



Disaster Risk Reduction and Climate Change Adaptation. Two sectors with converging aims

Tommaso Natoli – *IFRC Disaster Law Consultant*



Disaster risk reduction (DRR)

Definition

The systematic efforts 'aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development'

- Choices made by governments affect vulnerability, exposure and resilience levels of people and property
- DRR could be used both to set the agenda for the law reform process and as a key tool to guide the implementation of DRM laws



Disaster risk management (DRM)

Definition

“The application of DRR policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk”

- DRM laws and policies define the institutional mandates and implementation strategies of a national system
- It concerns: operational planning; institutional responsibilities; resource allocation; civil society participation; Early Warning Systems (EWS); education and public awareness (...)



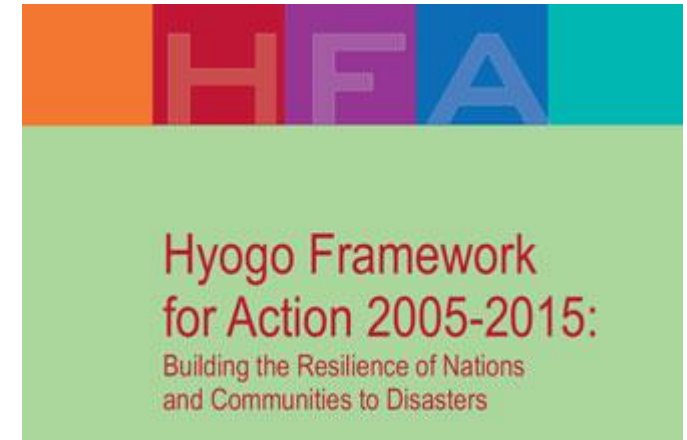
Disaster Risk Reduction at the international level

Historical Evolution

- 1990s → UNGA proclaims the 'International Decade for Natural Disaster Reduction'
- Yokohama, 1994 → First World Conference on Natural Disaster Reduction
- 2000s → International Strategy for Disaster Reduction, and the creation of a permanent secretariat (UNISDR)
- 2005 → Second World Conference (Hyogo Framework for Action 2005)
- 2010s → progressive adoption of a multi-hazard and multisectoral approach



International Strategy for
Disaster Reduction



The Sendai Framework for Disaster Risk Reduction 2015-2030

“Aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.”

Main improvements

- Outlines seven targets and four priorities for action to prevent new and reduce existing disaster risks
- Use of benchmark indicators, subsequently endorsed by the UNGA
- Evaluation mechanisms, deemed necessary for the assessment of State progresses



The Sendai Framework for Disaster Risk Reduction 2015-2030



The Sendai Framework for Disaster Risk Reduction 2015-2030

Four priorities for action to prevent new and reduce existing disaster risks:

- (i) Understanding disaster risk;
- (ii) Strengthening disaster risk governance to manage disaster risk;
- (iii) Investing in disaster reduction for resilience and;
- (iv) Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction.



DRR and International Law (Global)

The ILC Draft Articles on the Protection of Persons in the Event of Disasters

“Art. 9

1. Each State shall reduce the risk of disasters by taking appropriate measures, including through legislation and regulations, to prevent, mitigate, and prepare for disasters.
2. Disaster risk reduction measures include the conduct of risk assessments, the collection and dissemination of risk and past loss information, and the installation and operation of early warning systems”



DRR and International Law (Regional)

European Union Law

- TFEU art. 196.1 → the Union can ‘support and complement Member States’ action at the national, regional and local level in risk prevention, in preparing their civil-protection personnel and in responding to natural or man-made disasters within the Union.
- The «reformed» EU Civil Protection Mechanism (Decision of the European Parliament and of the EU Council of 17 December 2013 -1313/2013/EU) → More emphasis on long-term management of risk



DRR and International Law (Regional)

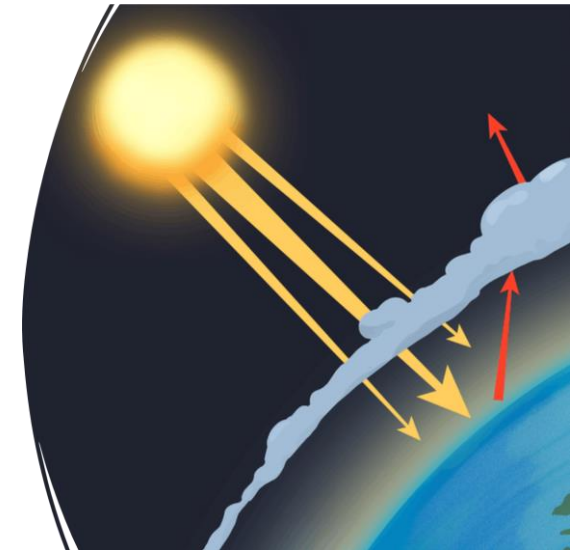
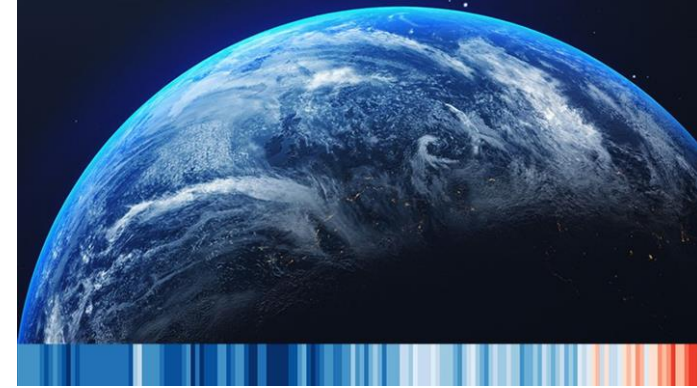
European Union Law

- EUCPM → disaster prevention and preparedness, providing single country and multi-country grants
- EU countries and 6 other participating states regularly exchange information on disaster risks.
- The European Commission supports Member State signatories and third countries in implementing the Sendai Framework
- In 2016, 9% of the EU's humanitarian funding went to disaster risk reduction (DRR) activities, more than €175 million



Climate Change: Definition of Key Concepts

- **Climate change** is a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, and which is in addition to natural climate variability observed over comparable time periods.
- Climate warming is mainly caused by the **greenhouse effect** is the way in which heat is trapped close to Earth's surface by “greenhouse gases”



Climate Change Mitigation and Adaptation

Definitions

Climate change mitigation → Efforts to reduce or prevent the emission or enhance the sinks of greenhouse gases. Mitigation can include using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behaviour.

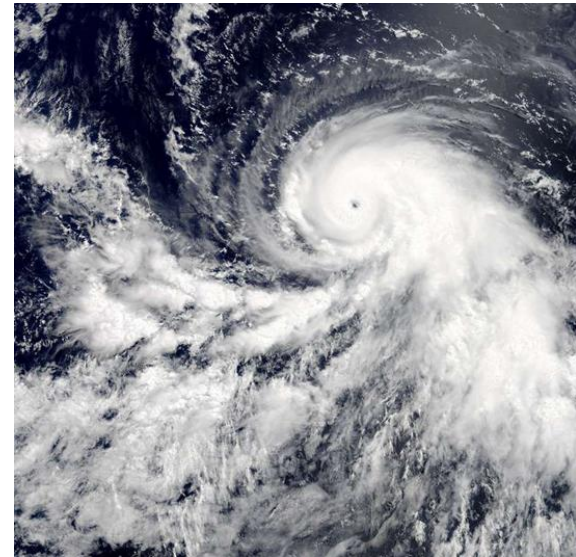
Climate change adaptation (CCA) → Adjustments to ecological, social, or economic systems in response to actual or expected climatic impacts, in order to moderate potential damages or to benefit from opportunities associated with climate change



Climate Change Adaptation

Main aspects of CCA

- Main aim → to reduce human “**vulnerability**” (the propensity or predisposition to be adversely affected) to events provoked by climate change.
- Vulnerability is determined by three factors: **exposure** to hazards, **sensitivity** to those hazards, and the **capacity to adapt**
- Adaptation measures aim at intervening on these three factors favouring the **building adaptive capacities**



The United Nations Framework Convention on Climate Change (UNFCCC)

- Adopted at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in June 1992
- To combat “dangerous anthropogenic interference with the climate system”, in part by stabilising greenhouse gas concentrations in the atmosphere.
- Contains a list of **general commitments** States have agreed to, including the development, periodic update, and publication of **national inventories of anthropogenic emissions by sources** and removals by sinks of all greenhouse gases (art. 4).



The UNFCCC Conference of the Parties (COP)

- Annually convenes all States that are parties to the UNFCCC to **assess progress in addressing climate change** → ongoing long-term processes rather than standalone events
- Reviews the implementation of the UNFCCC as well as that of any other related legal instruments it adopts
- Takes decisions necessary to promote them, including institutional and administrative arrangements.



The Paris Agreement (2015) – CoP 21



- First binding agreement that brings all nations into a common cause to combat climate change and adapt to its effects.
- Its goal is to limit global warming to well below 2°C, preferably to 1.5° C, compared to pre-industrial levels.
- The Paris Agreement requires each State Party to prepare, communicate and maintain successive nationally determined contributions (NDCs)



The Paris Agreement and CCA (Article 7)

- Countries are required to engage in adaptation planning processes and the implementation of adaptation actions.
- **National Adaptation Plans (NAPs)** are programmatic documents that enable States parties to the UNFCCC to identify medium- and long-term adaptation needs and develop and implement strategies and measures to address those needs.
- Each Party should **submit and periodically update an adaptation communication**, which may include its priorities, implementation and support needs, plans and actions.



CCA and DRR: Connections

The inherent connections between the two sectors

Overlapping goals:

- the **reduction of losses** due to weather and climate-related hazards (including both slow-onset and sudden events)
- the **reduction of exposure** and vulnerabilities in at-risk communities.

the conceptual and practical connections between CCA and DRR are widely recognised and greater coherence between CCA and DRR efforts is urged by key instruments, resolutions and reports adopted at the international level.



CCA and DRR – The convergence process

Historical Developments

- In 2001, The IPCC drew the world's attention to the unavoidable impacts of human-induced climate change, putting the need for adaptation on the international agenda
- Later, COP13 in 2007 placed adaptation on an equal footing with mitigation and highlighted DRR as a critical tool for CCA.
- The IPCC Special Report on Managing the Risk of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX Report, 2012), greater emphasis was put emphasised actual cooperation and synergies between DRR and CCA in international negotiations, national programmes and local activities.



CCA and DRR in practice

The overlap between CCA and DRR means that national and local level actions for DRR can promote CCA, and vice versa.



CCA and DRR: Mismatches

- The scope of action of the DRR community of practitioners is wider than the CCA one, as the former also considers geophysical hazards
- DRR community mainly stems from the humanitarian sector and is more focused on localised risks based on past experiences while CCA experts tend to consider long-term projection and effects.
- CCA and DRR activities are respectively framed by relevant bodies both at the national and international level.



Points of contacts in the international frameworks of reference



Points of contacts in the international frameworks of reference



The **UN Agenda/SDGs** overarching purpose of unifying the multifaceted dimensions of sustainability entails being able to cope with the adverse impacts of climate change (para. 14) and related disaster risks (para. 33) → + SDGs 1.5 and 13.1



The **Sendai Framework's** guiding principles and priorities openly recognise the need for coherence across sustainable development, climate change and DRR agendas in the development and implementation of all relevant policies, plans, practices and mechanisms (paras. 19(h), 28(b), 31(a)).



The **Paris Agreement** established a “global goal on adaptation” which entails “enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response” (art. 7).

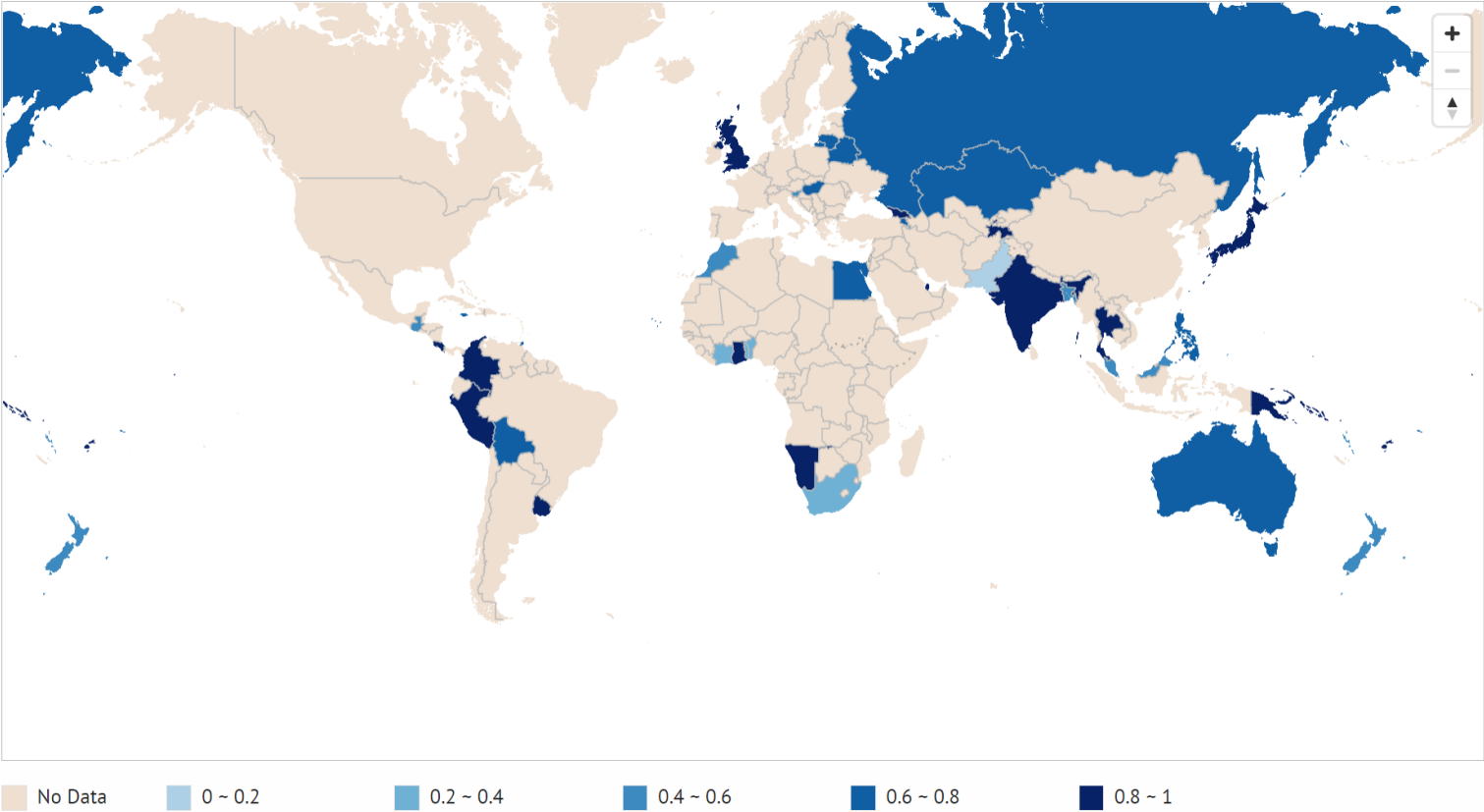
Sendai Framework - Target E

- Target E, the international community committed to “[s]ubstantially increase the number of countries with national and local disaster risk reduction strategies by 2020”.
- DRR strategies should not only be “in line with the Sendai Framework”, but also “promote policy coherence relevant to DRR such as sustainable development, poverty eradication, and climate change, notably with the SDGs and the Paris Agreement”.
- States’ progress towards Target E is reported in the [Sendai monitoring platform](#).



Sendai Monitor – Target E, Indicator #9

	BASE YEAR SELECTED YEAR 2015 2020
<div><div></div><div>E-1 a: Detailed rating based on core requirements [E-1 a #9: Promote policy coherence relevant to disaster risk reduction such as sustainable development, poverty eradication, and climate change, notably with the SDGs the Paris Agreement]</div></div>	<div><div></div><div>114.06%</div></div>



Conclusive remarks

- A coherent CCA and DRR law and policy making is gradually taking place at different levels, and seems **likely to expand in the near future**;
- **Risks of** loosing sight of clear assessable targets, accountability **‘dispersion’ or ‘turf-wars’** between public institutions and respective budget lines need to be considered
- International agencies and networks support intergovernmental decision-making in these sectors and stress the need for binding national laws clearly allocating **institutional responsibilities**, guaranteeing **necessary technical human and financial resources**, establishing **reliable monitoring and evaluation systems**, and ensuring effective **civil society participation**.