

FORIN IN THE CONTEXT OF PREPARING FOR EXTREME AND RARE EVENTS IN COASTAL REGIONS (PEARL)

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Presentation structure

1. PEARL
2. Reviewing FORIN in PEARL
3. Developing a Risk and Root Cause Assessment Framework for PEARL
4. Testing the Framework for European flood cases
5. Developing new methods for Root Cause Analysis
6. Reality check: the politics of FORIN research

Preparing for Extreme And Rare events in coastal regions (PEARL)

- 4-year EU funded project (2014-2018) involving 24 partners from 13 countries
- Principal aim: to develop adaptive, sociotechnical risk management measures and strategies for coastal communities in Europe against extreme hydro-meteorological events
- PEARL Risk and Root Cause Analysis Framework aims to enable systematic assessment of different root causes of risk, risk cascading and propagation of vulnerabilities

Reviewing FORIN in PEARL: Review of Formal FORIN Case Studies

Study	Strengths of FORIN	Limits of FORIN	Gaps in FORIN
Naruchaikusol, Beckman & Mocjizuki 2013	Disaster-development nexus Integration scenarios		
Huang et al. 2013	Disaster-development nexus Holism	Defining limits Different disaster types	Analysing causal relationships
Castillo et al. 2013	Holism Adaptability FORIN narrative	Climate 'normals' Challenges inter-disciplinarity	Analysing and predicting causal relationships Characterisation of risk (H=VxE) Transformation
Faustino-Eslava et al. 2013	Integration multiple stakeholders Integration scenarios		
Fujiwara, Sagara & ICHARM studies of GEJET			Propagation Infrastructure networks

Reviewing FORIN in PEARL

Strengths of FORIN in PEARL:

- Broad, adaptable structured framework
- Inter-disciplinary, comprehensive and inclusive approach
- Link disaster risk and development trajectories
- Prioritise governance as driver of risk

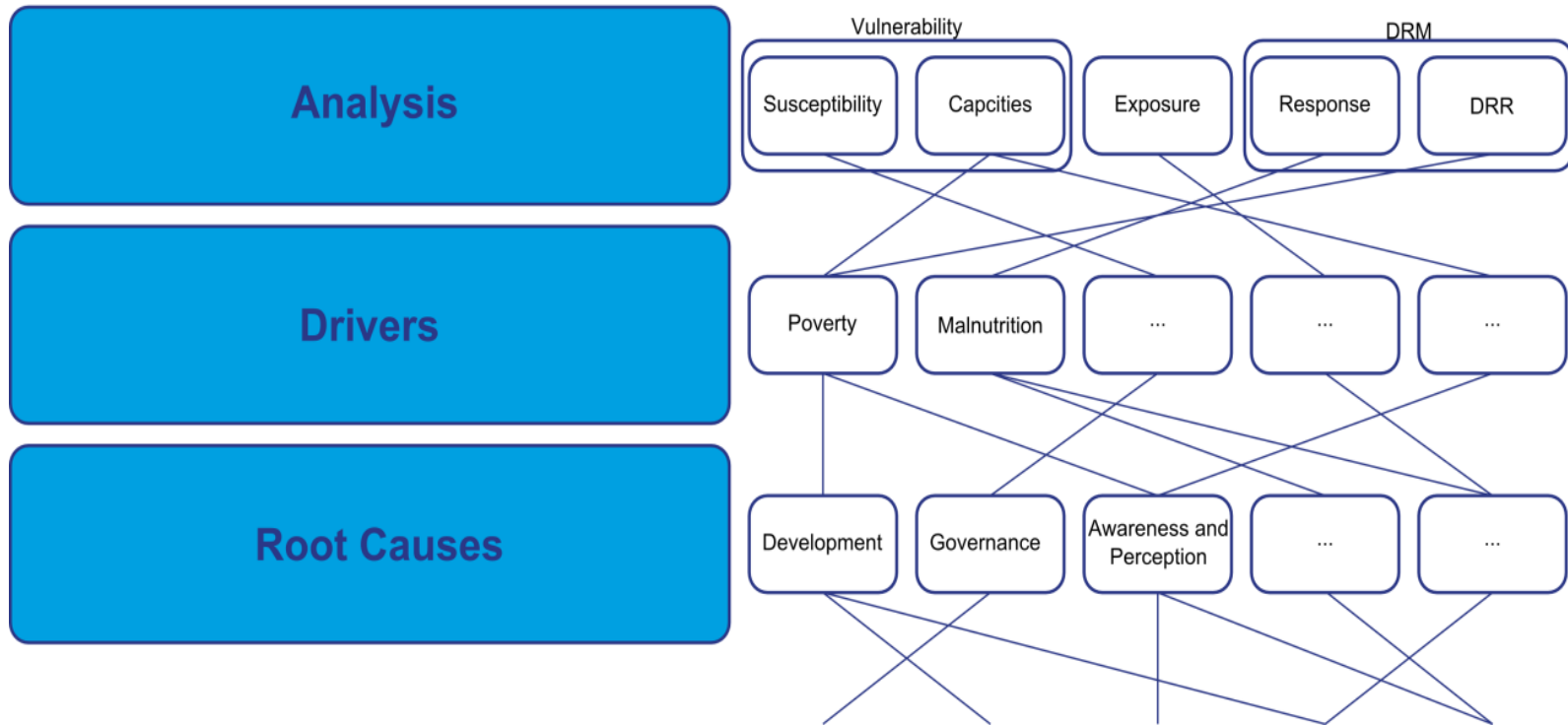
Reviewing FORIN in PEARL

Developing FORIN in PEARL:

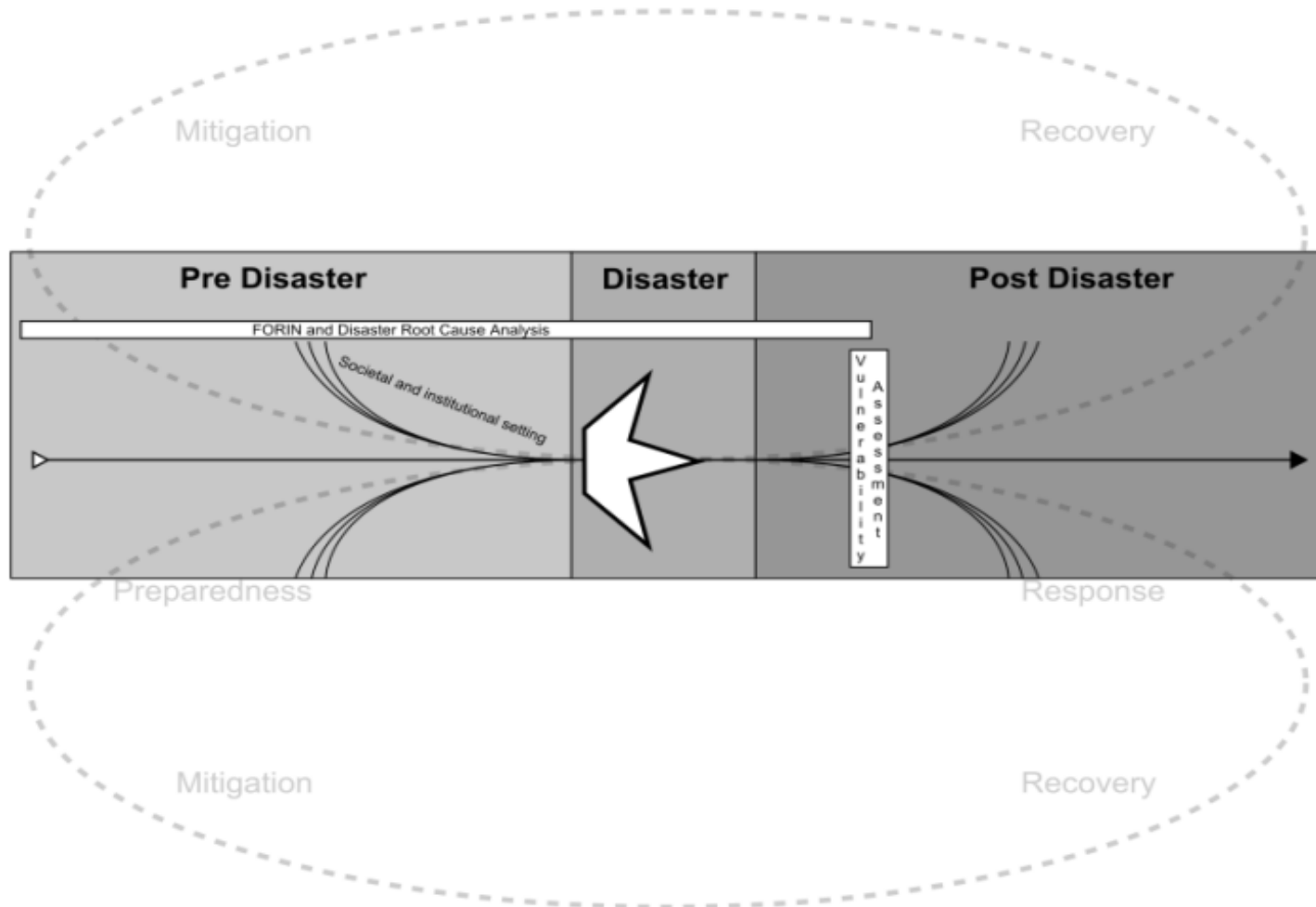
1. A stronger theorisation of, and greater precision of methods for investigating, the governance dimension of disaster causation,
2. A more central focus on the role of the disaster management cycle in perpetuating risk,
3. The connection of a backward-looking, historical perspective on disaster risk causation to a forward-looking, scenarios-based analysis,
4. The development of methods for analysing causal pathways and
5. The development of FORIN indicators for comparative analysis over time and through which to improve the policy update of FORIN.

Reviewing FORIN in PEARL: Setting FORIN alongside the DKKV approach

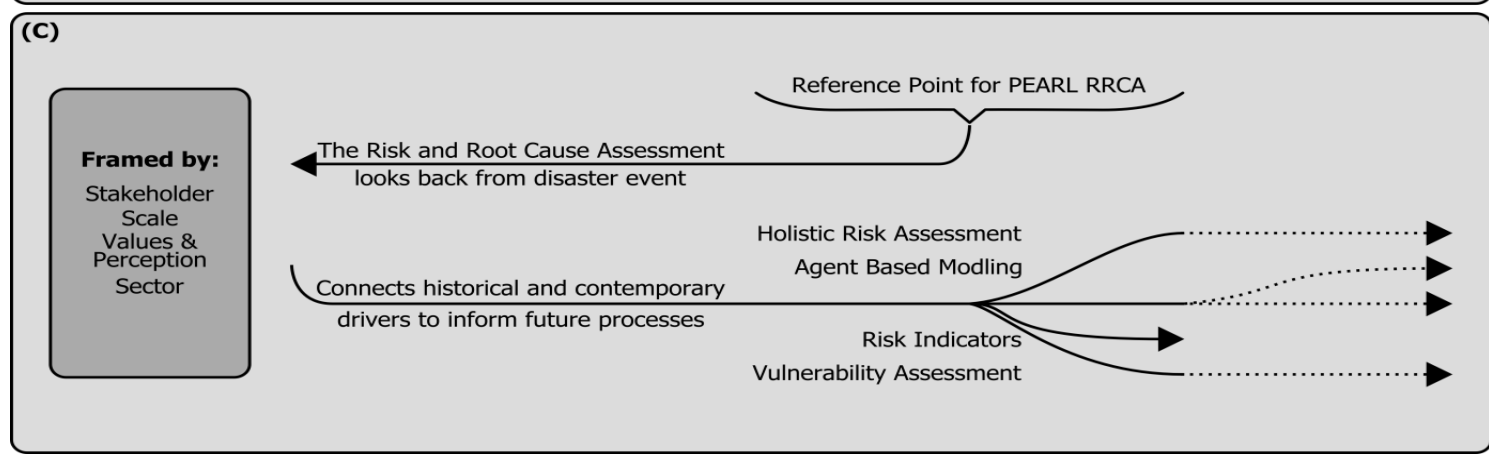
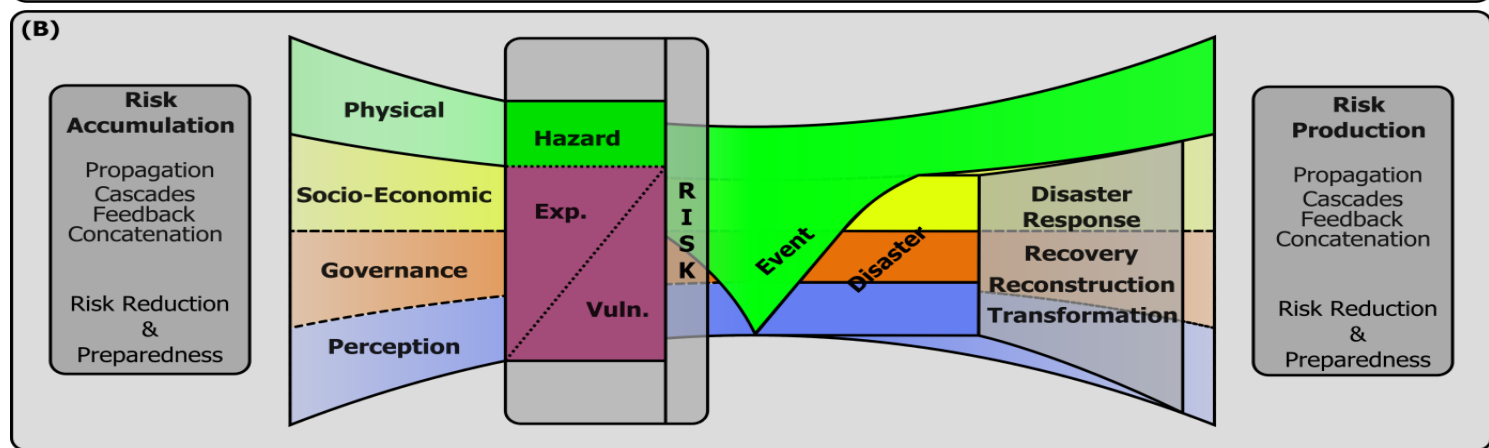
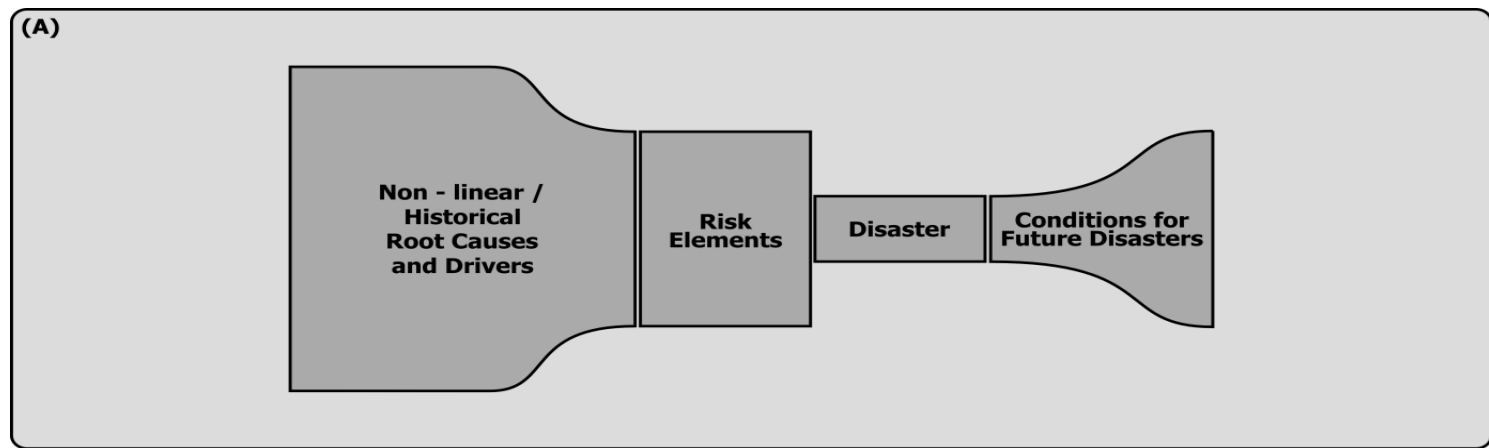
Framework for the analysis of disaster root causes showing the 3 levels of analysis and examples for the subjects that are investigated. Based on DKKV 2012.



Reviewing FORIN in PEARL: Setting FORIN alongside the DKKV approach



The PEARL Risk and Root Cause Analysis (RRCA) Framework



Testing the Framework for European flood cases

- 16 European coastal flood cases, or sets of cases, where holistic assessments available
- Confirmed embeddedness of disaster events in historically configured, inter-related physical, socio-economic, governmental and attitudinal processes
- Distinct profile of small-scale events; importance of local government
- In every case disaster event reconfigured policies and institutions

Developing methods for Root Cause Analysis

- FORIN methods remain appropriate for the RRCA in PEARL
- Techniques for linking FORIN work and vulnerability analysis: using qualitative work to inform development of quantitative indicators; setting historical narratives alongside time-series data; weighting of causal factors in stakeholder workshops
- Analysis will inform agent-based model

Developing methods for Root Cause Analysis

- Additional aim is the development of indicators to track trajectories of root causes
- Most indicator sets capture the outcome, but the link to development is missing
- Ensuring compatibility with HFA2 and existing UNISDR high-level indicators: more prominent role for sub-national?
- UNISDR indicators lack sequence – need for analytic protocol to establish cause and effect

Reality check: the politics of FORIN research

- Surprise element in PEARL so far: legal and political blocks to FORIN case study research in Europe