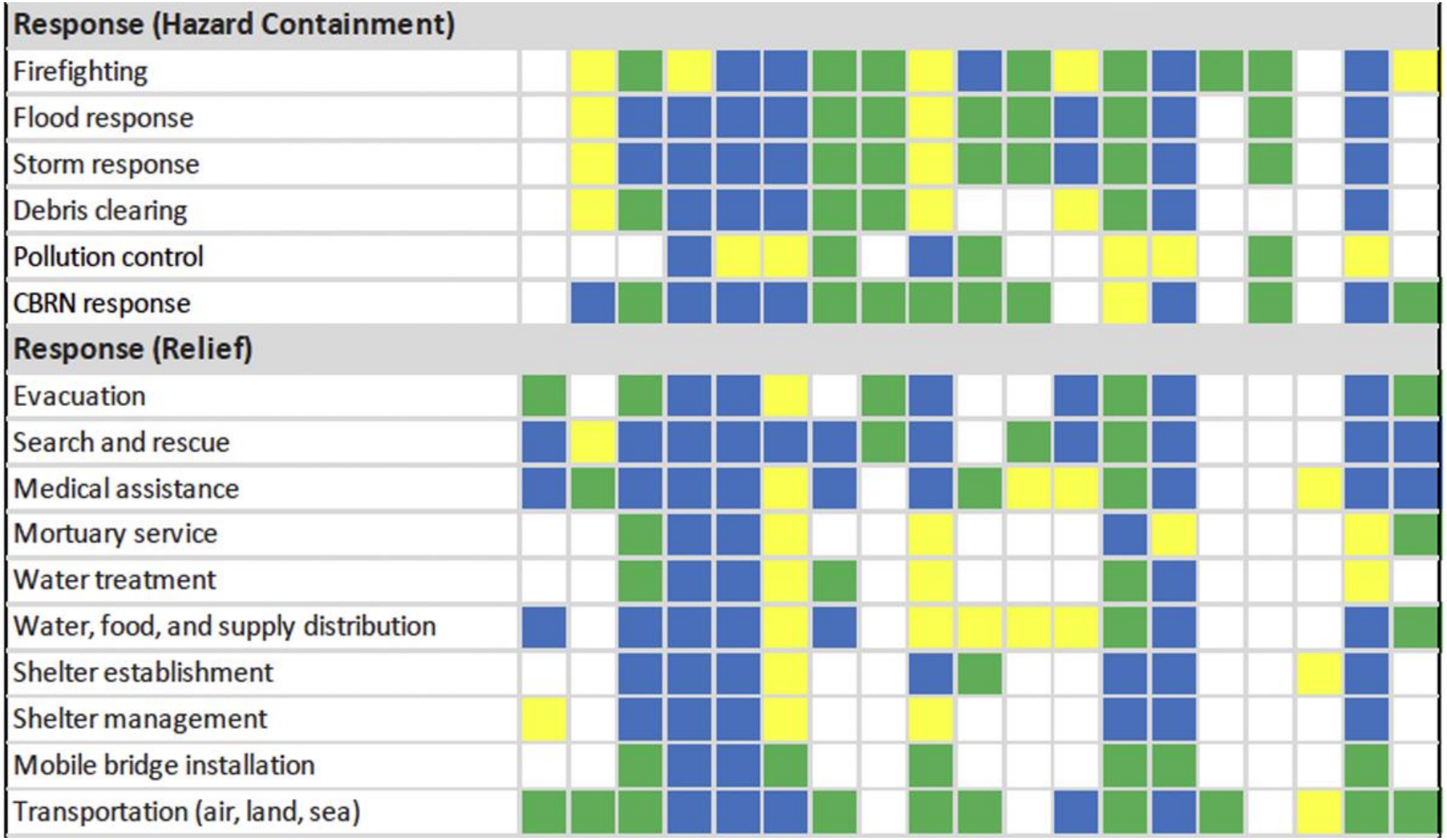


| Prevention | Bangladesh | Belgium | Brazil | Bulgaria | Canada | Croatia | France | Hungary | Ireland | Italy | Latvia | Lithuania | Mexico | Pakistan | Romania | Spain | Sweden | Switzerland | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk assessment | | | | | | | | | | | | | | | | | | | |
| Risk reduction | | | | | | | | | | | | | | | | | | | |
| Risk reduction training | | | | | | | | | | | | | | | | | | | |
| Prevention planning | | | | | | | | | | | | | | | | | | | |
| Evacuation planning | | | | | | | | | | | | | | | | | | | |
| Research and innovation | | | | | | | | | | | | | | | | | | | |
| Public awareness and education | | | | | | | | | | | | | | | | | | | |
| **Preparedness** | | | | | | | | | | | | | | | | | | | |
| Disaster planning | | | | | | | | | | | | | | | | | | | |
| Disaster training | | | | | | | | | | | | | | | | | | | |
| Supply management | | | | | | | | | | | | | | | | | | | |
| Domestic cooperation | | | | | | | | | | | | | | | | | | | |
| International cooperation | | | | | | | | | | | | | | | | | | | |
| Early warning | | | | | | | | | | | | | | | | | | | |
| Emergency declaration | | | | | | | | | | | | | | | | | | | |

Done by civilian and military agencies
Done by military agencies
Done by civilian agencies
Not raised in country profile

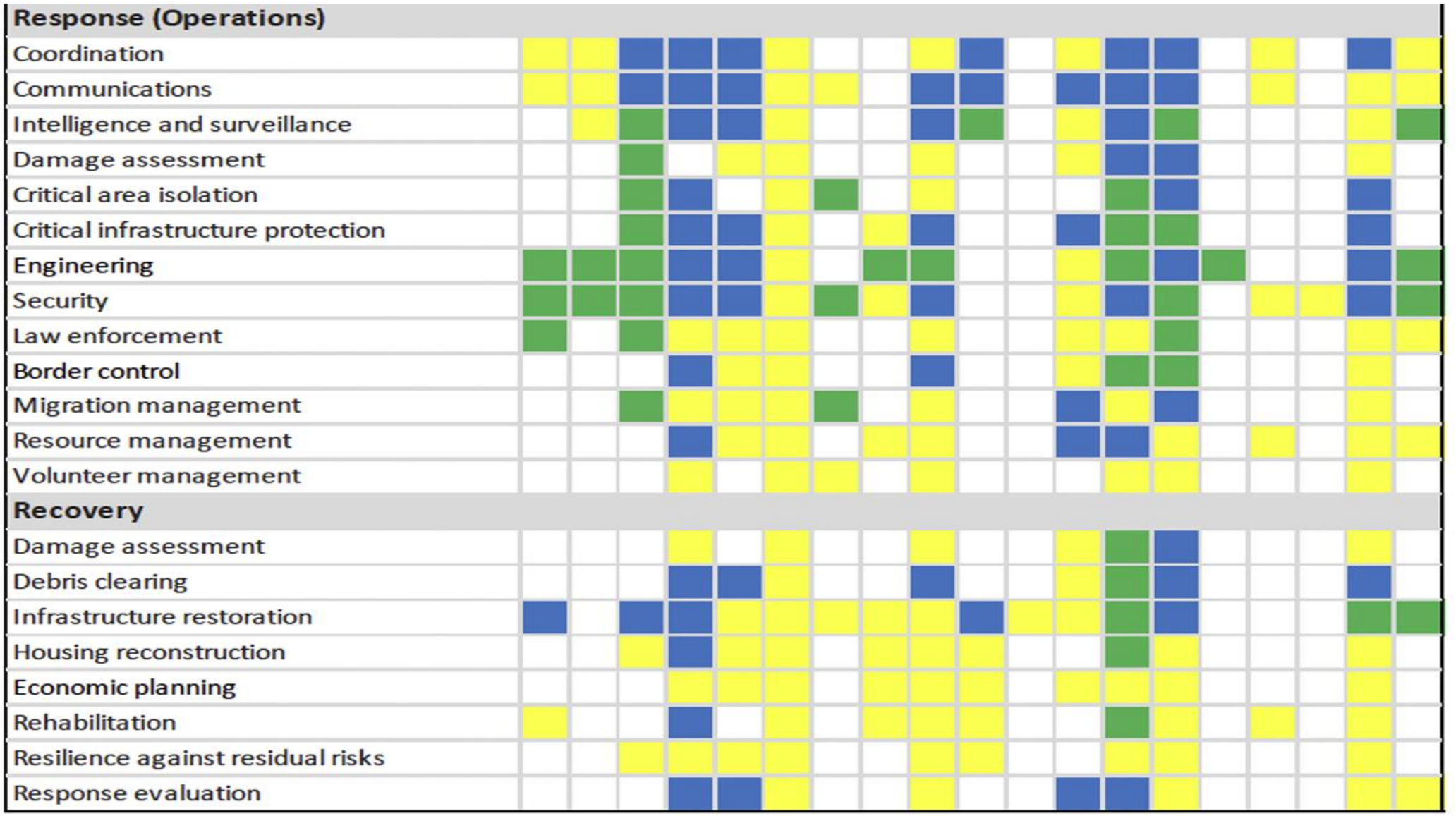
Source: Country profiles in EDRC, *Resilience, Readiness, and Response*, ch. 2.2.

# INDICATIVE PROJECT FINDINGS




Source: Country profiles in EDRC, *Resilience, Readiness, and Response*, ch. 2.2.

# INDICATIVE PROJECT FINDINGS




Source: Country profiles in EDRC, *Resilience, Readiness, and Response*, ch. 2.2.

# INDICATIVE PROJECT FINDINGS

Table 2.3. International Coordination Mechanisms by Country

| International Coordination Mechanisms | Bangladesh | Belgium | Brazil | Bulgaria | Canada | Croatia | France | Hungary | Ireland | Italy | Latvia | Lithuania | Mexico | Pakistan | Romania | Spain | Sweden | Switzerland | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EU Emergency Response Coordination Centre | | ■ | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | | |
| International Federation of Red Cross and Red Crescent Societies | | | ■ | ■ | ■ | | | ■ | | ■ | | ■ | | | ■ | ■ | ■ | ■ | ■ |
| NATO Euro-Atlantic Disaster Response Coordination Centre | | ■ | | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | | | ■ | ■ | | | ■ |
| OSCE Strengthening Responses to Security Risks from Climate Change | | | | ■ | ■ | | ■ | | | ■ | | ■ | | | | ■ | ■ | ■ | ■ |
| UNDP Global Risk Identification Program | | | ■ | ■ | ■ | ■ | | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ |
| UN Office for the Coordination of Humanitarian Affairs | | ■ | ■ | ■ | ■ | ■ | | | | ■ | | ■ | | | ■ | ■ | ■ | ■ | ■ |

■ Country is active in the international coordination mechanism

Source: Country profiles in EDRC, *Resilience, Readiness, and Response*, ch. 2.2.

# SPECTRUM OF APPROACHES (I)

*The study reveals a **wide spectrum of approaches among countries** facing varied types of climate security risks, budgetary constraints, military and civilian agency structures, and national contexts—shared with the goal of learning from each other as all states face growing climate challenges and a potential need to take new steps outside of what has worked in the past.*

**Legal and policy frameworks:** Some countries, like Bangladesh and Sweden, rely on general national disaster frameworks without specific military guidelines, while others, such as Hungary, Ireland, and Italy, have extensive laws and military policies on disaster response. Belgium, Brazil, Bulgaria, Canada, France, Latvia, Mexico, Romania, Spain, Switzerland, and the United States have additional robust legal frameworks and military guidelines covering climate change mitigation, adaptation, and resilience.

**Operational frameworks:** Approaches range from training specialized personnel within regular units (e.g., Croatia, Italy, Latvia, Pakistan, Romania) to creating specialized stand-alone units (e.g., Bulgaria, Canada's DART, France, Spain, Switzerland) or engaging the full military (e.g., Bangladesh, Ireland, Sweden). Brazil even utilizes "dual use" units for both civil protection and general military missions.

# SPECTRUM OF APPROACHES (II)

**Military training:** Training varies from specific tasks like search and rescue or firefighting for specialized personnel (e.g., Croatia, Ireland, Latvia, Romania) to broad civil protection training for specialized personnel (e.g., Belgium, Brazil, Bulgaria, Lithuania, Mexico, Switzerland) to full-force training on civil protection generally (e.g., Bangladesh, Sweden). Notably, some countries like Canada, France, and Spain maintain permanent training schools for natural hazard response.

**Roles and responsibilities:** Militaries are most often involved in the early stages of emergency response, providing services like firefighting, flood response, immediate relief and evacuation, engineering, and security. Civilian agencies typically focus on longer-term processes such as prevention, preparedness, and recovery. However, there is wide variation in who handles search and rescue, medical assistance, and infrastructure restoration. Many countries charge civilian authorities with oversight, while others charge the military with overseeing aspects of civil protection, and still others form joint civil-military control structures.

**International coordination:** The report identifies wide participation in oft-mentioned mechanisms like the EU Emergency Response Coordination Centre, NATO Euro-Atlantic Disaster Response Coordination Centre, and the UN Office for the Coordination of Humanitarian Affairs, but also a wide range of other international and regional mechanisms.

https://www.project-casa.org/international-organisations-and-mechanisms/north-atlantic-treaty-organization-nato

# NORTH ATLANTIC TREATY ORGANIZATION (NATO)

NATO recognises that it faces many environmental challenges, particularly due to the risks posed by climate change, and has been acting on these challenges for many years.

According to the NATO website article on **"Environment, climate change and security"** key milestones in the last few years include the following:

In 2021, NATO adopted an ambitious Climate Change and Security Action Plan to mainstream climate change considerations into NATO's political and military agenda.

NATO's 2022 Strategic Concept – the Alliance's core policy document, which guides NATO's strategy over the coming years – highlights climate change as a defining challenge of our time, with a profound impact on Allied security. It states that NATO should become the leading international organisation when it comes to understanding and adapting to the impact of climate change on security.

At the 2023 NATO Summit in Vilnius, Allies welcomed the establishment of a **NATO Centre of Excellence (COE) for Climate Change and Security in Montreal, Canada**. The COE was accredited in May 2024.

Also in 2024, NATO published the third edition of its **Climate Change & Security Impact Assessment - The NATO Secretary General's report**.

# KEY RECOMMENDATIONS (I)

- **Track detailed military response data:** National governments should systematically collect and publish detailed data on all domestic and foreign emergency responses, including crisis type, responding agency, response activities, and dates.
- **Compile cross-national data:** International organizations like the OECD, NATO, EU, or UN bodies should enhance data collection to provide a more comprehensive global picture of military involvement in climate emergencies.
- **Enhance integration of response data:** Early warning systems should incorporate environmental, public health, and security indicators, leveraging diverse sources from scientific data to data from local monitoring networks and indigenous knowledge.
- **Integrate strategic climate intelligence:** Civil-military frameworks should shift from reactive to proactive approaches, using foresight and scenario planning to anticipate cascading risks.

# KEY RECOMMENDATIONS (II)

- **Promote participatory scenario planning:** Civil-military frameworks should involve diverse military, civilian, and community stakeholders in scenario development.
- **Prioritize collaborative, interdisciplinary approaches:** Formal collaborative governance structures and interdisciplinary training should be established for improved coordination and culturally sensitive engagement.
- **Strengthen civil-military partnerships throughout the DRR cycle:** Militaries should consider their roles in preparedness and recovery, identify the partnerships needed with civilian agencies and communities, and build this into planning.
- **Facilitate learning and exchange:** Intergovernmental organizations should convene international forums to share lessons learned and good practices across countries and international mechanisms.

# WHAT NEXT FOR PROJECT CASA?

• Project CASA aims to continue this collective action on climate and security and welcomes others to get involved,
as profiles are added of more countries and the website gets further enriched as a depository of information on related research, organizations, and activities.

•For more information and to provide your feedback, please contact Project CASA via our website:

**https://www.project-casa.org/**

# BIBLIOGRAPHY

*Text and data for the preparation of this PowerPoint presentation were primarily drawn from:*


- Ronald A. Kingham and Dr. Ashley McIlvain Moran, Eds., *Resilience, Readiness, and Response – Report of the Project on Climate and Security Action through Civil-Military Cooperation in Climate-Related Emergencies (Project CASA),* Published by the Environment & Development Resource Centre (EDRC), Brussels / The Hague, 31 May 2025 / Revised 30 July 2025

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- Project CASA website: https://www.project-casa.org/

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