



# Stepping up Disaster Risk Reduction action for Greening EU Cooperation



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# Fundamentals of DRR

Key facts and figures









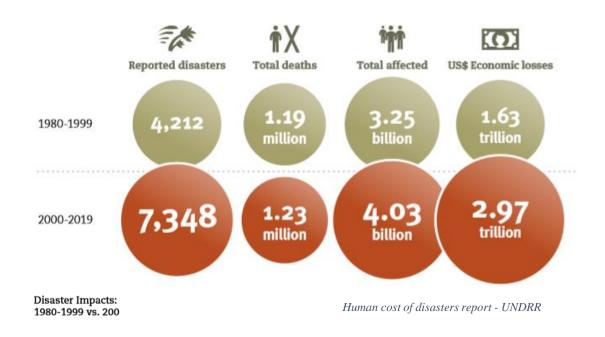
# Question 1: Is the number of natural hazards events increasing or are we just more informed these days?

- 1. Yes, it is increasing
- 2. No, I am just more aware thanks to Twitter, Insta and tiktok

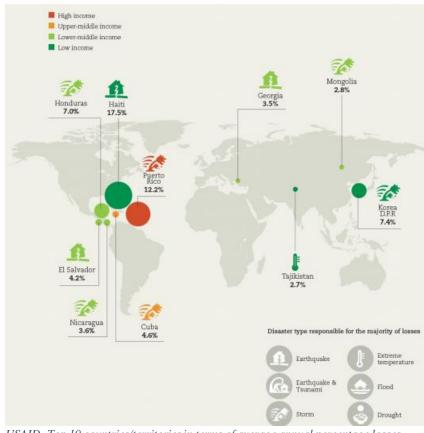


### Natural Hazards are indeed increasing:

Winter (or rather summer) is coming



And affecting the **most vulnerable**:

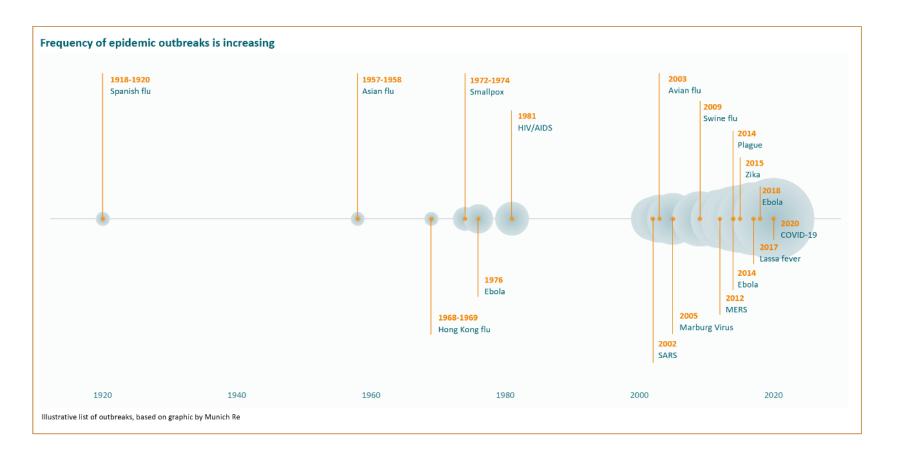


USAID -Top 10 countries/territories in terms of average annual percentage losses relative to GDP (1998-2017)



## Natural Hazards are indeed increasing:

#### Frequency of epidemics outbreak





#### **Question 2: Which of the following are natural hazards?**

- 1. COVID-19 outbreak
- 2. Hurricane Katrina
- 3. An asteroid Impact



### Natural and Man-Made hazards

Group	Subgroup	Main Type	
		Earthquake	
	Geophysical	Mass Movement (dry)	
		Volcanic activity	
		Extreme Temperature	
	Meteorological	Fog Storm	
	Hydrological	Flood Landslide	
Natural	Hydrological	Wave action	
		Drought	
	Climatological	Glacial Lake Outburst	
		Wildfire	
		Epidemic	
	Biological	Insect infestation	
		Animal Accident	
	Extra-terrestrial	Impact Space weather	

Group	Subgroup	Main Type
Technological	Industrial accident	Chemical spill Collapse Explosion Fire Gas leak Poisoning Radiation Oil spill Other
	Transport accident	Air Road Rail Water
	Miscellaneous accident	Collapse Explosion Fire Other



# Natural hazards are not disasters... ...and Disasters are not natural

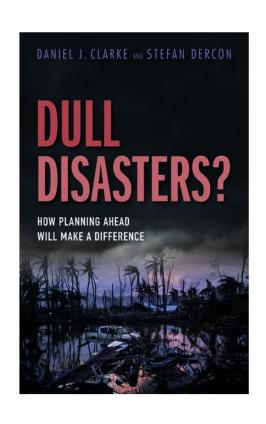




# Disasters are not natural: ...from DM to DRM





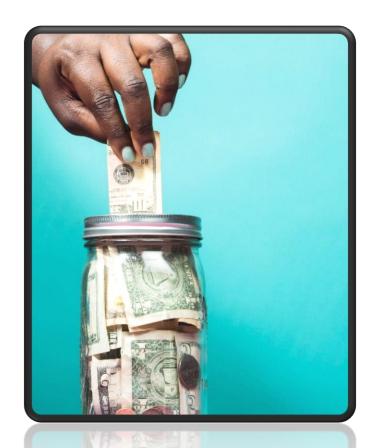


**Begging-bowl approach** "Disaster Management"

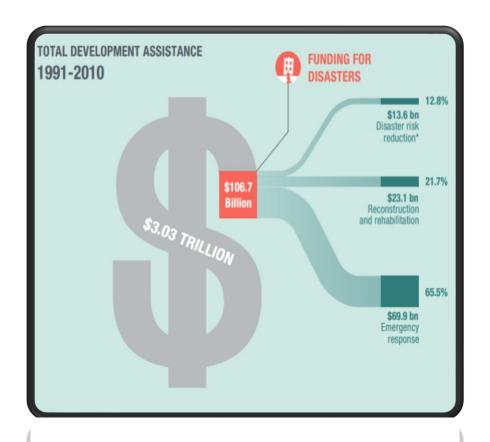
Anticipatory approach "Disaster Risk Management"



## Funding: The ugly duckling?



Though DRR renders benefits of 1 to 4

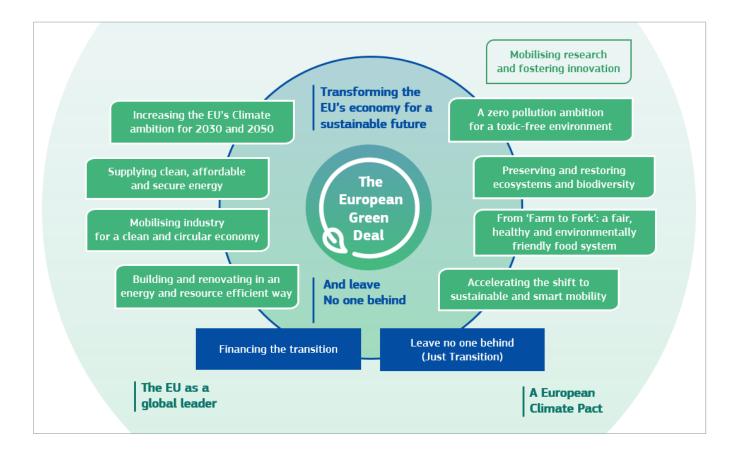


...it is still the ugly duckling



#### The EU Green Deal:

#### A very comprehensive strategy...



**EU ambitious roadmap** for economic and social transformation towards **climate neutrality** and resource efficiency

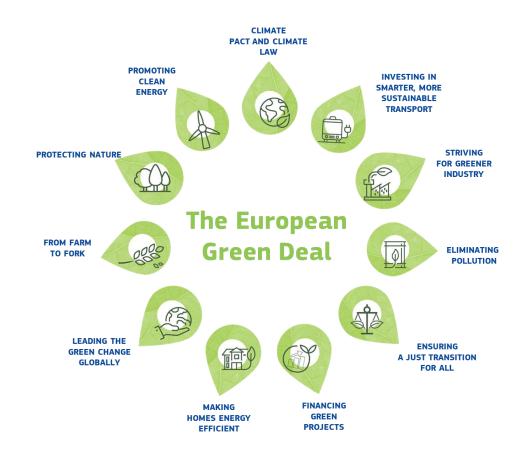
**Covering all policies:** energy, transport, industry, trade, agriculture... but also education...

And **mobilising all tools**: regulations and standards, policies, investments, taxation, research, diplomacy...



#### The EU Green Deal:

#### What about DRR?



"All EU actions and policies will have to contribute to the European Green Deal objectives"

- It also aims to protect, conserve and enhance the EU's natural capital, and protect the health and well-being of citizens from environment-related risks and impacts.
- An immediate priority will be to boost the EU's ability to predict and manage environmental disasters. To do this, the Commission will bring together European scientific and industrial excellence to develop a very high precision digital model of the Earth.
- Ecosystems provide essential services such as food, fresh water and clean air, and shelter. They mitigate natural disasters, pests and diseases and help regulate the climate.
- It will pay particular attention to the role of **outermost regions in the European Green Deal**, taking into account their vulnerability to climate change and natural disasters and their unique assets: biodiversity and renewable energy sources.
- It will be important to ensure that across the EU, investors, insurers, businesses, cities and citizens are able to access data and to develop instruments to integrate climate change into their risk management practices.
- We will also examine how our financial system can help to increase resilience to climate and environmental risks, in particular when it comes to the physical risks and damage arising from natural catastrophes



# Overarching international framework





# Question 3: Have you ever heard of the Sendai Framework?

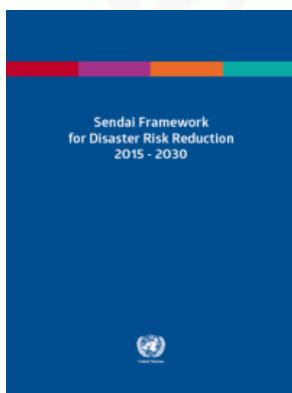
- 1. Yes
- 2. No



## The Sendai Framework for Disaster Risk Reduction 2015-2030

#### **Intended outcome:**

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.



- Adopted at the Third UN World Conference on Disaster Risk Reduction on 18 March 2015
- Endorsed by the UN General Assembly on 15 May 2015.
- 15-year, voluntary, non-binding agreement with
   4 Priorities for Action and 7 Global Targets
- Recognizes that the State has the primary role to reduce disaster risk but that responsibilities are to be shared with other stakeholders including local government and the private sector.





#### Priority 1 Understanding disaster risk

Policies and practices for DRR should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment.

# Priority 2 Strengthening disaster risk governance to manage disaster risk

Disaster risk governance at the national, regional and global levels is of great importance for an effective and efficient management of disaster risk.

# Priority 3 Investing in disaster risk reduction for resilience

Public and private investment in DRR are essential to enhance the economic, social, health & cultural resilience of persons, communities, countries, their assets, as well as environment

#### **Priority 4**

Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction Strengthened disaster preparedness for response, recovery, rehabilitation and reconstruction are critical to build back better

National and local dimensions egional





# Reduce

# Increase

Mortality/

global population

2020-2030 Average << 2005-2015 Average

b Affected people/

global population

2020-2030 Average << 2005-2015 Average

c Economic loss/

global GDP

2030 Ratio << 2015 Ratio

Damage to critical infrastructure & disruption of basic services

2030 Values << 2015 Values

Countries with national& local DRR strategies

2020 Value >> 2015 Value

International cooperation

to developing countries

2030 Value >> 2015 Value

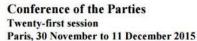
g Availability and access
to multi-hazard early warning
systems & disaster risk
information and assessments
2030 Values >> 2015 Values





#### 2030 Agenda for Sustainable Development





Agenda item 4(b)

Durban Platform for Enhanced Action (decision 1/CP.17) Adoption of a protocol, another legal instrument, or an agreed outcome with legal force under the Convention applicable to all Parties



#### ADOPTION OF THE PARIS AGREEMENT

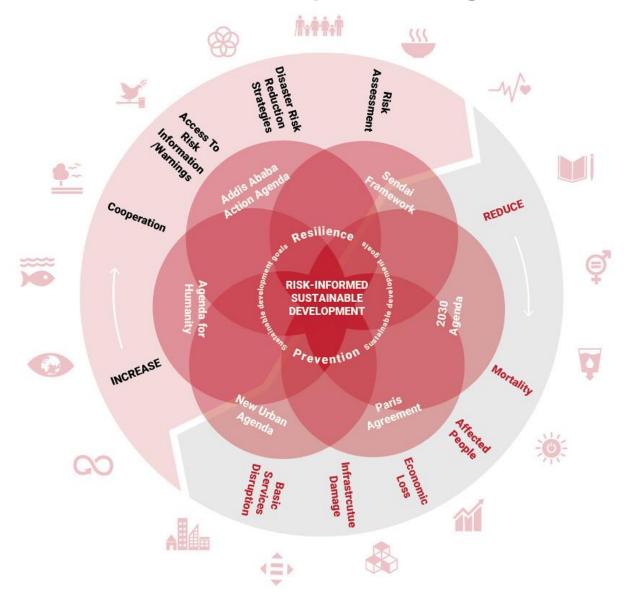








#### Risk-informed Sustainable Development: Integrated Risk Governance







# Links between DRM areas of practice, climate change and sustainable development

	PROSPECTIVE	CORRECTIVE	COMPENSATORY
DISASTER RISK MANAGEMENT	Risk avoidance	Risk mitigation/reduction	Strengthening resilience to disaster (both financial and social resilience)
CLIMATE CHANGE	Climate change mitigation	Climate change adaptation	Strengthening resilience to extreme events associated with climate change
SUSTAINABLE DEVELOPMENT	Contributing to future sustainable development	Increase the sustainability of existing development conditions	Strengthening resilience to everyday risks and shocks





# Sendai Framework Monitoring Highlights

As of 2019

**81** 

MEMBER AND OBSERVER STATES REPORTED THE EXISTENCE OF A NATIONAL DISASTER RISK REDUCTION STRATEGY IN THE SENDAI FRAMEWORK MONITOR

**130** 

MEMBER AND OBSERVER STATES USING THE SFM TO REPORT ON IMPLEMENTATION OF THE SENDAI FRAMEWORK

4,311

CITIES PARTICIPATING IN THE MAKING CITIES RESILIENT CAMPAIGN 237

LOCAL GOVERNMENTS FROM 36 COUNTRIES IN FIVE REGIONS COMPLETED DISASTER RESILIENCE SCORECARD SELF-ASSESSMENTS

4,087

GOVERNMENT OFFICIALS AND DISASTER RISK REDUCTION STAKEHOLDERS TRAINED IN 2019 BY UNDRR, 39 PER CENT OF WHICH WERE WOMEN





# Sendai Framework Monitoring Highlights

National DRR Strategies: 2015 vs. 2019 Local DRR Strategies: 2015 vs. 2019

Figure 4. % of Countries having national DRR strategies by Regions (as reported on the SFM, August 2020)

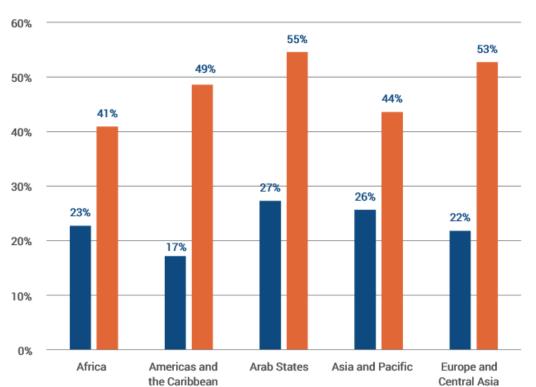
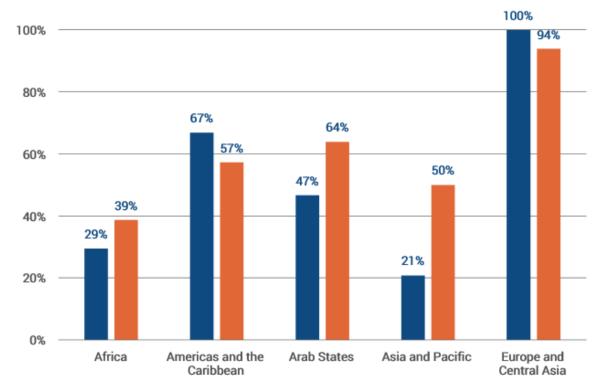


Figure 12. % of local Governments having local DRR strategies (as reported on SFM, August 2020)







# Sendai Framework Monitoring Highlights

National DRR Strategies: 2015 vs. 2019 Local DRR Strategies: 2015 vs. 2019

Figure 5. % of LDCs, SIDS, and LLDCs having national DRR strategies (as reported on the SFM, August 2020)

Figure 13. % of local Governments having DRR strategies in LDCs, SIDS and LLDCs (as reported on SFM, August 2020)







# DEVCO's cooperation on DRR

Stepping up action



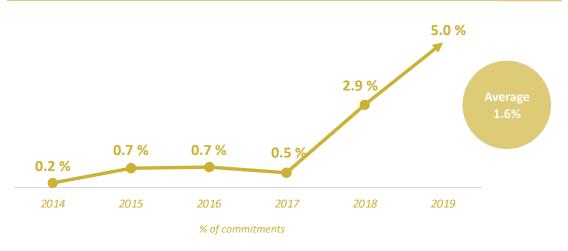
# **Question 4: What percentage of DEVCO funding to partner countries contribute to DRR?**

- 1. Around 1%
- 2. Around 5%
- 3. Around 10%
- 4. Around 20%



### DEVCO's contribution to DRR

Disaster risk reduction (Contributions in EUR Million)							
2014	2015	2016	2017	2018	2019	2014-19	
10	56	70	52	249	364	800	

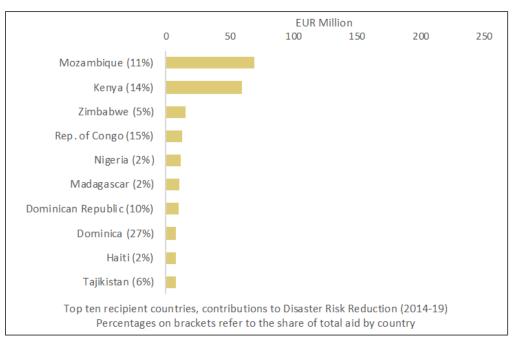


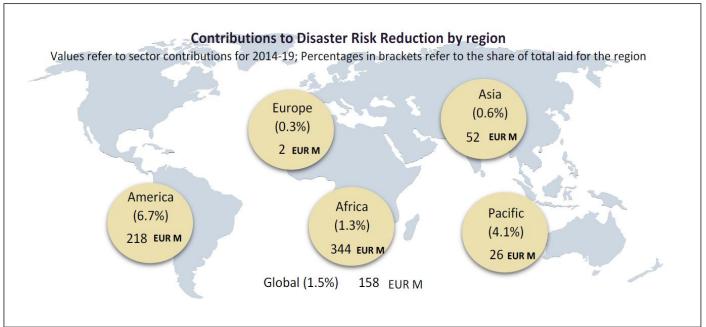
	Climate Change						
	2014 2015 2016 2017 2018 2019 2014						2014-19
Total	607	1 052	2 266	2 456	1 941	1 828	10 150
Mitigation	426	569	1 191	1 335	1 106	1 027	5 654
Adaptation	401	715	1 549	1 874	1 534	1 521	7 595





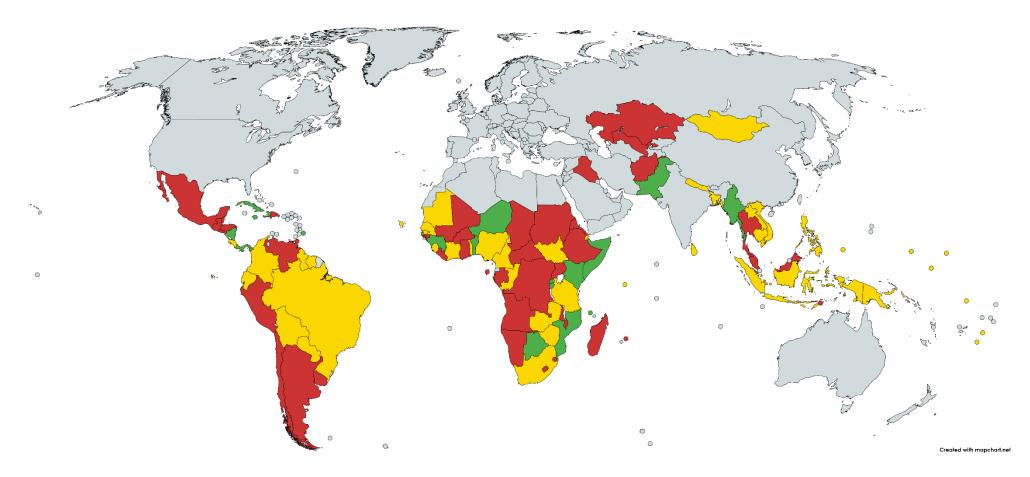
#### DEVCO's contribution to DRR







# Programming 2021 – 2027 – DRR integration





### Programming: tools and entry points

- DEVCO Technical Assistance Facilities
  - Mainstreaming Facility: quality review of programmes (DRR marker)
  - GCCA+ Facility: support to formulate actions
  - EU Global Support Facility for Nationally Determined Contributions (NDCs) - to be launched in Q1 2021

9. Markers (from CRIS DAC	General policy objective	Not targeted	Significant objective	Principal objective
form)	Participation development/good governance		х	
	Aid to environment			х
	Gender equality and Women's and Girl's Empowerment		Х	
	Trade Development	Х		
	Reproductive, Maternal, New born and child health	х		
	Disaster Risk Reduction			х
	Inclusion of persons with disabilitie		х	
	Nutrition	х		



### Implementing partners



























# DG ECHO's work on Disaster Preparedness & the HD Nexus



# **Question 5: Is Disaster Preparedness just a humanitarian actors' affair?**

- 1. Yes
- 2. No



## Disaster Preparedness (DP)

- **Sendai Priority 4** "Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction"
- Addressing residual risk
- Risk analysis at its core.

• **DP interventions (examples)**: EWS, contingency plans, institutional and legislative frameworks, communication, capacity building, anticipatory action, shock-responsive social protection & cash preparedness, logistics, data management, spatial/technology, etc.

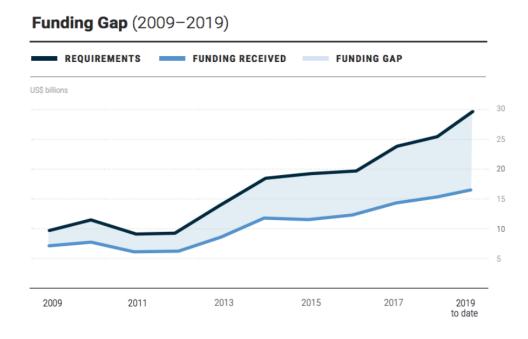
## Disaster Preparedness (DP)

- Why DG ECHO & preparedness?
- Central elements: multi-hazard, climate & environmentally sensitive, stand-alone/cross-cutting
- Main objective/target: building capacity of first responders
- Average DG ECHO's yearly DP budget: 75 million euros

• **Nexus in practice** - some examples: risk assessments, EWS, institutional and legislative frameworks, Shock Responsive Social Protection, Disaster Risk Finance (macro vs micro level).

### **NEXUS**

- Changing nature and increasing complexity of crises and conflicts
- Increasing funding gap
- Gradual expansion of scope of humanitarian mandate



- ⇒ Growing **ambiguity** between humanitarian and development objectives
- ⇒ Increased need for political dialogue



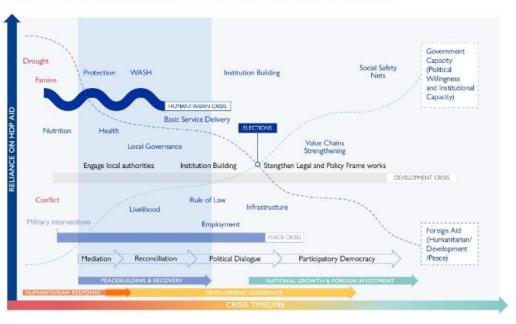
<sup>\*</sup> Source UN Dispatch 2019

### **NEXUS**

- Optimization and joined approach : Framework GRAND BARGAIN
- Joined risk analysis, increased risk reduction and better preparedness
- Increased role of local actors :
  - first responders
  - capacity to engage in dialogues involving a political dimension

=> Willingness of both ECHO and DEVCO to increase Nexus initiatives, but it counts on individual responsibility

#### COMPLEX PROTRACTED CRISIS SCENARIO



### **NEXUS**

Example – pilot study :

#### **Regional Lake Chad Programme**

- Nexus efforts to promote <u>children's rights</u> and gender equality in protracted crisis.
- Starting point: joint context analysis



- identification of the root causes and structural drivers of the crisis
- collective outcomes and incorporating the functional areas of humanitarian, development, and social cohesion actions (enhance peace at community level)



# Cases on implementation of DRR

Examples from developing countries







The best arguments in the world won't change a person's mind.

The only thing that can do that is a good story

Richard Powers



## Understanding Disaster Risk



## Getting a community perspective



- Participatory process identifies expanded factors of risk e.g. in Delgado, El Salvador and Guatemala City, Guatemala
- Accumulation of garbage, pollution and poor access to water resources; and crime.
- Broad risk reduction actions, including garbage collection and projects to channel sewage.





# Examples of existing hazard, risk, and historical loss information

- Index for Risk Management (INFORM) tool (EU) <a href="http://www.inform-index.org/">http://www.inform-index.org/</a>
- Global Assessment Report (GAR) Atlas Risk Data Platform (UNDRR) http://risk.preventionweb.net/capraviewer/main.jsp?tab=0
- Think Hazard (GFDRR) <a href="http://thinkhazard.org/">http://thinkhazard.org/</a>
- EMDAT (CRED) <a href="http://www.emdat.be/">http://www.emdat.be/</a>
- Global Assessment Report (GAR) disaster loss database -<a href="http://www.desinventar.net/index\_www.html">http://www.desinventar.net/index\_www.html</a>





## Strengthening Disaster Risk Governance



## How to engage with communities?



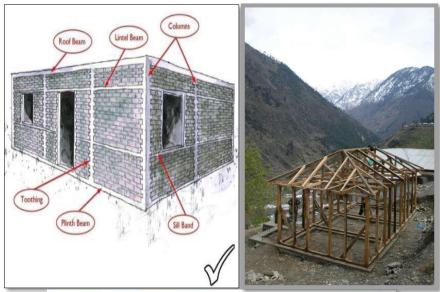
- Bangladesh BRAC to facilitate community-led DRR
- Nicaragua Sandinista Defense Committees
- They proved extremely effective for reaching the local population.
- Philippines & India Parent Teacher
   & Community Associations

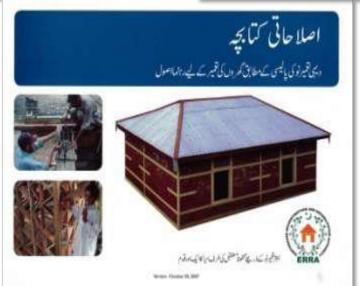




# Investing in disaster risk reduction for resilience







- Hospital seismic retrofit in Costa Rica and El Salvador reduce impacts of a disaster by saving money and lives
- Stress Test of 14 hospitals in Kathmandu Valley
- Critical infrastructure Identify measures that must be in place to retain functionality post-disaster.





## How to reduce climate risk?



- Infrastructure design in Micronesia - Consideration given to wave heights
- Climate Field Schools in Indonesia
- Urban flood control in Bamako -Unanticipated benefits
- Integrating DRR into the WASH in Yemen - reduced "pipe drifting" decreases Case Fatality Rate (CFR) from 0.14% to 0.13%





## How to mainstream DRR finance?

- Peru includes disaster risk evaluation criteria for public investment projects, followed by Costa Rica and Guatemala.
- If the risks are not addressed, the project is not financed (GAR 2011)
- Many governments and organizations are introducing resilience markers and using DRR check lists







# Question 6: Based on the learning today, which Sendai Framework Priorities are most linked to your work in regions and countries? Select all that apply.

- 1. Priority 1: Understanding disaster risk
- 2. Priority 2: Strengthening disaster risk governance
- 3. Priority 3: Investing in disaster risk reduction for resilience
- 4. Priority 4: Enhancing disaster preparedness for effective response, and to 'Build Back Better' in recovery, rehabilitation and reconstruction









- Addressing Biodiversity in EU Cooperation 09/12
- Introduction to Circular Economy 15/01
- Rendre la coopération au développement plus « verte » 26/01



## Keep in touch



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## Thank you





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#### **Key Resources**

Disaster Risk Reduction Terminology

https://www.undrr.org/terminology

· Sendai Framework for Disaster Risk Reduction 2015-2030, UN

https://www.undrr.org/implementing-sendai-framework/what-sf

• The Global Assessment Report 2019 with link to 2017 Global Risk Atlas & 2013, 2011, 2009 GARs

https://gar.undrr.org

Understanding Risk

https://www.undrr.org/building-risk-knowledge/understanding-risk

• The Global Risks Report 2020, 14th Edition, World Economic Forum

https://www.weforum.org/reports/the-global-risks-report-2020

• Unbreakable, GFDRR, World Bank

https://www.gfdrr.org/sites/default/files/publication/Unbreakable\_FullBook\_Web-3.pdf

View all UNDRR GETI National Workshop Recommended Reading and Sources:



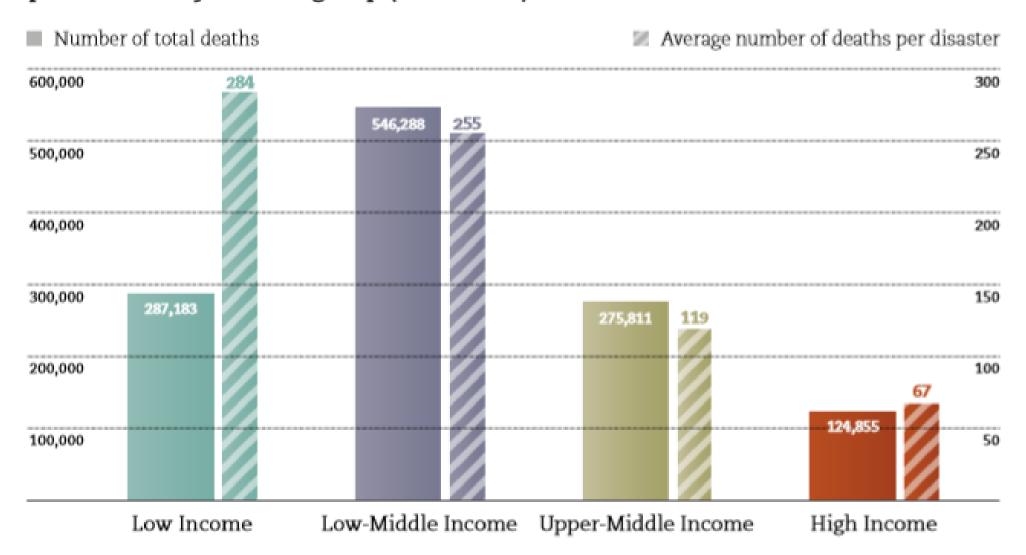
https://www.preventionweb.net/collections/geti-national

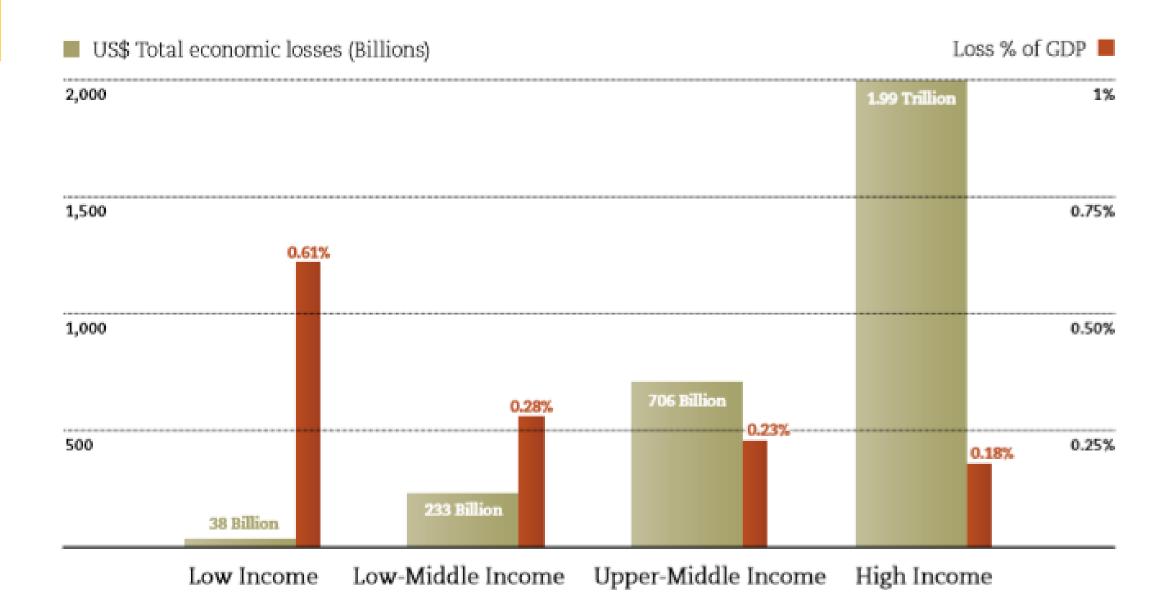
## Disaster Preparedness (DP) in context





## Total numbers of deaths compared to the average number of deaths per disaster by income group (2000-2019)









## CCA/DRR: Commonalities and differences

#### DISASTER RISK REDUCTION

#### Geophysical hazards

- · Earthquakes
- Tsunamis
- Landslides
- · Volcanic eruptions

#### Risk assessment

 Based mainly on historical data

#### Long history

(over 1 000 years)

#### Climatic hazards

Storms, floods, landslides, temperature extremes, droughts, fires, etc.

#### Impacts

Deaths and injuries, population shifts, loss of resources, security and access to shelter, etc.

#### Clear political commitments: SDGs, Paris Agreement, Sendai

SDGs, Paris Agreement, Send Framework

#### Scope for coherence

in DRR & CCA towards resilience

#### Need for an inclusive approach:

"All-of-states and all-of-society" approaches

#### CLIMATE CHANGE ADAPTATION

#### Slow onset events

 Sea-level rise, desertification, etc.

#### Non-disaster aspects of CCA

 (including positive benefits from climate change)

#### Risk assessment

 climate risk models and projections

#### Emerging topic (since 1985)

Source: Adopted from (Coninx et al., 2016[21]).







## Principles of DRF



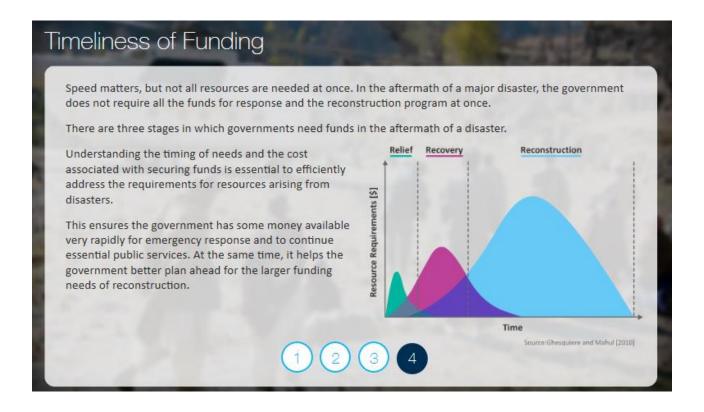


## Principles of DRF



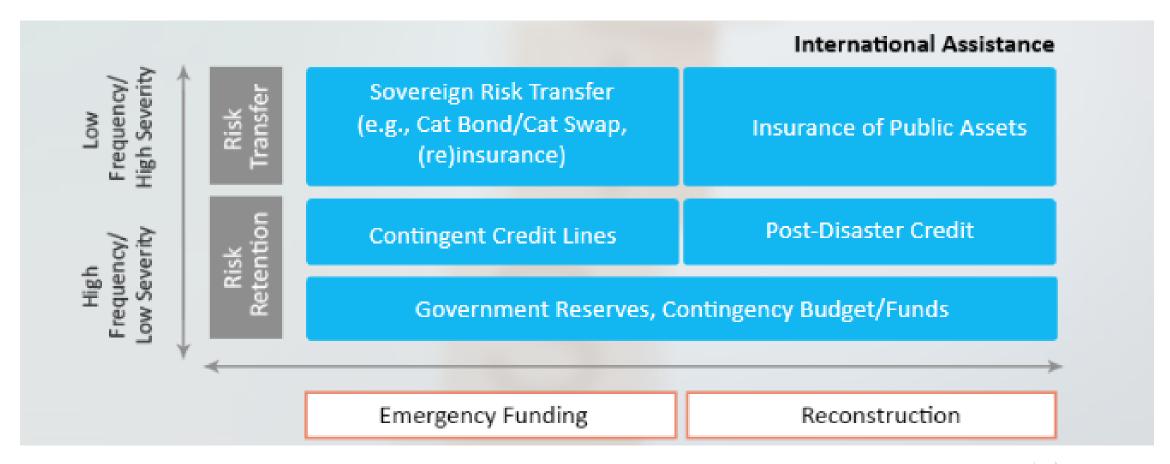


## Timeliness of funding





## Risk layering





#### **Thematic Priorities**

 Coherence (Development, Climate Change and DRR)



- Biological threats (pandemics) are integrated into disaster risk reduction
- Expansion and consolidation of regional, national and local DRR Plans and Policies (Target E)
  - Continue expanding Private Sector, and,
- Expanding School Safety Initiatives

Science & Technology networks



- Databases on loss and damage, as well as the Sendai Framework Monitoring
- Multi-hazard Early Warning Systems



- Regional Risk Assessment
- Urban Risk: Development of local plans for resilience
- Promote resilient investments and resilient infrastructure



## Global Facility for DRR

- GFDRR is a global partnership that helps developing countries better understand and reduce their vulnerability to natural hazards and climate change.
  - Knowledge hub: publications and publicly available trainings
  - Tailored analytical support: analytics to support operations
  - Events (Understanding Risk Forum, World Reconstruction Conference)
- Presentations of the Facility being organized with DEVCO geographic units





LIFELINES

## Global Facility for DRR





#### Areas of work:

- Integration of DRR into national planning
- Disaster risk governance
- Risk tools to guide vulnerability
- Resilient infrastructure
- Risk financing strategies
- Operational early warning systems
- Post disaster needs assessments (PDNAs) and Recovery planning



## InsuResilience Global Partnership

- Launched in 2017; a collaboration between the G20 and the V20 countries
- 80 members including the EU
- Develop Disaster risk financing and insurance solutions
- Targets by 2025:
  - √ 500 million poor and vulnerable people covered against disaster and climate shocks
  - √ 150 million people covered by microinsurance
  - √ 80 V20 and other vulnerable countries with comprehensive disaster risk finance strategies in place

