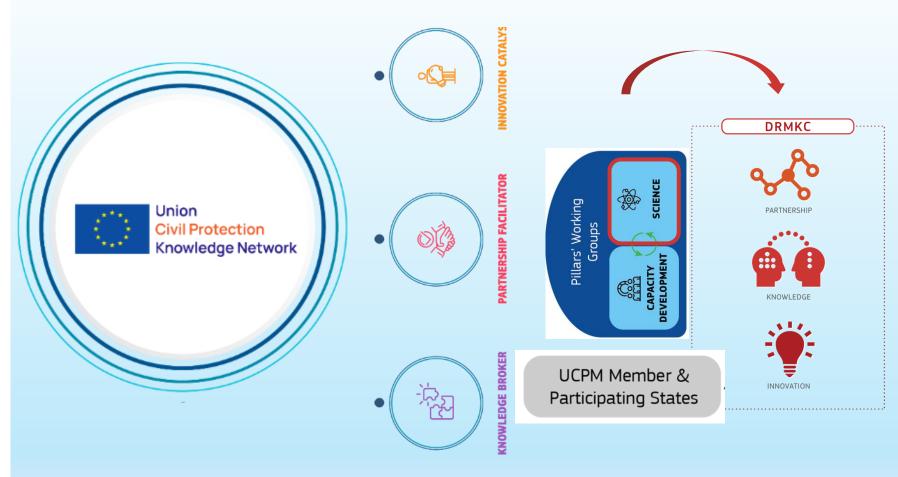
DRMKC - Partnership pillar

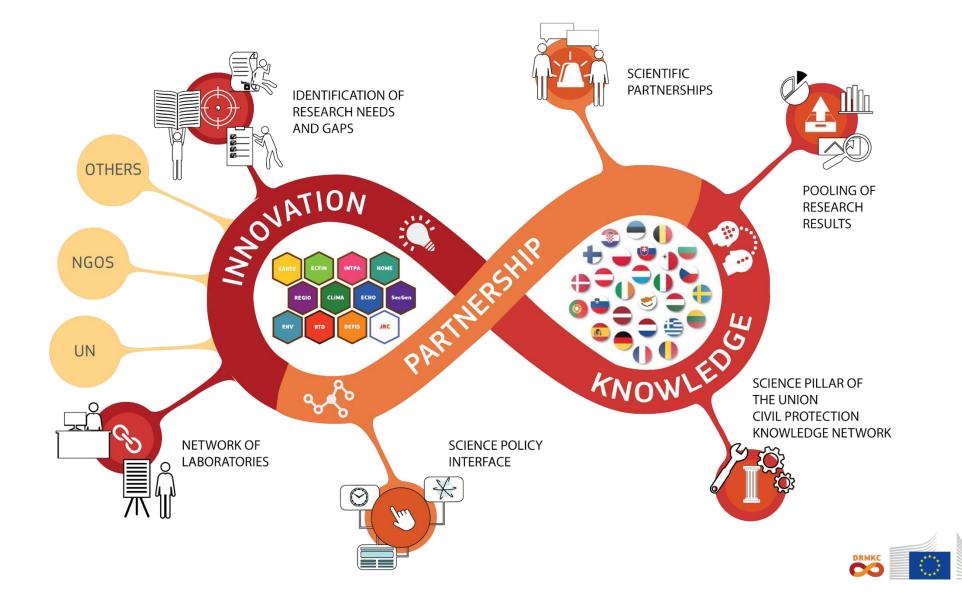


Role of Science: current challenges

- Support and facilitate the process of defining, implementing and monitoring Union Disaster Resilience Goals
- Link with scenario building

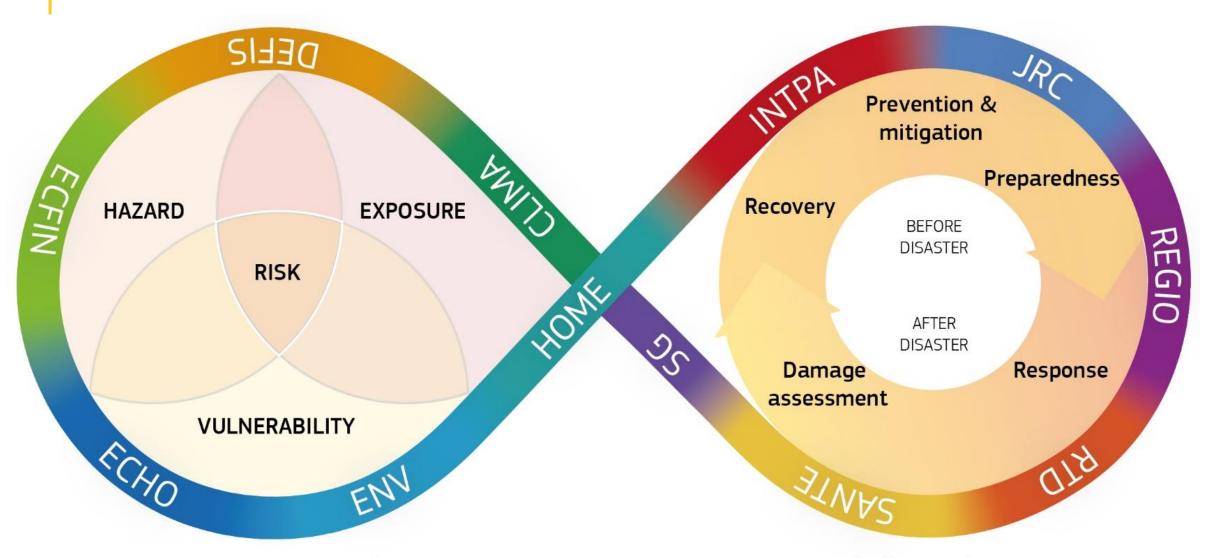


ORMKC & Science Pillar of the UCPM: reinforcing our collaborations with MS/PS scientific communities



European Commission

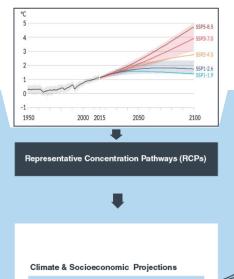
DRMKC main deliverables 2023 – selected highlights



Knowing for managing, our journey around the risk

INFORMCLIMATE CHANGE





2010 2020 2030 2040 2050 2060 2070 2080 2090

About INFORM Climate Change Risk Index

It is an upgrade of the INFORM Risk index incorporating climate and socioeconomic projections to analyze future risk

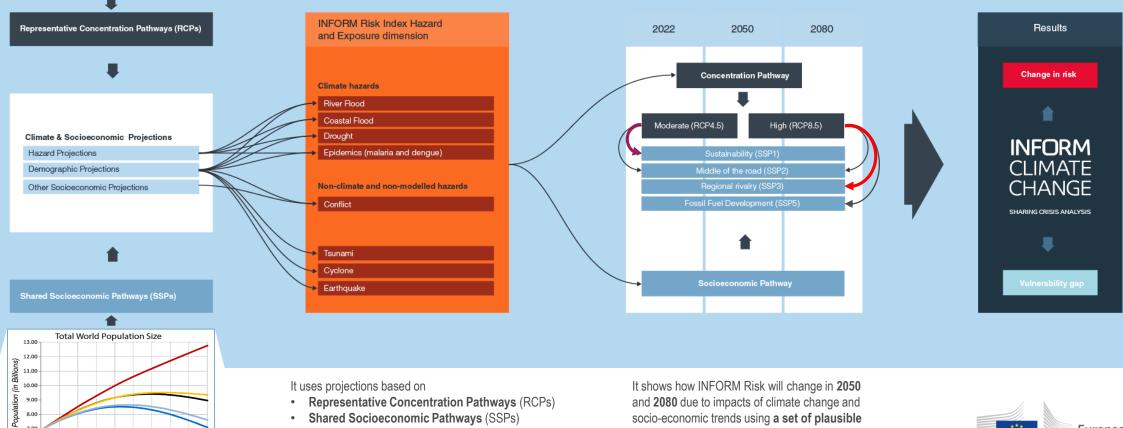
The overall objective

Develop a common evidence-based tool for riskinformed decision-making that can help unify disaster risk reduction and climate change adaptation strategies.

Results

It computes the

- change in risk
- vulnerability gap



In Hazard&Exposure dimension of INFORM Risk Index

socio-economic trends using a set of plausible **RCP-SSP** scenario combinations (from pessimistic to optimistic)



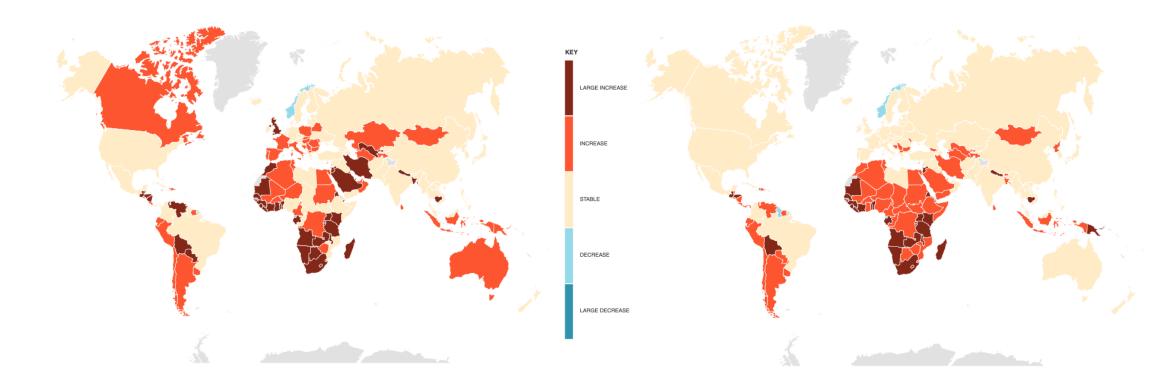
INFORMCLIMATE CHANGE RESULTS



Pessimistic climate and socio-economic scenario (RCP 8.5 + SSP3)

Change in risk (2050-baseline)







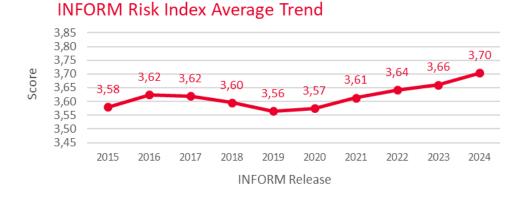
New releases : data and information systems

INFORM Risk 2024 A decade of INFORM Risk



Global trends in the INFORM Risk Index and its dimensions 2015-2024

Score





Hazard&Exposure Index Average Trend





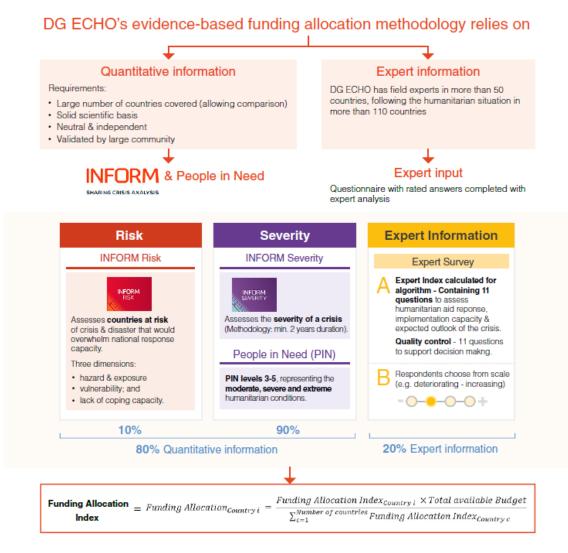
Lack of Coping Capacity Index Average Trend

INFORM 2023 report





INFORM is a collaboration of the Inter-Agency Standing Committee and the European Commission. The Joint Research Center of European Commission is the scientific and technical lead for INFORM. UN OCHA is coordinator of INFORM.



Risk Data Hub: Vulnerability dashboards



Eklund, G., Sibilia, A., Salvi, A., Salari, S., Rodomonti, D., Poljansek, K., Marzi, S., Gyenes, Z., Corbane, C., Antofie, T-E., *Towards a European wide vulnerability framework*, Publications Office of the European Union, Luxembourg, 2023, doi: 10.2760/353889, JRC118850

Eklund, G., Sibilia A., Salvi A., Antofie T-E., Rodomonti D., Salari S., Corbane C., Pal J., Melchiorri M., *Vulnerability to Disasters in Europe*, Disaster Risk Management Knowledge Centre, European Commission, 2022, <u>https://drmkc.jrc.ec.europa.eu/risk-data-hub#/vulnerability-in-europe</u>

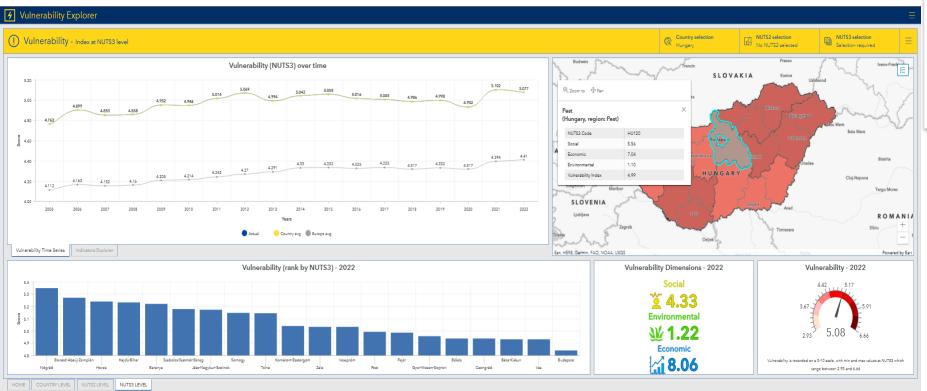


JRC TECHNICAL REPORT

Towards a European wide vulnerability framework

> A flexible approach for vulnerability assessment using composite indicators

> Eklund, G., Sibilia, A., Salvi, A., Antofie, T-E., Rodomonti, D., Salari, S., Poljansek, K., Marzi, S., Gyenes, Z., Corbane, C.







20

Risk Data Hub: Analytical reports

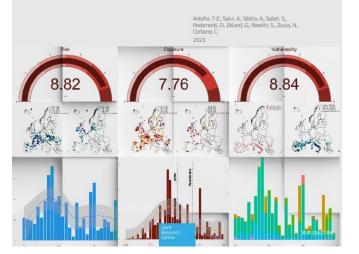
ISSN 1831-9424

Evidence for Disaster Risk Management from the Risk Data Hub



Evidence for Disaster Risk Management from the Risk Data Hub

Analytical reports on natural hazards, vulnerabilities and disaster risks in Europe based on the DRMKC - Risk Data Hub



Report: 1. Analysis of European wide losses and risks from single hazards

This analysis of relevant hazards at European level comparing historical damages and losses, and current risk levels.

Report: 2. Identifying European wide regions with multi-hazard potential and quantify their population at risk

Assessment of population at risk from multiple hazards at the level of Local Administrative Units (LAU) and the multi-hazard interactions based on a theoretical framework.

Report: 3. Identifying European regions with Emerging and Increase in risk

Identification of regions with emerging and increase in risk that are the result of low probability hazard occurrence.

Report: 4. Identifying drivers of vulnerability and disaster risk

Trends in terms of disaster vulnerability and its components.

Report: 5. Country Reports

Overview of the risk and its components for a selected country.



Risk Data Hub: Upcoming

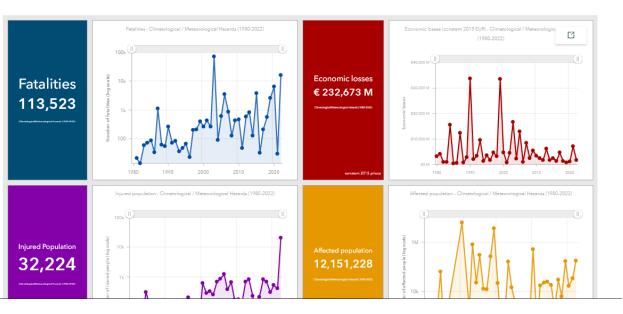
Disaster Losses in Europe Story Map

Climatological and Meteorological Hazards

Climatological: Droughts, Wildfires; Meteorological: Cold waves, Heatwaves, Wind-storms

Droughts and Wildfires are classified as climatological hazards in the DRMKC RDH, while Cold waves, Heatwaves and Wind storms are classified as meteorological hazards.

The data should be analysed with caution, since the data availability is not constant between the various hazards/through time (e.g. limited data availability related to droughts).



Methodological report on estimation of fatalities and economic losses and disaggregation by sector

Hydrological Hazards

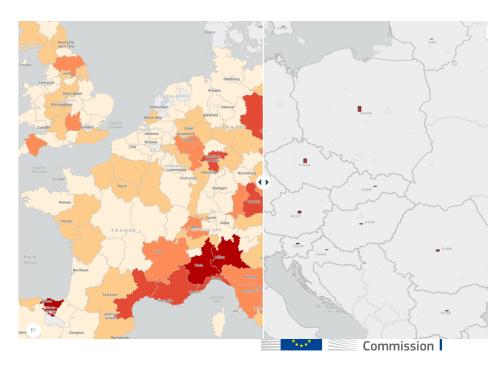
Coastal floods, Flash floods, River floods

In the DRMKC RDH coastal floods, flash floods and river floods are classified as hydrological hazards



As previously mentioned, floods (river floods, coastal floods and flash floods) have led to important economic losses in Europe in the past 43 years, with an estimated total loss of almost **€ 269 billion**. *Pais Vasco* (Spain) is estimated to have incurred important losses related to floods (1980-2022) of **€** 20.8 million. S5% of the hydrological losses in Pais Vasco are due to river floods. The remaining 45% of the losses are related to flash floods.

As illustrated on the map on the right, at the country scale, Gernany is the country with the highest economic losses linked to hydrological hazards with a total loss of \in 59 billion. It is followed by Italy and Spain with \in 53.3 billion and \in 40.7 billion (1980-2022) of losses respectively.



How to engage

➤To know more: <u>https://drmkc.jrc.ec.europa.eu</u>

➤<u>To engage</u> in the community

≻To <u>brainstorm together</u> about the UCPKN

