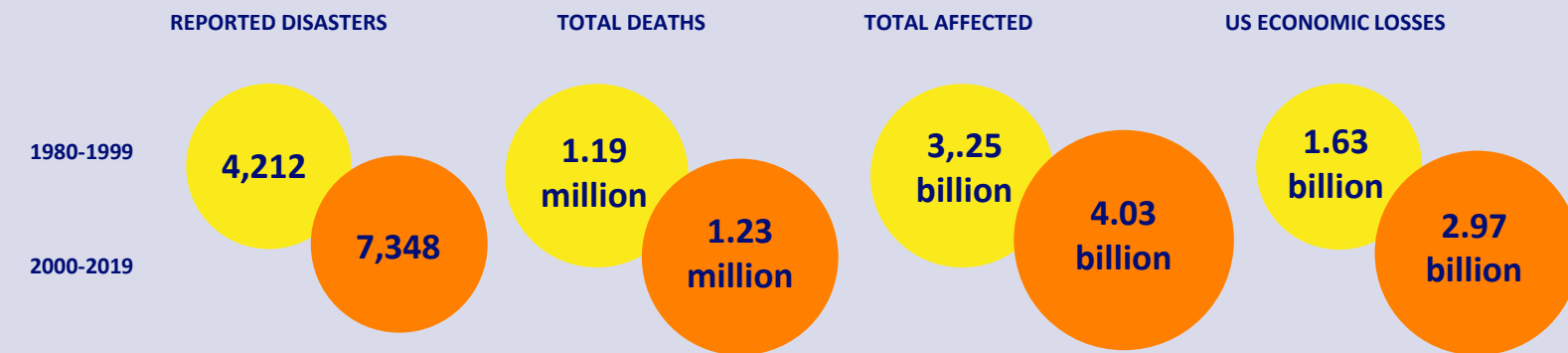


ICARIA: IMPROVING CLIMATE RESILIENCE OF CRITICAL ASSETS

WHY



Promote the use of a comprehensive asset level modelling framework to achieve a better understanding about climate related impacts produced by complex, compound and cascading disasters and the possible risk reduction provided by suitable, sustainable and cost-effective adaptation solutions.

WHAT



WHO

PROJECT PARTNERS			COPS
ORGANIZATION	COUNTRY	ROLE	CoPs (communities of practices) created in each study: <ul style="list-style-type: none"> Provide requirements Feedback on the methods and tools developed and implemented <p>3rd parties:</p> <ul style="list-style-type: none"> Local governments Public and private asset operators Civil society actors Other relevant stakeholders
1. AQUATEC	ES	Coordinator (C)	
2. CETAQUA	ES	Transversal cross-cutting partner (TCCP)	
3. FIC	ES	Case study facilitator (CSF)	
4. IREC	ES	Risk owner (RO)	
5. UNEXE	UK	Coordinator (C)	
6. DEMOKRITOS	GR	Transversal cross-cutting partner (TCCP)	
7. LNEC	PT	Case study facilitator (CSF)	
8. DRAXIS	GR	Risk owner (RO)	
9. CERTH	GR	Coordinator (C)	
10. PLINIVS	IT	Transversal cross-cutting partner (TCCP)	
11. AIT	AT	Case study facilitator (CSF)	
12. AMB	ES	Risk owner (RO)	
13. SAR	GR	Coordinator (C)	
14. VERB	AT	Risk owner (RO)	

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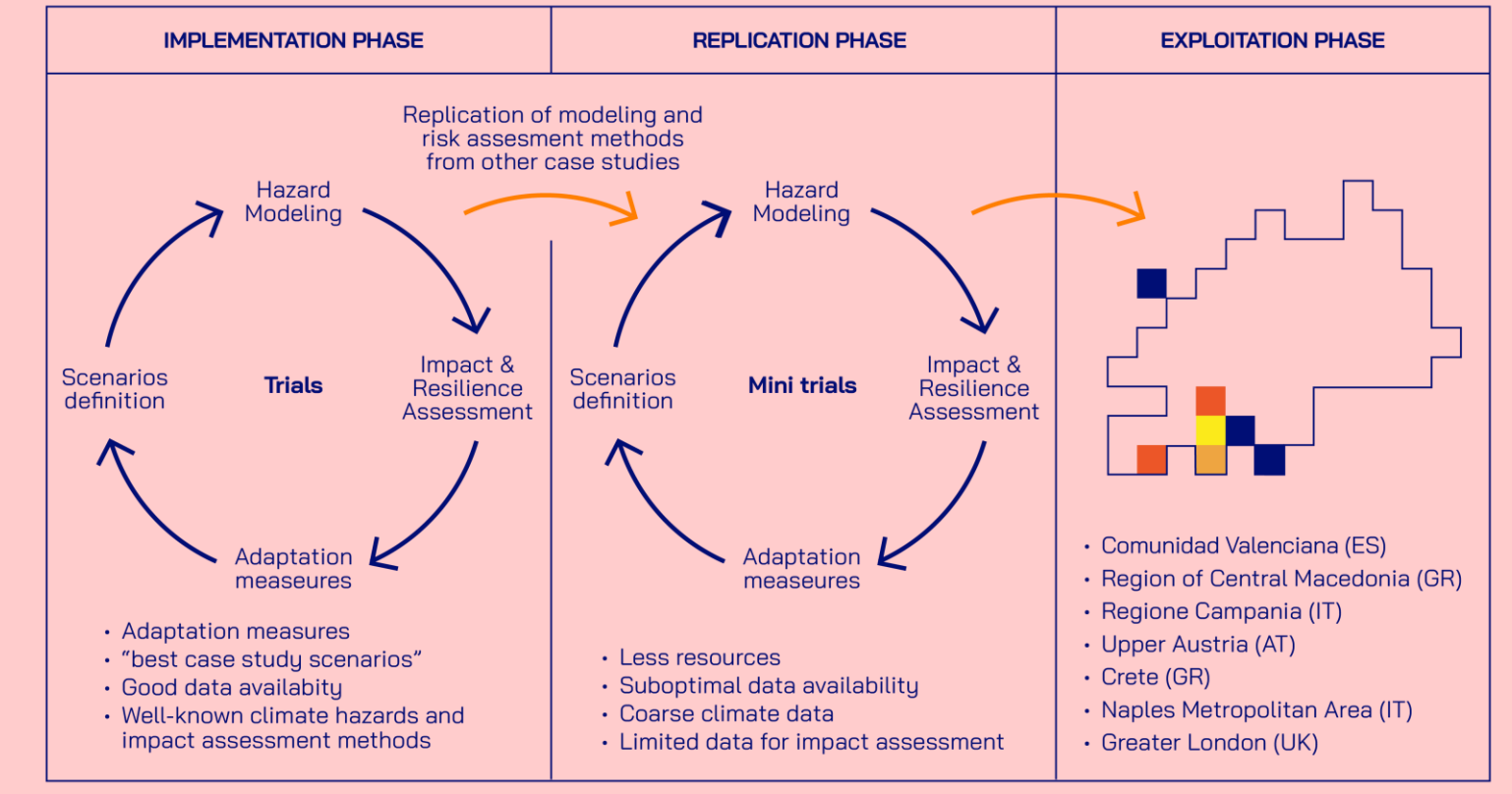
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National Center For Scientific Research "Demokritos"

WHERE

	BARCELONA METROPOLITAN AREA		SOUTH AEGEAN REGION		SALZBURG REGION	
	Trial	Mini trial	Trial	Mini trial	Trial	Mini trial
Hazards	Floods, Storm surges, Heat waves, Forest fires, Droughts, Storm winds	Heat waves, Forest fires, Droughts, Storm winds	Heat waves, Forest fires, Droughts, Storm winds	Floods, Storm surges, Heat waves, Forest fires, Droughts, Storm winds	Floods, Storm surges, Heat waves, Forest fires, Droughts, Storm winds	Heat waves, Forest fires, Droughts, Storm winds
Assets/services	Tourism, Properties, Natural areas, Transport, Water assets, Electricity assets, Waste assets	Tourism, Properties, Natural areas, Transport, Water assets, Electricity assets, Waste assets	Tourism, Properties, Natural areas, Transport, Water assets, Electricity assets, Waste assets	Tourism, Properties, Natural areas, Transport, Water assets, Electricity assets, Waste assets	Tourism, Properties, Natural areas, Transport, Water assets, Electricity assets, Waste assets	Tourism, Properties, Natural areas, Transport, Water assets, Electricity assets, Waste assets
Tangible impacts	Flood Damage, Water demand / supply, Energy demand / supply, Compound hazards, Cascading effects on assets	Flood Damage, Water demand / supply, Energy demand / supply, Compound hazards, Cascading effects on assets	Flood Damage, Water demand / supply, Energy demand / supply, Compound hazards, Cascading effects on assets	Flood Damage, Water demand / supply, Energy demand / supply, Compound hazards, Cascading effects on assets	Flood Damage, Water demand / supply, Energy demand / supply, Compound hazards, Cascading effects on assets	Flood Damage, Water demand / supply, Energy demand / supply, Compound hazards, Cascading effects on assets

HOW



KEY OUTCOMES

- Technological results:**
- Climate Multi-Hazard modeling tools
 - Holistic climate resilience assessment tool
 - Portfolio of adaptation solutions
 - Decision Support System for adaptation to extreme and compound events with cost-effective measures.
- Scientific results:**
- Project framework for climate multi-hazard holistic assessment at a regional level
 - Regional climate projections in long term considering the local socio-economic dimension
 - Methods for mending the data gaps and uncertainty analysis for the risk and impact models
 - Climate-related multi-risk tangible impact assessment method
 - Multi-risk and resilience assessment for the 3 case studies
 - Replication, sustainability and explorations of ICARIA results.

CURRENT SCENARIO	BUSINESS AS USUAL (BAU)	ADAPTATION SCENARIOS (MANY)
Data: Climate, Asset, Vulnerability functions Multi-hazard modelling Assessment: Risk, Resilience Results: Expected annual damage (EAD), Risk maps, Resilience metrics	Data Multi-hazard modelling: Climate modeling for long term projections Assessment Results	Data Multi-hazard modelling: Climate modeling for long term projections, Portfolio of adaptation solutions Assessment Results
Scenario comparison	Results: Costs-benefit analysis (CBA), High Risk reduction (%), Resilience increase, Best scenario	Users: Decision makers, Asset and service managers, Other stakeholders

More info:
www.icaria-project.eu