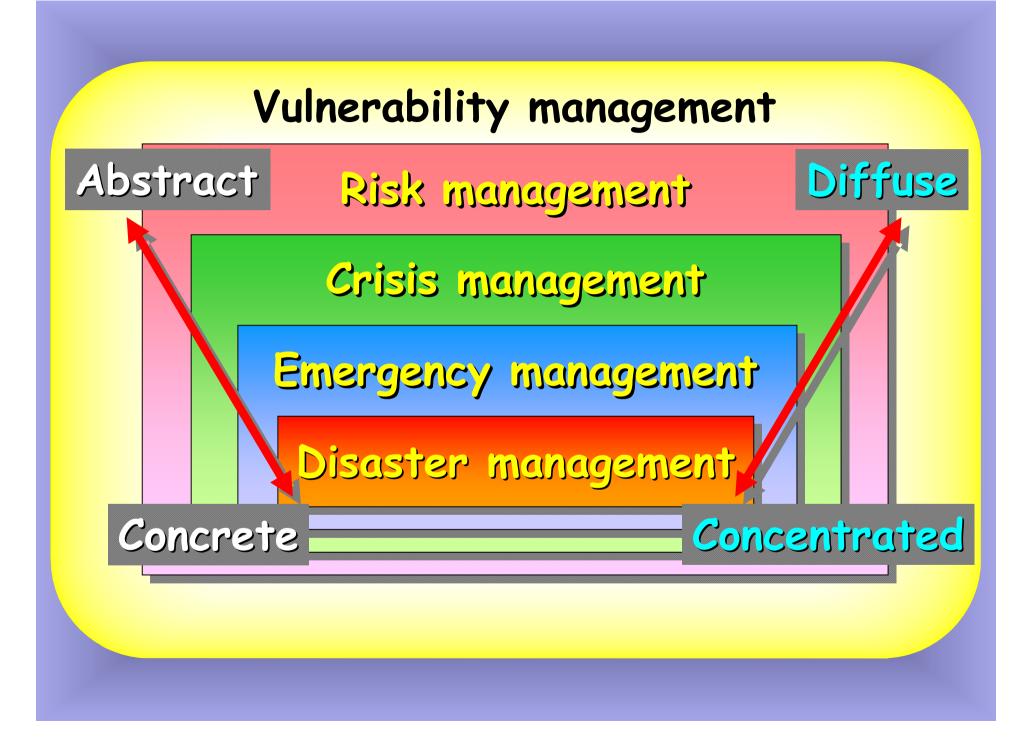
The Social and Economic Dimensions of Vulnerability



Prof. David Alexander CESPRO - University of Florence







The main Projects:



- ARMONIA: Applied Multi-Risk Mapping of Natural Hazards for Risk Assessment
- CAPHAZ-NET: Social Capacity Building for Natural Hazards
- CONHAZ: Costs of Natural Hazards
- ENSURE: Enhancing Resilience of Communities and Territories Facing Natural and Na-Tech Hazards



Cap<mark>Haz</mark>-Net

Social Capacity Building for Natural Hazards Toward More Resilient Societies

- MOVE: Methods for the Improvement of Vulnerability Assessment in Europe
- SCENARIO: Support on Common European Strategy for Sustainable Natural and Induced Technological Hazards Mitigation.



Social and economic studies of vulnerability

Filling the gaps in basic knowledge: There is a huge lack of knowledge of social & economic vulnerability in Europe: projects address this and redress the balance with respect to studies from other continents.

Social and economic studies of vulnerability

Understanding the complexity of Europe: The collaborative perspectives inherent in FP7 projects have thrown light on geographical and cultural diversities and shown how they affect vulnerability to hazards and M climate change.





Social and economic studies of vulnerability

Awareness raising is fundamental: projects are not only creating and providing knowledge, they are also studying the process of knowledge utilisation to ensure that it is efficient and effective. Projects are building bridges: they are dealing with multiple risks, interdisciplinary consequences, and dynamic and complex vulnerabilities.

Social and economic studies of vulnerability





Projects are building bridges: they are connecting researchers with other constituencies: policy-makers, planners, technical experts, academics, and communities of citizens.

Social and economic studies of vulnerability







Prevention is paramount: projects on vulnerability are also studying resilience

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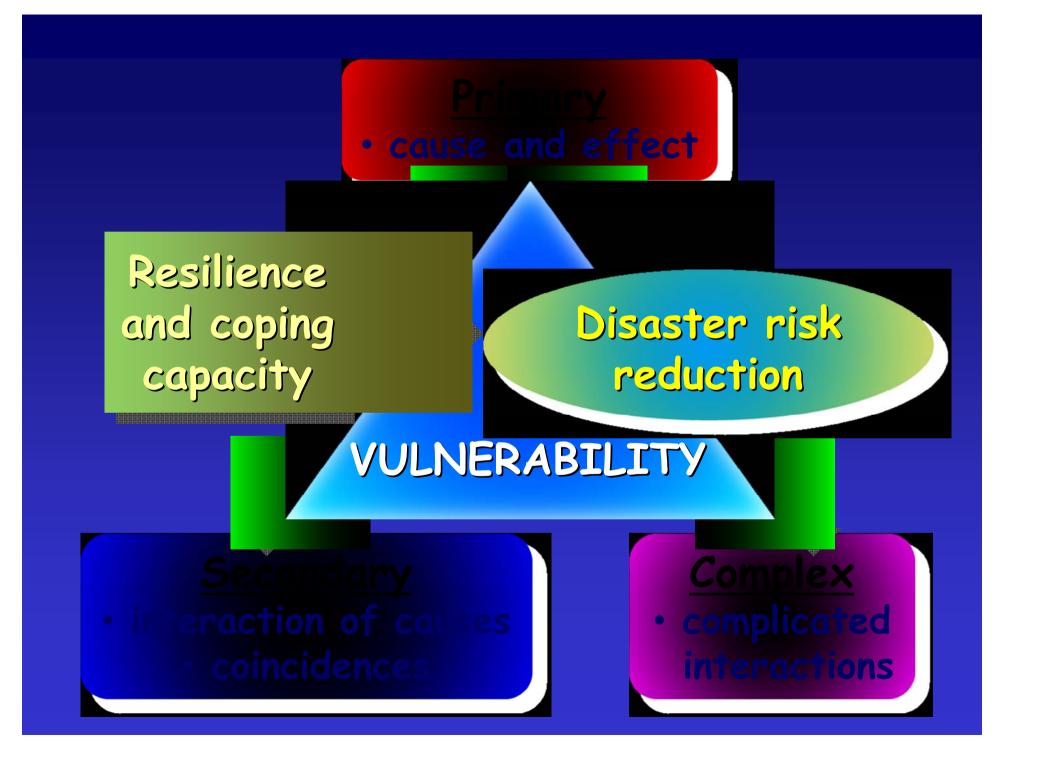
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Social and economic studies of vulnerability

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London, United Kingdom Case Heat waves Drought **Studies**

> **North-western Portugal** Forest fires **Coastal erosion** Mass movements

> > **Barcelona**, Spain Earthquakes Floods

Cologne/Bonn, Germany Floods Temperature shocks

South Tyrol

Heat waves Floods

Landslides

Avalanches

Italy

Martine allerken all

Salzach River, Austria Floods and flash floods Alpine hazards Hazards related to permafrost degradation (Province of Bolzano)

> Prato, Pistoia, Florence, San Sepolcro, Italy Earthquakes Hydrogeological hazards Floods Landslides

Issues to be tackled in future projects:

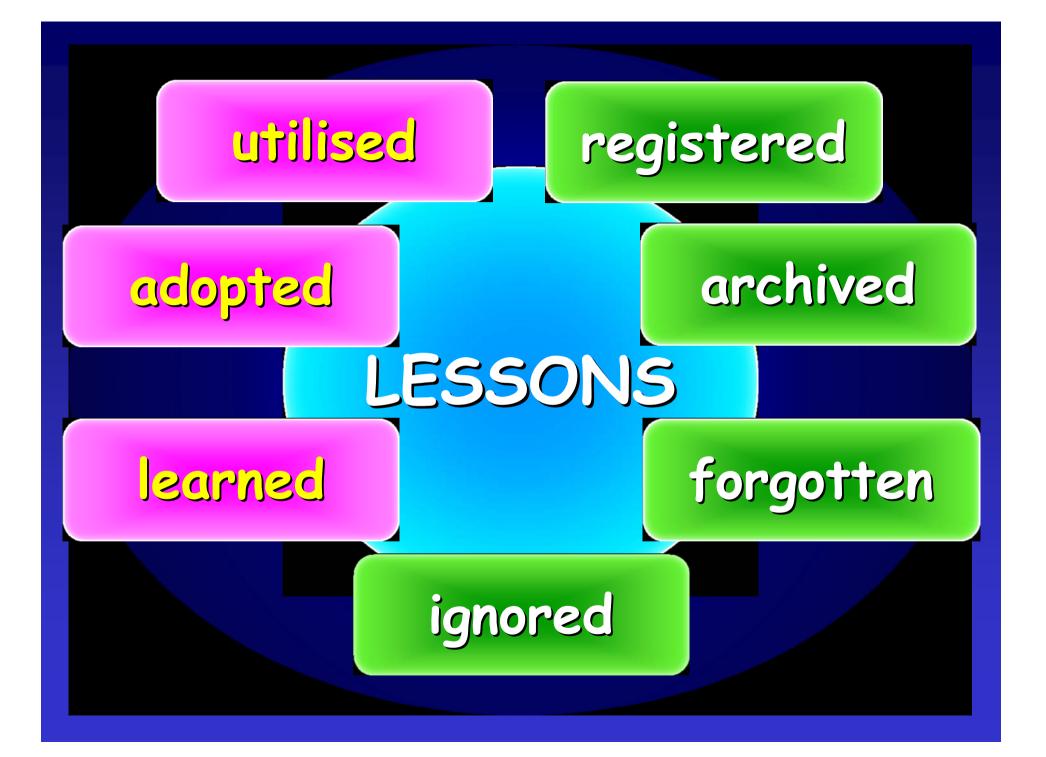
- deliverables should be made available in different European languages
- European climate change policy is beginning to favour adaptation: vulnerability studies must reflect this
- global change is causing fast evolution of people's exposure to hazards, with many demographic, social and infrastructural changes.



These projects represent a concerted effort to understand, research and diffuse useful information on European vulnerability to natural hazards and climate change.

Only by understanding the causes of disaster in terms of patterns and webs of vulnerability can we make the vital shift from reaction to prevention.







The gap is being bridged between physical and social sciences and between researchers and stakeholders

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Thank you for your attention!





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