Building Community Resilience: Practical Options for Agencies and Communities

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Overview

• Interest in resilience in several fields
  – Psychology-mental health, social-ecological systems, and disaster management
• Studies to understand social resilience
• Managing for community resilience
  – Options for a regional environmental manager
  – Options for a community worker or agency
Resilience from a social-ecological systems perspective (regions)

- Comes from ecology, recognises people
- About the ‘coupled’ relationship between people and environment (at nested levels)
- Based in complexity theory (complex adaptive systems)
- Key ideas
  - Generalised and specified resilience
  - Adaptive cycle (non-linear system behaviour with shocks and surprises)
  - Critical thresholds and tipping points

Adaptive cycles and nested levels (theory)

Idea that systems go through these cycles
e.g. Nested social-ecological systems
Barron River catchment, Far North Queensland

- Resilience definition: the ability of a system to absorb disturbances, be changed and then re-organise while retaining its same basic essential structure and function. (Resilience Alliance)
  (alternative – transformation into a different system)

- Typical aims: to keep the system capable of withstanding shocks
  - Systems losing resilience suffer from smaller and smaller shocks
- To identify strategies for making our landscapes more resilient (e.g. connectivity – wildlife corridors)
Strengths and limitations

• Important contribution of complex adaptive systems way of thinking
• Most work has been on regions, not smaller scales
• Ecological focus, many social and economic gaps, ignores built environments

Social science perspectives
(psychology, mental health)

• Derives from child development
• Focus on individual people’s strengths, personal and community processes of becoming resilient (overcoming adversities)

A definition: “the processes of, capacity for, or outcome of, successful adaptation despite challenging or threatening circumstances” (Masten et al. 1990)

Aim: to understand these strengths and resilience-forming processes, so as to build them
Strengths and limitations

• Positive approach, focus on strengths
  – Rather than weaknesses or vulnerabilities
• Most work has been on individuals, and recently communities (not larger scales)
• Very person-focused
  – Talks about the influence of ‘the environment’, but tends to mean social environment rather than physical (e.g. a poor neighbourhood)
  – Neglects other social dimensions e.g. power, culture, social dynamics

The disaster management literature

• A specific application of the psychology literature
  – But some authors now recognising the social-ecological
• Most uses ‘resilience’ rather vaguely, not analytical, confounded with shifting management responsibilities

Photo: Helen Ross
Brisbane floods Jan 2011
Cont.

- Tends to consider ‘the community’ as many individuals (the public), not a socially-bonded set of people.
  - Typical emphasis – how to inform them, encourage their preparation
- Focuses on disaster management planning, especially infrastructure, not much on the community or how it perceives, organises and recovers

Towards integration and management

1. Great Barrier Reef and Wet Tropics region
2. Stanthorpe, Queensland
Far North Queensland Resilience challenges

- Reef water quality
- Climate change imperative
- Rapid regional change
- Cyclones and other risks

Research to understand social resilience and inform management

Participatory research with regional organisations:

- World Heritage Area Managers (Reef, Rainforest)
- Aboriginal organisations
- Regional collaboration for natural resource management
- Department of Communities (planners)

Six case studies of overcoming adversity:
Crown of Thorns, Declaration of Wet Tropics, Water allocation planning, Dairy deregulation, Growth of Cairns, Girringun Aboriginal Corporation
Key strengths identified

- People-place connections
- Knowledge, skills and learning
- Community networks
- Engaged governance
- A diverse and innovative economy
- Community infrastructure

Includes some processes
- collaborating, connecting

Ross et al. (2010)

Stanthorpe community, SE Queensland

Participatory action research (3 cycles) with community and key partners

- Scoping discussions and interviews
- 75 interviews
- Production of toolkit

Photos: Google images
Resilience concepts found

1. Social Networks and Support
2. Positive Outlook
3. Learning
4. Early Experience
5. Environment and Lifestyle
6. Infrastructure and Support Services
7. Sense of Purpose
8. Diverse and Innovative Economy
9. Embracing Differences
10. Beliefs
11. Leadership

Resilience as a process
(Berkes and Ross, Society and Natural Resources, 2013)
Managing for resilience

Manage in terms of ‘social-ecological system’
(multi-level, complex and adaptive)
- Identify key landscape strengths, processes and vulnerabilities
- Identify people-environment connecting processes (mutual influences)
- See how building social strengths (or landscape interventions) can assist society and environment
- Foster agency and self-organising capabilities

Photos: Hinchinbrook passage Far North Queensland, and Girringun Board meeting. Arturo Izurieta-o

e.g. strengthening social networks, improving environment
- Identify social networks, and place attachment
- Engage community groups in mutually relevant landscape endeavours
- Grow them – e.g. seed and support new groups where networks needed

Photos: Helen Ross, Ian Beitz
Strengthening people-place connections

- Activities and dissemination of information that build a stronger sense of and pride in place, make people feel part of their area and treasure the natural resources there

  ![Cassowary crossing on Barron R. (CMA)](image1)

  e.g. the Cassowary coast

Management options for community resilience

(Ross et al. 2010)

1. **Know (acknowledge) resilience**
   
   Pursue existing organisational mandates in consciousness of social characteristics, without trying to intervene

2. **Use it**

   Take advantage of resilience characteristics in management strategies (e.g. get the landcare group involved)

3. **Grow it**

   Pursue organisational mandates in a new way that enhances social resilience (e.g. facilitate landcare group formation and building of social capital where the species need help)
Management options in communities

Use existing groups – build from what you already do

Options for building resilience in community, groups, individuals – influence each other

Build generalised resilience – will help specified resilience


Conclusions (and challenges)

• Resilience places sustainability thinking in a complex adaptive systems context

• An integrated view of community resilience would
  – Identify and build on system strengths
  – Understand the couplings of ecological and social dynamics
  – Bring in un-recognised factors (e.g. power, economics, mental models)
  – Recognise and work with relationships with other levels
  – prepare for disasters but also prepare for all eventualities (specified and generalised resilience)

• We need to understand more about self-organising, social networks, power, collaboration, social learning...at multiple levels
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References

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Far North Queensland study


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Other references

Others


Thank you

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