



# **INTPA-NEAR** **Environment** **& Climate Week** **2023**

**Climate Change Adaptation (CCA) and Disaster Risk Management (DRM)**

***Brussels, 27 March 2023***

# Setting the Scene : Introducing Climate Change Adaptation and Disaster risk management

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Andrea Alfieri, Head of the Climate Change sector, INTPA.F1

Aikaterini Tsakmakidou, Policy Officer, NEAR.A3



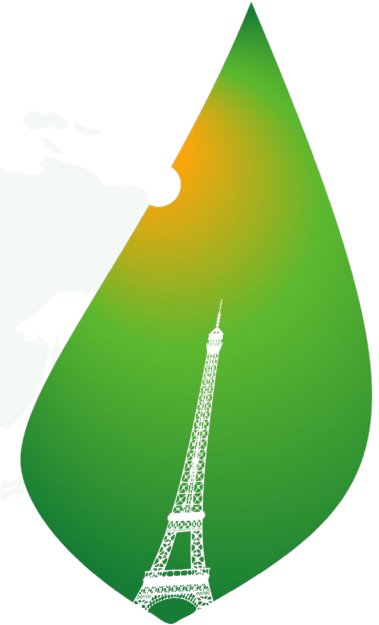
# Outline of this session

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1. Introduction to the international agreements and Framework
  - Paris Agreement
  - Sendai Framework for Disaster Risk Reduction
2. Introduction to key concepts
  - Adaptation
  - Disaster risk reduction
  - Resilience
  - Loss & Damage
3. Overview of the Global Adaptation Finance
4. Presentation of a snapshot analysis on 185 EU Actions Documents (AAP 2021-2022)
5. Introduction to the breakout sessions

# The Paris Agreement (PA)

- PA sets out a **global framework** to avoid **dangerous climate change** by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C.
- In addition to its overarching climate mitigation objectives, the PA established the **global goal of adaptation** for enhancing adaptive capacity (Art. 7.1).
- Adaptation action to be **gender-responsive, participatory** and **transparent** (Art.7.5).
- The EU adopted its new **EU Adaptation Strategy** in 2021 as a key part of the **European Green Deal**, aiming to make adaptation smarter and more systemic by stepping up **international action**.



**PARIS2015**  
UN CLIMATE CHANGE CONFERENCE  
**COP21·CMP11**

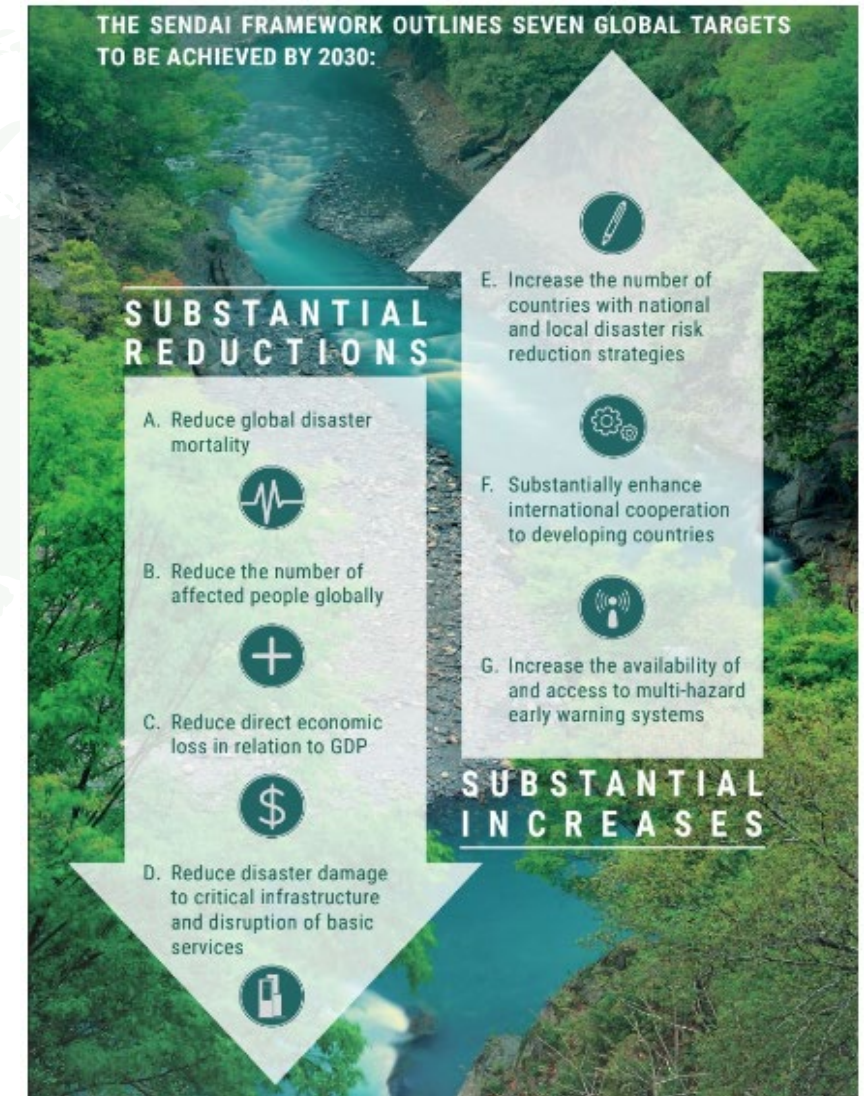
# The Sendai Framework for Disaster Risk Reduction

## SENDAI FRAMEWORK FOR DRR (2015-2030)

- The **Sendai Framework (SF) for Disaster Risk Reduction (2015-2030)** is a global framework to guide multi-hazard management of disaster risk, focusing on the adoption of measures which address the **three dimensions of disaster risk** (exposure to hazards, vulnerability and capacity, and hazard's characteristics) to prevent the creation of new risks, reduce existing risks and increase resilience.
- **International agreement** that provides countries with **concrete actions** to protect development gains from **disaster risk**.

The SF includes 4 priorities:

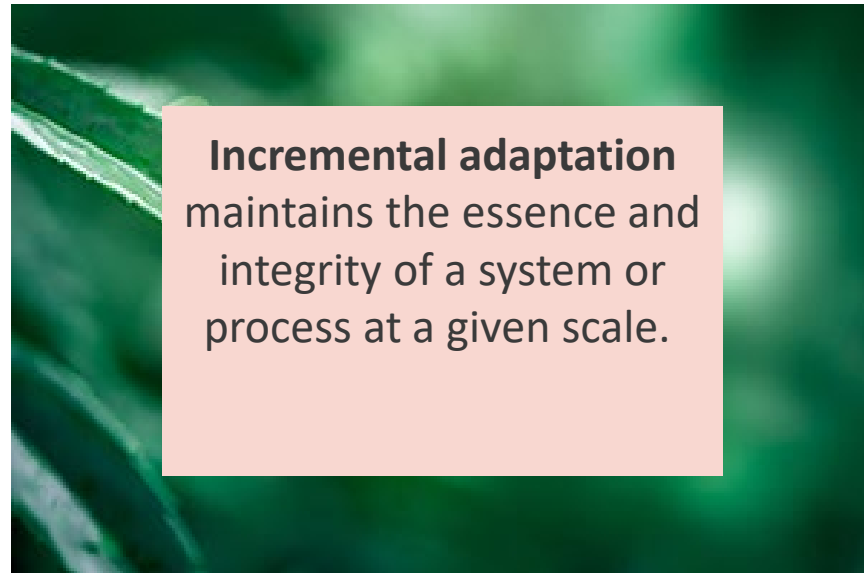
- 1 Understanding disaster risk
- 2 Strengthening disaster risk governance to manage disaster risk
- 3 Investing in disaster risk reduction for resilience
- 4 Enhancing disaster preparedness for effective response, and to «**Build Back Better**» in recovery, rehabilitation and reconstruction





# Climate Change Adaptation (CCA)

ADAPTATION in *human systems* is the **process of adjustment to actual or expected climate and its effects**, in order to moderate harm or exploit beneficial opportunities. In *natural systems*, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects.



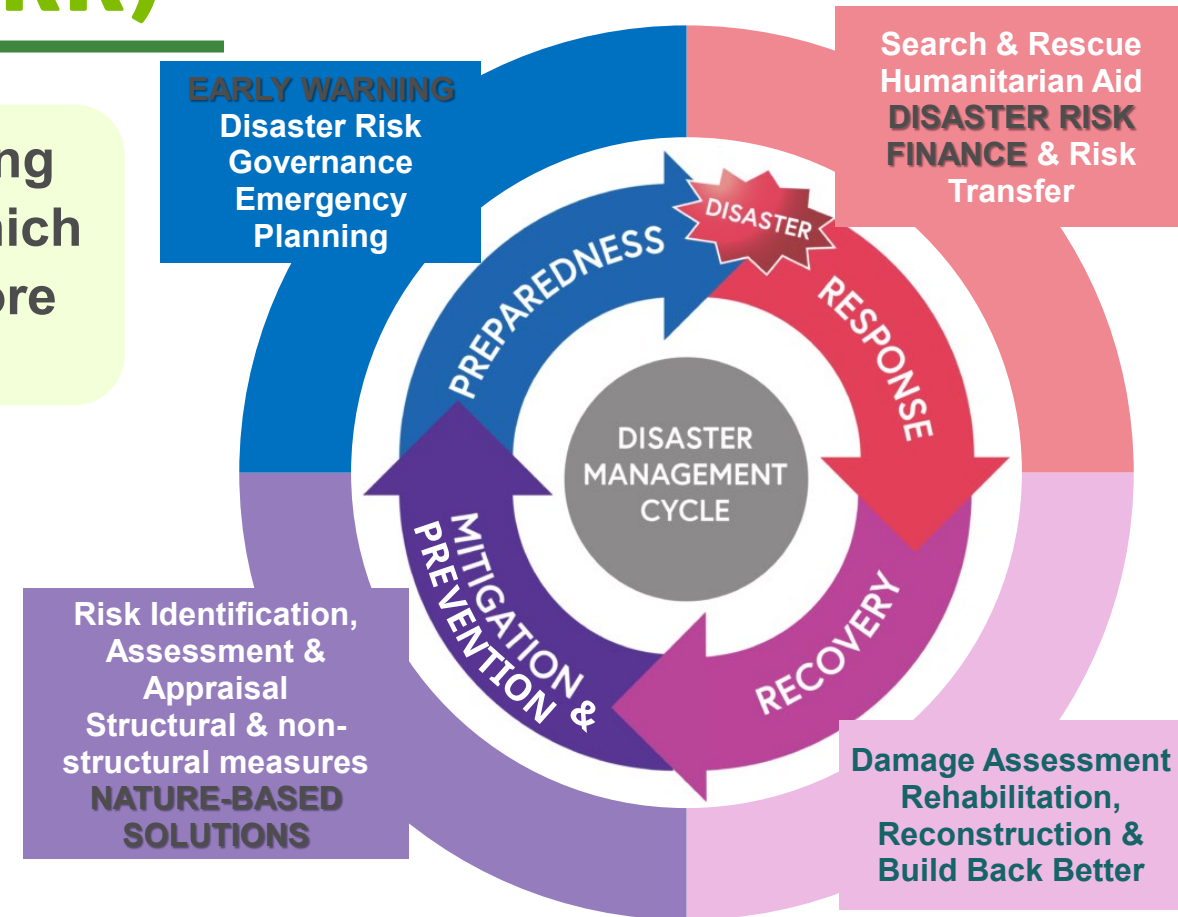
# Disaster risk reduction (DRR)

**DRR:** Aims 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

- **FOCUS:** natural and man-made hazards and related environmental hazards and risks

**DISASTER RISK MANAGEMENT (DRM)** is the implementation of DRR - the actions that aim to achieve the objective of reducing risk

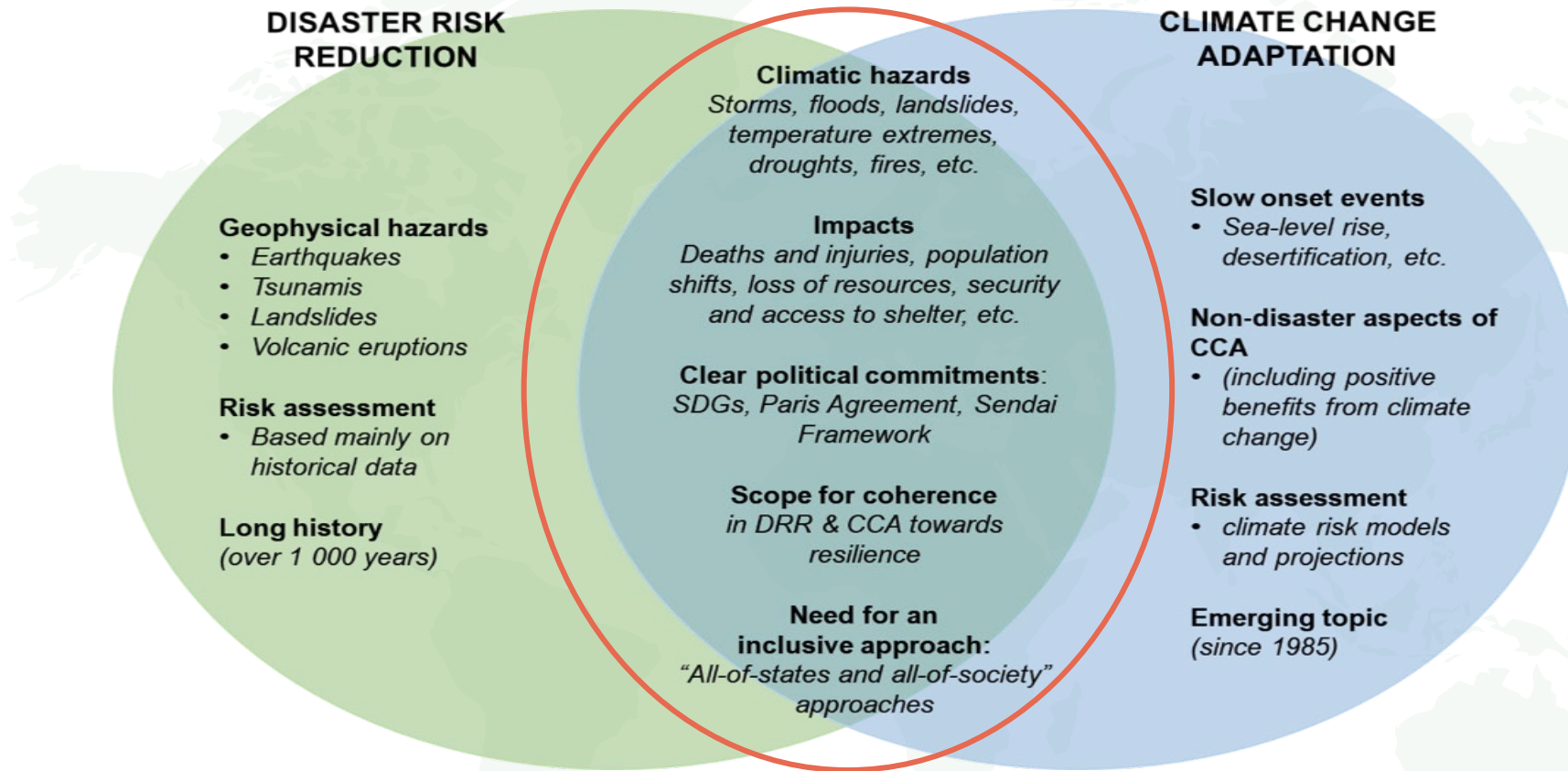
How do we reduce risk?



**DISASTER RISK MANAGEMENT CYCLE**



# Need for an integrated approach towards Resilience





# Loss & Damage (L&D)

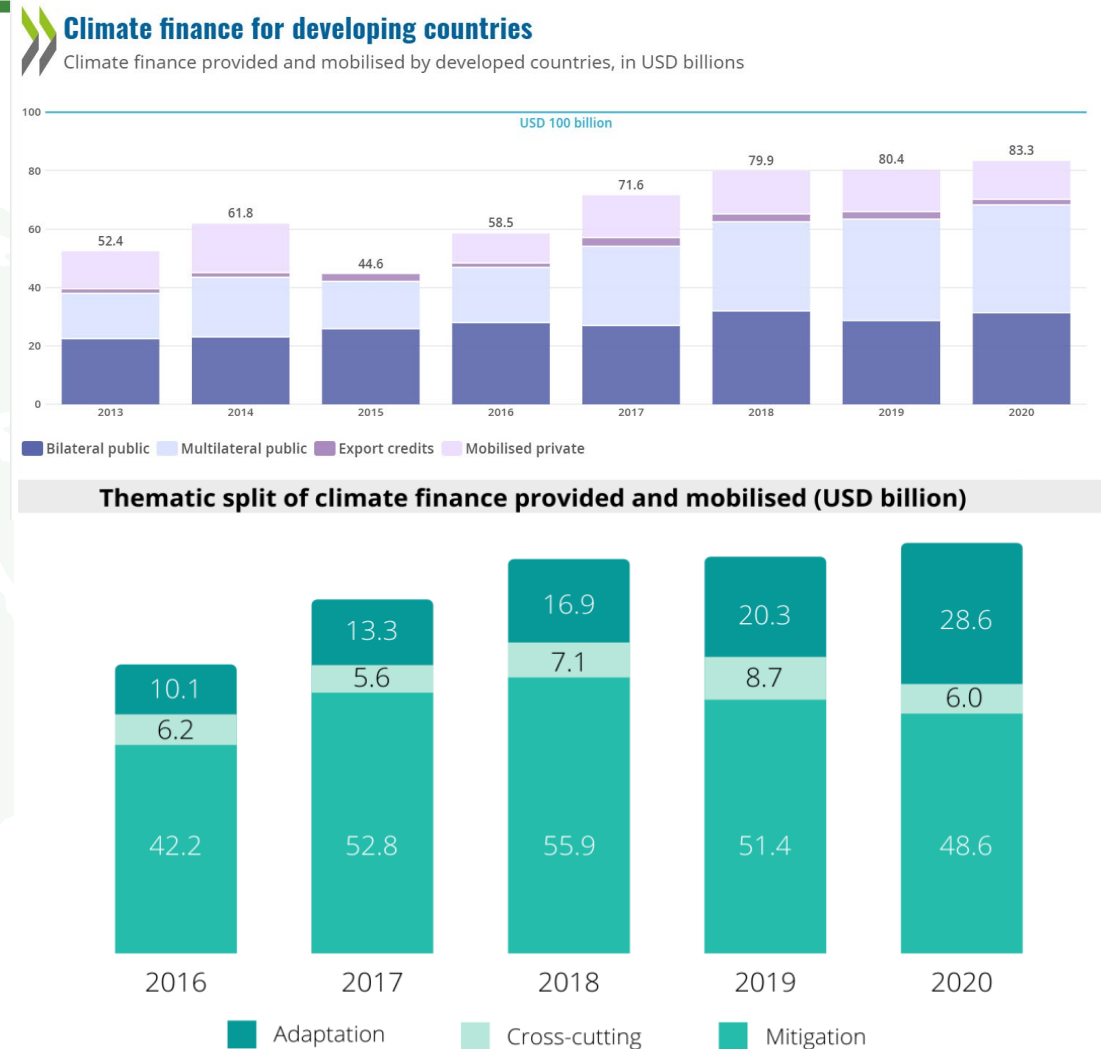
- **Adaptation** and **L&D** are two related concepts, but they differ in their focus and goal.
- L&D are defined as “*impacts of climate change that have not been, or cannot be, avoided through mitigation or adaptation efforts*”
  - **Loss** indicates irreversible damage, such as land loss because of sea-level rise or loss of freshwater resources because of desertification.
  - **Damage** involves reparable harm such as shoreline or infrastructure impacts linked to climate change
- The decision to establish a **Loss and Damage Fund** was approved at the COP27

**By 2030, L&D are estimated to cost developing countries between €290 billion and €580 billion annually**  
**(equiv. to 20% of the African GDP)**

Source: [European Parliament \(2022\), Understanding Loss and Damage](#)

# Global Adaptation Finance

- **Adaptation finance** supports actions that help communities reduce the risks they face and harm they might suffer from **climate hazards** (i.e. storms, droughts) to provide resilient infrastructure, smarter agriculture for food security, and improved governance for climate-related risks.
- The EU, with its Member States and the EIB are the world's **biggest contributors to climate finance**, providing at least a third of the world's public climate finance (> EUR 20 bi per year).
- In the past seven years, **more than 50%** of the EU's **climate finance** has been allocated towards **adaptation**, which will be maintained until 2027.
- **Adaptation** is primarily a **public sector** investment. **Private sector** finance for adaptation is **limited** and difficult to track. Adaptation projects often bring **broad social benefits** that do not have clear **financial returns** for private investors in the short term.
- However, **innovative financial instruments** to unlock **private investments** in **adaptation** are needed. These instruments are increasingly viewed as a means to **scale up** the investment needed in adaptation, as public funding alone will not meet the large and growing need for adaptation funding.



# Integration of CCA and DRR

## Quick tips



### INTEGRATING DISASTER RISK REDUCTION, ENVIRONMENTAL AND CLIMATE CHANGE ACTION AT SECTOR LEVEL

The number and severity of disasters is increasing. Disaster events in 2000-2019 almost doubled compared to the 1980-1999 period<sup>1</sup>. Related economic losses have been rocketing over the past 15 years and now reach a staggering EUR 480 bn per annum. Between 2005 and 2017, almost 70% of worldwide economic losses<sup>2</sup> were caused by disasters.

About 91% of all disasters reported between 1998 and 2017 were triggered by climate-related natural hazard, such as floods, storms, droughts, heatwaves and other extreme weather events<sup>3</sup>. Climate change not only accentuates these hazards<sup>4</sup>, it also affects natural regulating systems such as forests, oceans and coasts and reduces their capacity to buffer impacts when a hazard occurs. Climate change and environmental degradation amplify the three drivers of disaster risk: hazard, exposure and vulnerability. Natural hazard-related disasters tend to hit low-income households hardest, pushing 26 million people into poverty every year<sup>5</sup>, and threatening development gains.

Disasters are not natural. They are a serious disruption of the functioning of a community or a society at any scale and only happen when a hazardous event, such as a flood, storm or earthquake, interacts with conditions of exposure and vulnerability, leading to human, material, economic and/or environmental losses and impacts. As such, a disaster can only happen where a society exists. That society can make socio-economic decisions that alter its vulnerability and the way a hazard impacts it.

Disasters may be small- or large-scale, frequent or infrequent, with a slow- or sudden onset. Their effect can be immediate and localised, but is often widespread and lingering, testing or exceeding the capacity of a community or society to cope using its own resources and therefore requiring external assistance.

almost half of economic losses and for greater proportions of morbidity and displacement<sup>6</sup>. This means disasters are potentially predictable and can be prepared for, leading to reduced risks and impacts and an opportunity to prevent hazards from turning into disasters. Even if some natural hazard events may be inevitable, the resulting disasters are mostly due to human (in)action.

It is worth investing in disaster risk reduction (DRR). In low- and middle-income countries, investing in more resilient infrastructure yields four euros in benefits for each euro invested<sup>7</sup>. Prevention, mitigation<sup>8</sup> and preparedness are less costly than response, recovery and reconstruction. For instance, securing water for all could cost 1% of global GDP, yet failure to improve water management would result in regional GDP losses from 2-10% by 2050<sup>9</sup>. Soft or "non-structural" approaches, such as land use planning, early warning systems, and household-level adaptive/preventive measures, can be as or even more effective than structural measures<sup>10</sup>.

DRR is an integral part of EU development strategy and closely associated to climate commitments. In the 5th Intergovernmental Panel on Climate Change (IPCC) Assessment Report<sup>11</sup>, global actors agreed on the need to integrate climate change adaptation (CCA) and DRR. DRR and CCA are not only an imperative for protecting investments in development, but also an opportunity for a transformative shift towards a more resilient, sustainable development. The EU Green Deal envisages a transformation towards economies that are more resilient to climate and environment-related risks. The new EU Adaptation Strategy (2021)<sup>12</sup> underlines the "common ground"<sup>13,14</sup> that ties DRR and CCA Frameworks together, by putting the onus on a coherent response to increasing climate hazards and the shared approaches to resilience and on leaving no one behind.

## EU funded Project Example



## Integrating Climate Change Adaptation and DRM in Turkey

Technical Assistance (3 M€) to increase preparedness and resilience to climate induced disasters and enhance capacity of the Turkish Disaster and Emergency Management Authority (AFAD) and two pilot municipalities (Antalya and Trabzon)

Angel GUTIERREZ HIDALGO DE QUINTANA, Head of COOP2 Green Development and Inclusive Growth  
Akif TURKEL, Arif KARBAB, Christian BALLARO'

EU Delegation to Türkiye

Source: [Technical Assistance To Enhance The Capacity of AFAD In The Adaptation and Reduction of Disaster Risks Resulting from The Climate Change In Türkiye](#)

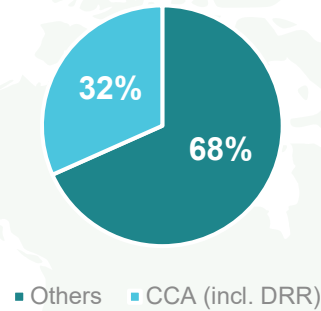


# Review of CCA and DRM activities

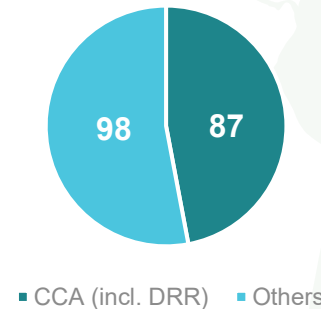
*Snapshot Analysis on a sample of 185 Actions Documents  
(AAP 2021-2022)*

# Review of Climate change adaptation activities

## % of EU budget contributing to adaptation activities

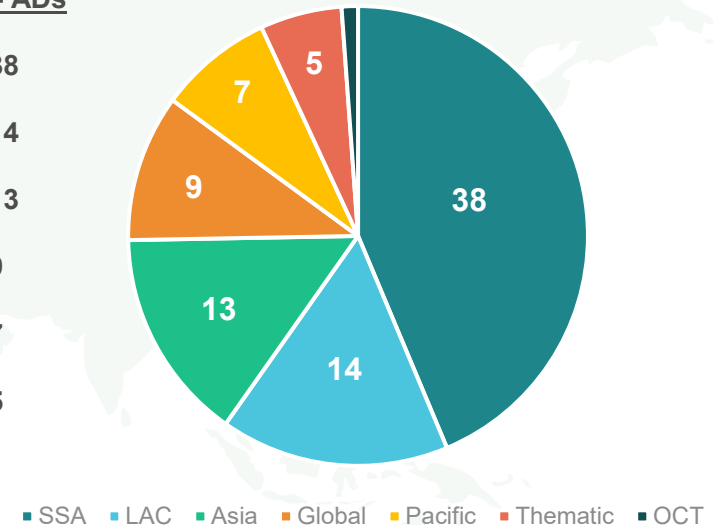


## Number of action documents stating Adaptation as Principal or Significant Objectives (OECD RIO Markers)



## Geographic spreading of adaptation activities

| Regions   | # ADs |
|-----------|-------|
| SSA:      | 38    |
| LAC:      | 14    |
| Asia:     | 13    |
| Global:   | 9     |
| Pacific:  | 7     |
| Thematic: | 5     |
| OCT:      | 1     |



# What makes a Project an “Adaptation” project ?

Example : Support Uganda to in the implementation of its NDC through Climate Smart Agriculture

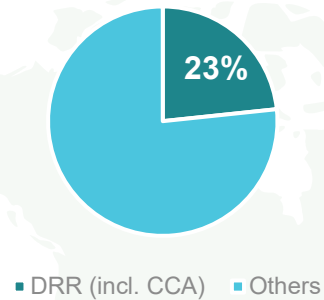
- 1. Anticipate climate risks:** *The project is based on a risks analysis where **climate hazards, vulnerability and exposure** (“risk propeller”) have been assessed.*
- 2. Develop adaptation options to reduce climate risks:** *The project is based on a **climate rationale** (climate-smart agriculture) managing the landscapes in an integrated manner - cropland, livestock, forests and fisheries, to impact on the interlinked challenges of food security and climate change.*
- 3. Measure CCA impacts:** *f.i. improved pastures leading to annual biomass yield from **700 Kg/Ha** on degraded areas to **4.000 Kg/Ha**.*

More information available on: [GCCA+ support to Uganda in the sectorial implementation of its NDC through Climate Smart Agriculture | Global Climate Change Alliance+](#)

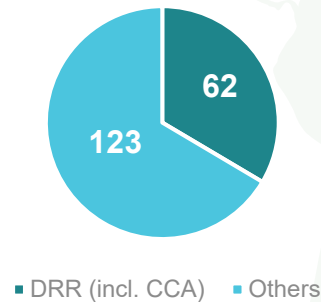


# Review of Disaster Risk Reduction Activities

## % of EU budget contributing to DRR activities

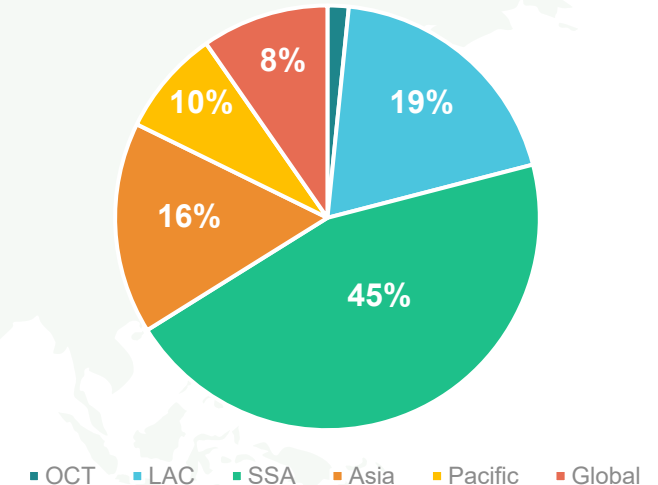


## Number of action documents stating DRR as Principal or Significant Objectives (OECD RIO Markers)



## Geographic spreading of DRR activities

| Regions  | # ADs |
|----------|-------|
| SSA:     | 28    |
| LAC:     | 12    |
| Asia:    | 10    |
| Global:  | 6     |
| Pacific: | 5     |
| OCT:     | 1     |



# What makes a Project a “DRR” project ?

## Example : NICALERT (Nicaragua)

### WHAT

- Disaster risk reduction with a focus on **disaster prevention** and **preparedness**

### WHERE

- Nicaraguan Caribbean Coastal Regions

### GOAL

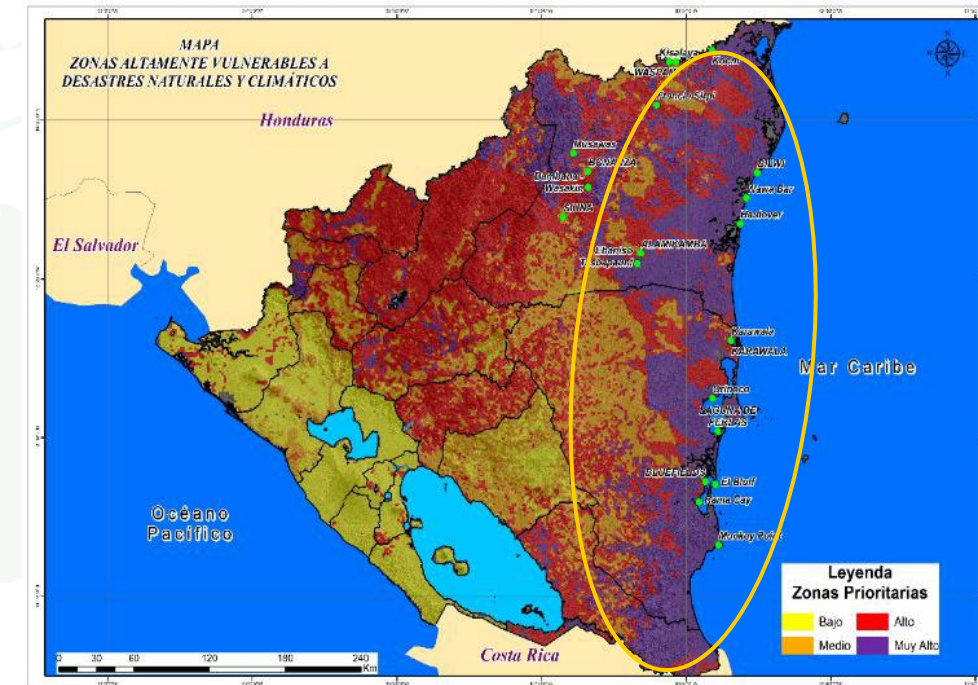
- MIP SO3: Community resilience
- Increase response, coping capacities & the resilience of the most vulnerable populations

1. Enhance local community-based preparedness and response capacity to disaster risk

2. Strengthen community-based EWS

3. Empower indigenous and afro-descendant women & youth in DRM & CCA

**Focus:** women, children and youth, indigenous people, afro-descendant ethnic communities, the elderly and people with disabilities





# Breakout Sessions – Key topics on DRM and CC Adaptation

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# Breakout Sessions – Key topics on DRM and CC Adaptation

1



**Unpacking Early  
Warning Systems to  
support disaster  
preparedness and  
climate risk reduction**

2



**Climate and Disaster  
Risk Finance and  
Insurance (CDRFI)**

3



**Nature-based  
Solutions for  
prevention and  
adaptation**

# Thank you

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