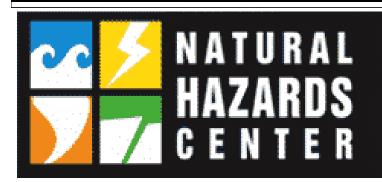
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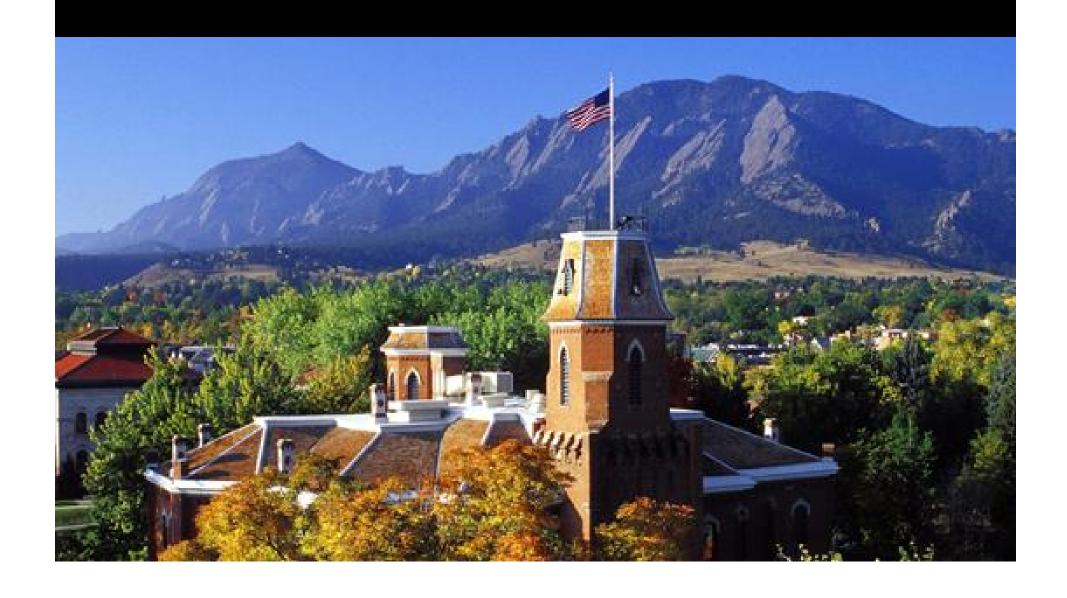
Considering Community Capitals in Disaster Resilience and Recovery

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Who We Are and What We Do...





Center Mission and Structure

Center Mission:

Since 1976, the mission of the Natural Hazards Center has been to serve as a national and international clearinghouse of knowledge concerning the social science and policy aspects of disasters. Additionally, the Center aims to strengthen the communication of that knowledge among researchers, practitioners, and policy makers concerned with reducing damages caused by disasters. Using an all-hazards and interdisciplinary framework, the Center fosters information sharing and the integration of activities; supports and conducts research; and provides educational opportunities for the next generation of hazards scholars and professionals.



Priority Areas

- Clearinghouse, KnowledgeTransfer, and Training Activities
- In-House Research Program

Support

- Funded through a consortium of federal agencies and other organizations
- ➤ Guided by National Advisory Committee of federal agencies and other stakeholders



The Natural Hazards Center Library





Web Resources

Conferences

Quick Response Grants



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Natural Hazards Review

Forum

Facets and Scope of Large-Scale Disasters Mohamed Gad-el-Hak

Technical Papers

- 7 Field Damage Survey of New Orleans Homes in the Aftermath of Hurricane Kotrina Guillerma Franco, Rebekah Green, Bijan Khazai, Andrew Smyth, and Georae Deodatis
- 19 Flood Modeling in the Coastal Plains and Mountains: Analysis of Terrain Resolution Jeffrey D. Colby and James G. Dobson
- 29 Gender and Age Factors in Tsunami Casualties
- Harry Yeh
- 35 Land Subsidence Disaster Survey and Its Economic Loss Assessment in Tianjin China Yi Lixin, Wang Jie, Shoo Chuanqing, Jia-Wei Guo, Jiang Yanxiang, and Ro Liu

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For more info, go to: http://www.colorado.edu/hazards/



A More Inclusive Approach



"Perhaps the most important initiative we must undertake, regardless of the budget environment, is to recognize our efforts are part of an interconnected plan of action. This 'Whole Community' approach to emergency management provides the appropriate framework for leveraging the expertise and resources of our stakeholders at all levels, both governmental and non-governmental."



-Testimony of Craig Fugate, Administrator of FEMA before the House Committee on Homeland Security Subcommittee on Emergency Preparedness March, 2011



Stage Models of Disaster

Preparedness, Response, Recovery, and Mitigation

- Historically, in the United States, processes during different disaster phases have tended to exacerbate differences and ignore pre-existing vulnerabilities among affected populations
- One way to ameliorate these concerns is to focus on inclusive approaches to preparedness, response, recovery, and mitigation that foster more equitable forms of participation among stakeholders



Resilience

What is it?

"Community resilience is a process linking a network of adaptive capacities (resources with dynamic attributes) to adaptation after a disturbance or adversity." ~Norris et al. (2008)

This model considers four primary sets of "networked adaptive capacities"—economic development, social capital, information and communication, and community competence.

The Community Capitals Framework











The Community Capitals Framework

The community capitals framework...

- Is a practical framework for researchers, practitioners, and local stakeholders
- Addresses a critical need to further engage in dialogue about how to effectively build community resilience
- Is adapted from Flora and Flora's (1993) concept of resource mobilization
- Concentrates on how to most effectively mobilize resources, such as money, expertise, and time, at the community level before, during, and after disasters



The Seven Types of Community Capitals

"Involves framing community capacity in terms of seven types of capitals..."

- Natural—resources (air, land, water, minerals, oil) and the overall stability of ecosystems
- Built/Physical—physical infrastructure, community lifelines, critical facilities and services
- Financial/Economic—financial savings, income, investments, and available credit
- Human—knowledge, skills, education, health, and physical abilities



The Seven Types of Community Capitals

"Involves framing community capacity in terms of seven types of capitals..."

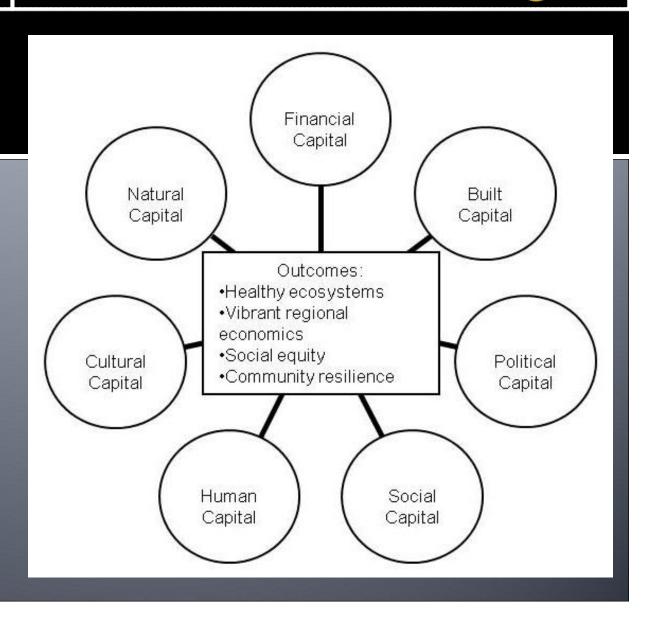
- Social—social networks, associations, and reciprocity and trust generated by groups
- Political—access to resources, power to influence resource distribution, ability to engage in external activities and to achieve internal goals
- Cultural—language, symbols, mannerisms, competencies, preferences, attitudes, and orientations



The Community Capitals Framework Figure

Community capitals are...

- Related and interactive
- Collectively available within given communities
- Assets that may be wisely invested, spent, and misspent
- Used to advance community growth, sustainable development, and resilience
- Exercised to enhance overall quality of life





Natural Capital

- Vital to human survival and fundamental to society
- Represents basic necessities that support human life
- A community's relationship with its natural environment also influences ways in which it responds to disaster-related environmental contamination



Built (Physical) Capital

- In the event of a disaster, built capital may be rendered inaccessible or it may be damaged or destroyed
- Disruption of critical services (e.g., medical, public safety and protection) is also likely
- Resumption of these is vital to recovery; how this is accomplished influences the extent to which recovery will increase resilience



Financial (Economic) Capital

- Significant implications for post-disaster recovery and resilience
- The most easily converted to other forms of capital
 - Reconstruction of physical capital
 - Enhancement of human capital
 - Provides a basis for political capital



Human Capital

- Central to advancing recovery efforts
- Fundamental to resiliency, which requires a skilled, trained workforce
- Enables individuals and communities to address physiological, safety, belonging, esteem, and self-actualization needs



Social Capital

- Enhances a community's ability to work toward collective goals
 necessary for disaster recovery
- Enhances a sense of belonging; strengthens bonds between individuals and groups
- Bridging social capital affords connections needed to solicit and leverage external support
- Facilitates access to other forms of capital essential to recovery



Political Capital

- Power, authority, and connections are essential to recovery efforts
- Tends to be more formal than social capital, although it exists informally
- Effective and responsible use of political capital
 - Actively involving vulnerable populations
 - Ensuring that traditionally underrepresented groups have a voice



Cultural Capital

- Influences a community's capacity to draw on its collective experiences and shared values
- Helps to cultivate other forms of capital
- Reflects values associated with natural and built capital

How can the Community Capitals Framework benefit the Netherlands?





The Community Capitals Framework

Advantages

- Not just saying the message "louder" —but differently
- Concepts transfer to different contexts
- Highlight the importance of local knowledge and experience
- Strengthening/increasing community capitals is generally beneficial to the overall wellbeing of a community
- Emphasize the value-added aspects of nurturing social capital



Community Capitals and Disasters

"Understanding the extent to which various forms of capital exist in a community is central to emergency management and can help to inform and increase resilience."

Factors to keep in mind regarding community capitals with respect to disasters:

- Variable effects
- Emergence
- Interdependent and interrelated aspects
- Issues of measurement
- Stakeholder interests
- Community valuation
- Stakeholder access
- Community access, understanding, and use





Putting Knowledge into Context

Some relevant questions:

- What potential damages (to particular forms of capital), as a result of disaster, are most difficult to ascertain or assess for the Netherlands?
- How can formal evaluations involving local stakeholders further inform these challenges?
- What forms of capital will be necessary to restore and reconstruct in the short term? The long term?
- Do certain forms of community capital rely on others before they can be restored? In others words, which forms must be spent or invested in order to restore others?



Putting Knowledge into Context

Relevant questions (continued)

- How can researchers work with practitioners in the Netherlands to develop and employ accurate methods to capture aspects of cultural, social, and political capital?
- How can we increase the vested interest of potentially affected populations before disaster strikes?
- How can crisis managers and others use community-specific knowledge to drive preparedness, response, and recovery efforts?

Questions?

