Social Resilience: Utility and Measurement

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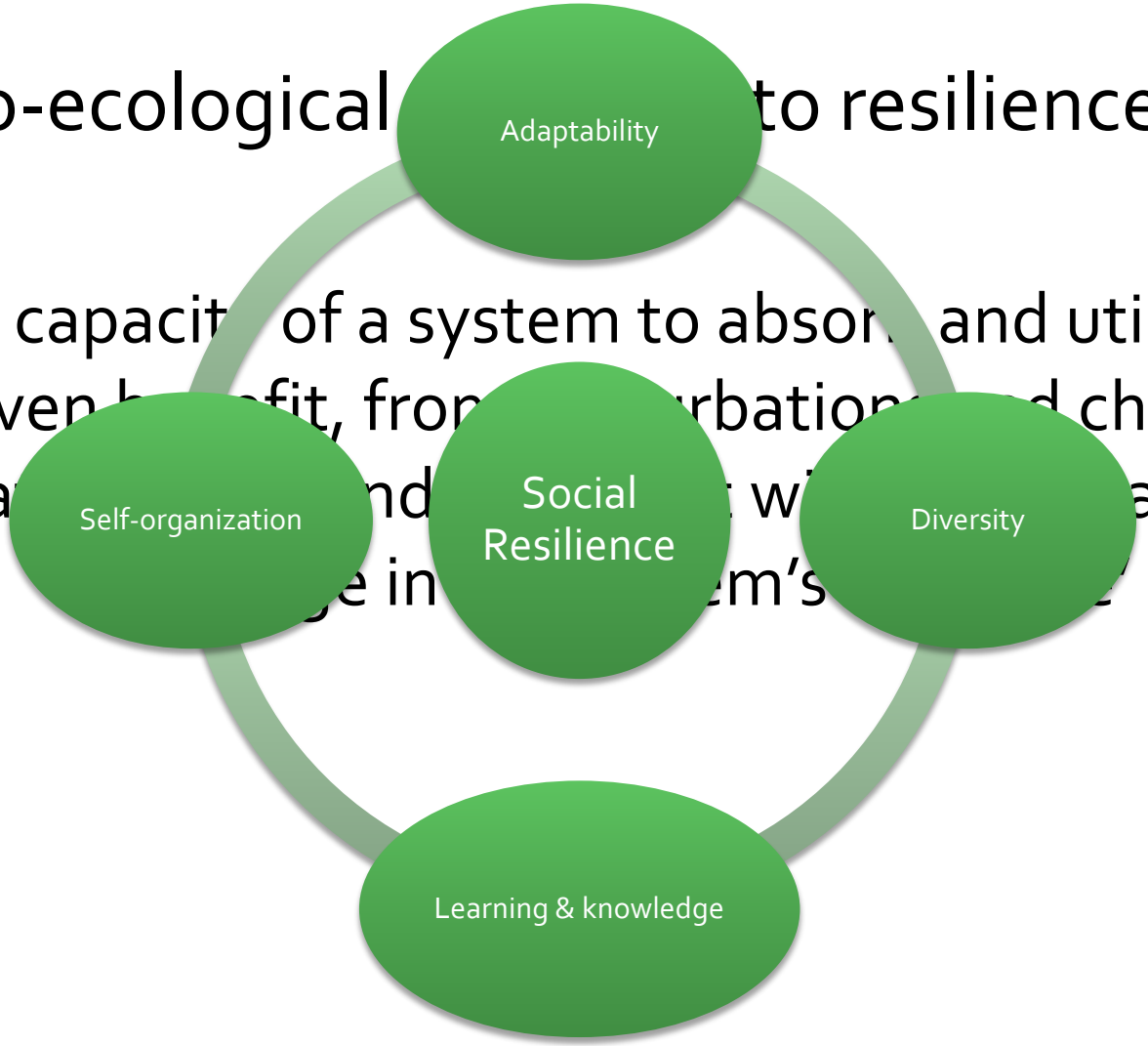
Conceptual framing

- Socio-ecological [illegible] to resilience

'the capacit[illegible] of a system to absor[illegible] and utilize, or
even b[illegible]fit, fro[illegible]rbatio[illegible]d changes
tha[illegible]nd[illegible] wi[illegible]alitative
[illegible]e in [illegible]em's



Expanded definition

- People cope differently in the face of changing environments
- A particular change may have vastly different consequences in different communities and with different people
- Ability to respond rather than return to pre-existing state
- A process; an ability to cope with change

Resilience as transformation

- Characteristics that enable development and innovation in response to a change
- The capacity of people to learn from their experiences
- Consciously incorporate learning into interactions with the social and physical environment
  - Move beyond "how do we cope" to adaptive capacity

A Continuum

- Abilities and expression varies along vertical and within horizontal space
  - How people and organisations foster, engage in, and sustain, social relationships to endure and recover from the stress of changes
- Sub-grouping to examine differences across potential indicators

Measurement

- Continuum development based on the three themes
  - Three main social constructs
    - *Ability to work with others (collaboration)*
    - *Inclination to plan for the future*
    - *Closeness of relationships within social network*
- Used to investigate social institutions

Ecosystem Services

- The outcomes of ecosystem functions that yield value to people; the things people care about
  - Particular sets of ecological characteristics provide particular sets of ecosystem services
- We manage towards desired ecosystem services
- What ecosystem services does society want, with what trade-offs, and at what costs? No preordained ecosystem exists

Linking Resilience to Ecosystem Services

- Decision trade-offs
  - What ecosystem/services do you want?
  - What will it cost, and who will pay?
  - What are you capable of re: resilience?
  - How resilient are you?
- Management through a combination of existing legislation, social values, and economic drivers (and democracy)
  - Opportunities to enhance social resilience

Utility – Why do this?

- Systematically score individuals, communities, and regions on a common metric
  - Creates the option for managers to focus scarce resources and financial assistance
  - Provides understanding as to what changes in ecosystem service benefits will affect people
  - Potentially inform social tipping points?

Barriers

- Factors that undermine the system's ability to cope and be resilient
  - Social conflict
  - Perceived or real lack of justice
  - Power inequality
  - Major disruption and alternation to cultural and traditional lifestyles, values and belief systems
- Can be overcome with effort

Dual approach

CAPABILITIES

- Solution-oriented opportunities to cope with change
- Empowerment of people to realise tangible benefits
- Comparison points to allow trade-off analysis

BARRIERS

- Identification of action areas
- Galvanisation of effort around areas of high impact potential - even if challenging
- Increased management effectiveness

Conclusions

- Changes to ecosystem services may affect livelihoods, identities, cultures, and social networks
  - Need to assess both capabilities of coping *and* barriers to resilience
  - Combining resilience and ecosystem service science offers a more holistic approach to resource management

Questions?

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