

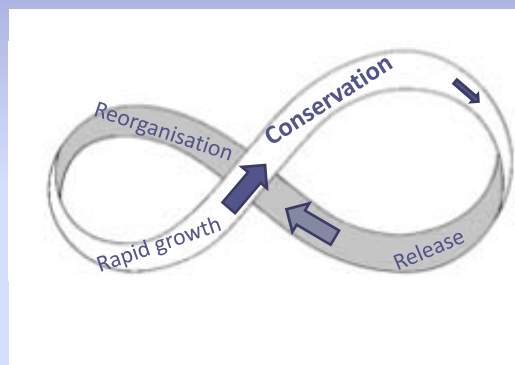
Overview

- 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

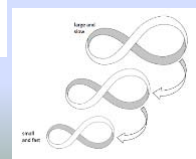
Resilience from a social-ecological systems perspective (regions)

- 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

Addressing salinity?
Western Australia

- 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)



Photo: Stanthorpe high school students

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

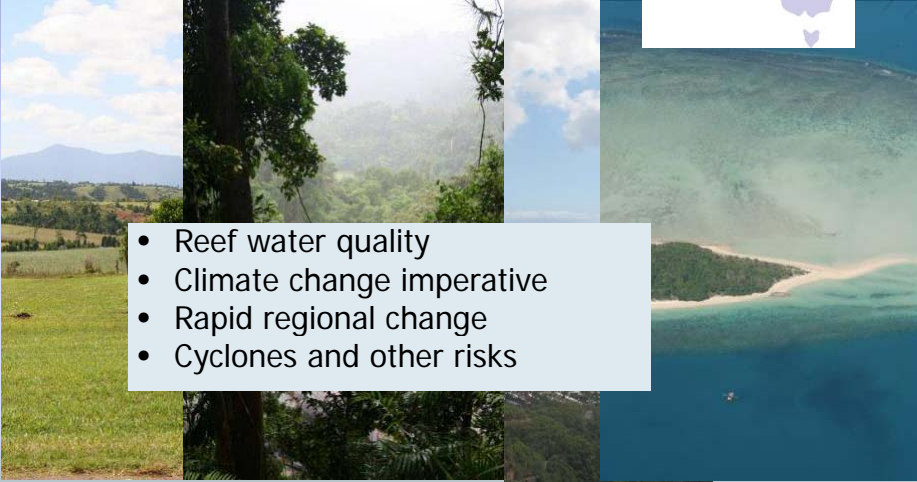



Conference run by Giringun Aboriginal Corporation, Cardwell, October 2007
(Photo Kirsten Maclean)



Opera in the vineyards,
Stanthorpe (photo Helen Ross)

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



Stanthorpe



Photos: Google images

A Stanthorpe Community Perspective

Without exception, the presence of social networks and social support was seen as a critical resilience factor across all six interview groups. The majority of people interviewed believed that the support provided by family and friends, or networks based upon shared cultural, economic or recreational interests, formed the foundation of both community and individual resilience. A supportive social network helped an individual to cope during hard times, and positive and caring individuals strengthened the network. Extended family networks—many of them of multicultural and farming origins—were particularly important, with the links resulting from intermarriage or shared interests such as a faith or profession also of significant value. Groups enabled individuals to bounce back and individuals contributed to the group's resilience and ability to offer further support. Overall, the presence of social networks and social support was the most frequently nominated element of both community resilience and an ideal resilient community.

"There's quite consistent and strong family networks and you can see people drawing a great deal of strength from that... . Families are tough they turn to their parents or they have a strong support network for family, for kids, that allow them to go on and do other—you know broaden their horizons."

"And I have a good husband and most of the time, good children. Been very supportive, so I have that help... . I have a wonderful mother... and brother."

"Living in a small town like Stanthorpe most of the youth don't realise how many social networks are out there, and because of that you will find a high percentage of teens stick to their family and friends as their social networks."

Perspectives from Stanthorpe High School Students
"Networks range from family to friends and even further—and each network is just as important as the next."
"We all are able to find our own sense of belonging with our family, our friends... our environment... but we are more keen to find our sense of belonging in a place that has great significance to us..."



"... our school friends are a big part of our life... being such a multicultural, welcoming community we have friends from everywhere..."




1. Social Networks and Support - Brief Literature Review

At the individual level, there is voluminous literature examining the role of social networks and support in physical and mental health. Within psychology and sociology, social support is characterised as a multidimensional construct which is differentially associated with many other aspects of intra and interpersonal functioning such as age and developmental stage, gender, personality, health status, ethnicity, and cultural norms (Helgeson & Cohen, 1999; Okun & Lockwood, 2003; Pearlin, 1985; Kaczmarski et al., 2006; Thoits, 1986). Despite these complexities, numerous reviews have concluded that overall, social support is an important protective factor which buffers stress and enhances resilience (Helgeson & Cohen, 1999; Luthar, 2006; Okun & Lockwood, 2003). For example, elderly people with strong social connections have been shown to have better self-rated health and less functional impairment (Holtzman, Morrow-Howell, & Kucsko, 2007). A study of urban Australian women found that those with more social contact report greater mental health than those who are socially isolated (Gurtman et al., 2007). Physiologically, social support has been found to have beneficial effects on the cardiovascular, endocrine, and immune systems (Jurkiewicz, Ciccioppo, & Kiecolt-Glaser, 1998).

Developing a sense of belonging is an important aspect of social networks and the support they provide, both at the individual and community level. A sense of belonging can encompass a psychological attachment to objects of significance, a place, or even the history of an area, as well as to people or a group of people within a community (Hill, 2006). There is evidence to suggest that a sense of belonging may have beneficial effects for the wider community as well as an individual. Participating in a community through voluntary work cultivates or maintains a sense of belonging which in turn links individuals to their community and benefits the community members assisted by the volunteers, as well as improving the health and longevity of the volunteers (Pattis & Thoresen, 2005).

At the community and group level, social networks have been demonstrated to have an influential role in many aspects of functioning, including information seeking (Choi, Foa, & Fang, 2006), group performance (Shah, Orlitzky, & Cheryan, 2006), and health behaviours and the seeking of medical treatment (Shaw et al., 2005). Some theorists view social networks as a defining aspect of communities (Pfeffer, 2007). According to Helli (2007), a community is "not a place" but a network of meaningful social relations with friends, neighbours, relatives, and work colleagues who do not necessarily belong to the same residential unit (p. 867).

Further, theorists often conceptualise social networks as part of the wider construct of social capital. The subject of strong research interest and debate in recent years, social capital has been defined by Putnam (1993) as the "features of social organisation, such as networks, norms and trust that facilitate action and cooperation for mutual benefit" (p. 35, cited in Holand, Renwick, & Weier, 2009). While many social capital theorists stress the positive effects of high levels of interpersonal trust and social networks on a community (Caison & Denis-Guzon, 2007), it has been acknowledged that closely knit communities may not always produce uniformly beneficial outcomes. The recognition of negative aspects of close social networks, for example, the denial of benefits for newcomers or subgroups within a community, has led to the distinction made between bonding and bridging social capital (Reisner, 2007; Patton, 2002). Bonding social capital may be associated with closed social networks whilst bridging networks are cross-cultural and generate more positive outcomes and inclusive benefits across communities (Corti & Gede, 2007).

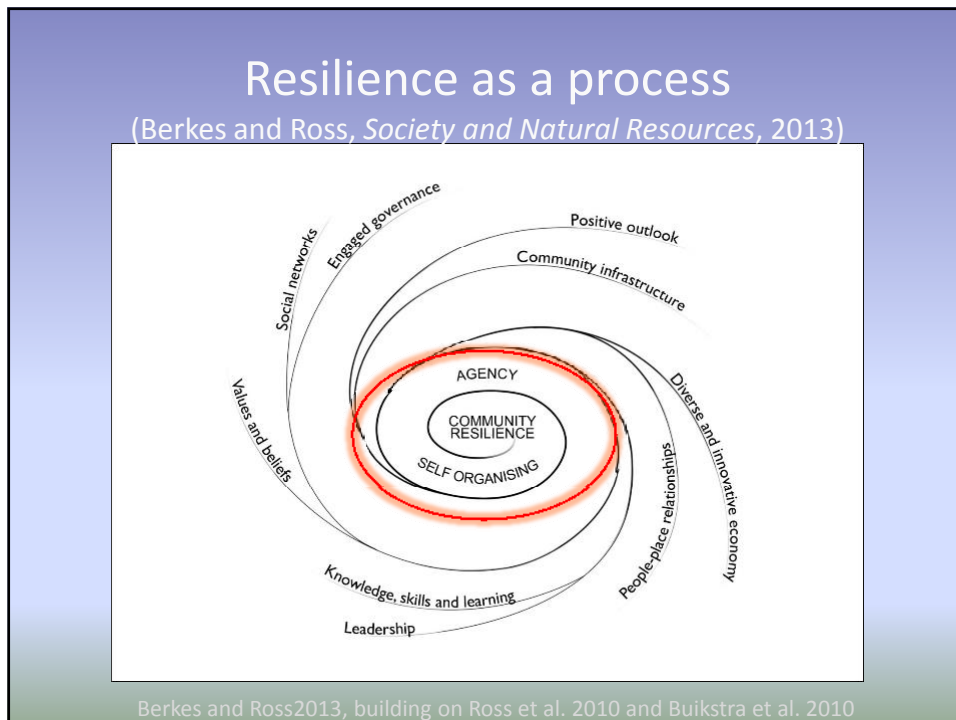


Building Resilience in Rural Communities

Social Networks and Support 7

8 Social Networks and Support

Building Resilience in Rural Communities



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)

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

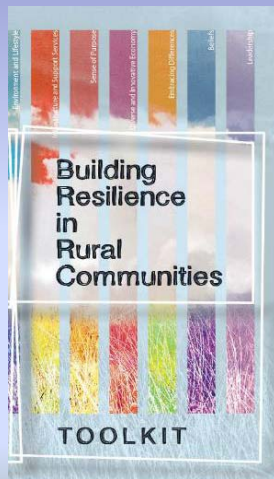
2. Use it

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

Hegney et al 2008, <http://learningforsustainability.net/>

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



Team and project acknowledgements

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Thank you

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