

Thriving or just surviving: social capital and resilience of long-term Landcare groups in Queensland

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Abstract. Drawing on academic work identifying criteria for assessing both community resilience and the social capital contributions of natural resource management groups, the fortunes and contributions of Landcare groups operating in Queensland for nearly thirty years are explored. Eighteen groups that were operating by early 1989 provided information through face-to-face or phone interviews. Symbiosis between the constructs of resilience and social capital was apparent in analysis, as was the impact of government funding policies on group resilience. Bonding capital was high, while bridging capital was moderate though with missed opportunities to improve the well-being of both groups and communities. Some groups were thriving but improvements in linkage capital, particularly the way regional natural resource management groups interact with Landcare groups are needed in order to bolster resilience of most of these groups and presumably many others in Queensland.

Keywords: bonding capital, bridging capital, linking capital, natural resource management, resilience and social capital

Introduction

The Victorian Landcare Initiative 1986, and the Federal National Landcare Program in 1989, led to unprecedented growth in community-based natural resource management. By 2006, there were some 5000 community groups engaged in improving the condition of land, water and vegetation under the banner of Landcare, predominantly in Victoria and New South Wales, with just over 300 in Queensland (Youl, Marriott & Nabben 2006). Campbell (1994) defined a community Landcare group as 'a group of people concerned about land degradation problems, who are interested in working together to do something positive for the long-term health of the land' (p. 31). Cramb (2004) expanded with 'Such groups identify problems at the local level and mobilise information, community effort, and finances to help improve the management of their soil, water, vegetation, and other natural resources' (p. 7).

While Queensland adopted Victoria's name 'Landcare' for informal (non-statutory) groups dealing with local land management issues before the Federal government's announcement of the National Landcare Program in July 1989, the structure of groups and their emphasis varied from the Victorian model. Early Queensland groups were larger, generally Shire-based with more diverse issues. This changed over time with smaller groups forming, the larger incorporated groups often acting as project fund managers for smaller non-incorporated groups. The initial focus on rural land management has now expanded to include native vegetation conservation, coastline and waterway health, and urban environmental issues.

As well as success in improving our natural resources, Landcare groups establish new levels of cooperation, trust, social capacity and cohesion: 'dynamic social relationships that fill gaps in the community beyond the agricultural and environmental domain' (GHD 2013). These social capital benefits of Landcare groups have been recognised for some time (Sobels, Curtis & Lockie 2001, Pretty 2003, Webb & Cary 2005). The need for balance between the forms of social capital (bonding, bridging and linking) was identified, and Compton and Beeton (2012) identified resistance to change in some strongly bonded groups.

The resilience of Landcare groups, ability to continue through potentially disabling challenges, is less assured. Even during the first two decades, at the height of enthusiasm, observers pointed out flaws that could bring groups to a halt. With a significant number of groups struggling, resilience is in question. Resilience and accumulation of social capital are critical for ongoing achievement of improved social-ecosystems.

This paper is about social capital and resilience of groups viewed through a study of the fortunes of 25 Landcare groups in Queensland – 24 recognised as meeting the requirements for Landcare Program support by the Queensland Department of Primary Industries (QDPI) in April 1989 (QDPI 1989) plus another that formed at the same time. The impetus to study social capital and resilience of these groups came partly from reading the Compton and Beeton (2012) study, which found that many Victorian groups, high in bonding capital, had stagnated into a condition of maintaining the status quo, and partly because of the author's 1980s work role in developing government support for these early Landcare groups. The intention was to explore the strength of the three forms of social capital and various attributes of resilience in these groups, draw inferences about how strengths or weaknesses in these attributes impact on their activity and

security, and recommend ways to move from mere survival to actively thriving. The longevity and similar periods of operation of these groups provide advantages for study of resilience.

This is a case study rather than a sample representative of the broad range of Landcare groups of today with various interests. They were rural producer groups and while some have broadened their charter, others have retained their agricultural focus. However, conclusions about how these groups might become better builders of social capital and what is needed for these groups to remain resilient will quite likely have wider application.

Origins of studied Landcare groups

'Jock Douglas and Cattlemen's Union started Landcare in Queensland' is a view expressed in some quarters. The Landcare proposal put by Cattlemen's Union President, Jock Douglas, to the Gympie Beef Liaison Group in February 1988 was certainly a huge game-changer, legitimising Landcare amongst Queensland's grazing communities. However, to appreciate how the early groups of this study formed, it is necessary to start further back.

Catchment planning on the Darling Downs required joint action by landholders to achieve run-off control. Early approaches in the 1950s usually involved preparing a plan then getting affected farmers together to agree to it. Key soil conservation operatives HS (Stan) Pink and MH (Max) Roberts, doubtlessly impressed by the work of Dr Joan Tully of The University of Queensland, changed the approach in the early 1960s. Following Tully's mantra that 'people's views are valid, they have to participate in any change and they are most likely to do so when their friends and neighbours are involved also' (Murray-Prior, Jennings & King 2006, p. 2), they established discussion groups that could raise their concerns and discuss options. This became input for preparing a plan that could be discussed with the group, making uptake much more likely (Pink & Roberts 1962).

The 1970s saw a dramatic change as slow uptake of soil conservation and consequent complaints by adopting landholders and Shire Councils led the QDPI to take a regulatory approach. In 1973, several shires on the Darling Downs and two in cane-growing areas in the Burnett Region were declared as Areas of Soil Erosion Hazard under the Soil Conservation Act. Sub-catchments were planned, opened for objections, then, when approved, subject to compulsory implementation, with a subsidy as sweetener (Carey 2007). Although six landholder advisory committees were set up to discuss priorities for treatment and issues arising, the participation attempted in the 60s had been ditched. But the regulatory scheme did not work – by the early 1980s ways to return responsibility and decision-making back to landholders were being sought. Advisory Committee members were seen as potential leaders of less formal groups to make decisions about action required and then seek the means to do it (with Departmental support).

At about this time, Lockyer farmer Fred From inspired the formation of the Lockyer Watershed Management Committee as a Bicentennial project. Formed in 1981, this was Queensland's first truly grassroots catchment cum Landcare group (without the name). The parent body fostered several smaller subgroups to allow more landholders to become closely identified with the problems and solutions. The group's work and efforts to get action going were supported by QDPI, notably by Max Roberts, who had brought his 1960s experience in facilitating informal groups from the Darling Downs to the Lockyer Valley. Preceding as it did the Victorian initiatives, it became a model for consideration of how informal groups might operate in Queensland as well as tackle administrative challenges such as incorporation (QDPI 1987).

Between 1983 and 1987, other grassroots groups emerged: the Bin Bian soil conservation group near Miles in 1983, which later expanded to become the Murilla Landcare Group; the Inglewood Shire Bicentennial Land Management Committee, formed in 1984 to develop land management guidelines for the shire, subsequently becoming the Inglewood and Texas Landcare Committee; the South West Rural Conservation Committee formed in 1987 at Charleville under the auspices of the Warrego Graziers Association; the Calliope Soil Conservation Association formed in 1987 in response to a QDPI pamphlet promoting the formation of informal groups along the lines of Victorian Landcare groups; and a group formed at Goondiwindi in 1987 and formalised in 1988 as the Waggamba Conservation Committee, supported by Queensland Parks and Wildlife.

By 1987, QDPI had an amended Soil Conservation Act (1986) that dispensed with the Areas of Soil Erosion Hazard and provided for Soil Conservation Committees. A staff seminar in April discussed how committees could best contribute to achieving soil conservation goals, potential roles for committees and training needed for staff to support the formation of committees (QDPI 1987). This groundwork, preceding the address by Jock Douglas in February 1988 to the Gympie Beef Liaison Group, had focussed on cropping lands. The Cattlemen's Union proposal for

Landcare was pivotal because of its call to grazing communities for Landcare action – communities perhaps unlikely to be motivated by soil conservation terminology. At least three groups formed in 1988 through the Cattlemen’s Union initiative – Gympie, Dalrymple and Maranoa Landcare groups - and perhaps others such as Arcadia, Taroom, Central Burnett and North Burnett, although independent initiatives or prompting by Departmental officers are likely alternatives. As well as these groups, the Cattlemen’s Union established Land Care sub committees in each district. This was an effective way to encourage land care in the grazing communities.

1988 also saw the six Soil Conservation Advisory Groups develop into ten Landcare committees (Allora, Cambooya, Chinchilla, Clifton, Dalby/Wambo, Glengallan, Pittsworth and Rosalie on the Downs and Isis and Kolan in the lower Burnett). A grain-grower based committee in the Dawson Callide catchment also formed an informal committee.

Thus the emergence and growth of Landcare in Queensland had several starting points and many ‘owners’. It had a strong ‘grassroots’ element but also government impetus in belief that this local interest should be fostered as a means of cultivating landholder ownership and responsibility. While government officers were actively encouraging groups to form, groups emerged in unexpected places, generated by local concern or industry impetus (Keith 2007, p. 52).

This is the background to the formation of the 24 ‘recognised’ Landcare groups operating in Queensland by April 1989. Subsequently, with increased State government support followed by the Hawke Government’s announcement of the National Landcare Program in July 1989, the number of Landcare groups expanded rapidly. However, this paper is about the first 24 (plus one other group, Capricorn Coast, which originated at about the same time).

By 1991, the Queensland Government moved to form catchment coordinating committees for more effective catchment-wide natural resource management (NRM). However, as these were not statutory bodies as existed in southern States, the Federal Government, seeking a more accountable structure, added another layer, the Regional Natural Resource Management Groups (RMGs). This heralded serious implications for the resilience and social capital of Landcare groups.

Social Capital and Resilience

Social Capital was vigorously explored, dissected, defined and redefined over about twenty years from the late 1980s. Putnam’s definition stands well amongst the others - features of social life-networks, norms, and trust-that enable participants to act together more effectively to pursue shared objectives (Putnam 1995). Alternatively, Pretty and Ward (2001) elaborate slightly, identifying four central aspects: relations of trust; reciprocity and exchanges; common rules, norms and sanctions; connectedness, networks and groups. They see benefits to the environment through social capital:

As it lowers the costs of working together, social capital facilitates co-operation. People have the confidence to invest in collective activities, knowing that others will also do so. They are also less likely to engage in private actions that result in negative impacts, such as resource degradation (p. 211).

The terms bonding, bridging and linking refer to three different ways of accumulating social capital. Bonding refers to the trust and common thinking of a well-knit group, the strength of relationship between members of a group. Bridging refers to the benefits gained through communication with other community groups (locally) or with wider groups of similar affiliation. Linking capital occurs when groups interact across ‘formal or institutionalised power or authority gradients in society’ (Szreter & Woolcock, cited in Compton & Beeton 2012). For Landcare groups this refers to the information, training and financial support received from the NRM tiers above them (catchment management association, RMG, Queensland Water and Land Carers (QWaLC), and from State and Federal Government NRM Departments. Cary and Webb (2005) and Compton and Beeton (2012) have suggested measures of these components suited to Landcare groups.

Resilience is ‘the way in which individuals and communities adapt, transform, and potentially become stronger when faced with environmental, social, economic or political challenges’ (Maclean, Cuthill & Ross 2013, p. 146), or viewed again, ‘the capacity of an individual, household, community, or system to respond over time to shocks and to proactively reduce the risk of future shocks’ (Bernier and Meinzen-Dick 2014, p. 2). Attributes contributing to resilience vary slightly according to whether applied to individuals, community groups, industries or regions. Hegney et al. (2008) provided dimensions suited to individuals and communities: social networks, positive outlook, learning, early experience, environment and lifestyle, infrastructure and support services, sense of purpose, diverse and innovative economy, embracing

differences, beliefs, leadership. Magis (2010) emphasised development and engagement of community resources together with strategic and collective action. A list by Berkes and Ross (2013) includes community infrastructure, diverse economy and engaged governance, which fit well in regional contexts but probably not so well for small community groups. Maclean, Cuthill and Ross (2013) defined six integrated attributes designed to cover all levels of organisation: knowledge, skills and learning; community networks; people-place connections; community infrastructure and access to services; diverse and innovative economy; and engaged governance (including inspired leadership, shared vision, appropriate communication, systems thinking, institutional capacity building and institutional learning). Another set, (Walton et al. 2013), tailored to a locally pertinent topic (coal seam gas, Chinchilla district) appears to fit well with Landcare groups: strategic thinking (planning, visionary leadership, positioning, learning, harnessing and using information, succession planning), links within community and bridging links to wider community, effective use of resources, commitment and perseverance, and trusting and respectful. Although it would suffice to apply the six integrated attributes in this study even though a couple of these do not sit comfortably with a small group (for instance, diverse and innovative economy), a selection from the Walton et al. paper, for instance commitment and perseverance and trust and respect, enhances understanding of factors affecting resilience.

It will be noted that some resilience attributes are also factors in social capital. High social capital might be a good predictor of resilience.

Method

A set of questions was prepared to probe dimensions of social capital and resilience. Some relied on subjective self-ratings of the group's experiences; some sought more quantitative or descriptive data. The questions attempted to trace the high points, achievements and obstacles overcome throughout almost thirty years, while probing bonding, bridging and linking social capital plus pointers to various attributes of resilience. The questions were framed so that they could be answered either through face-to-face or phone interview or by self-completion and email or postal return. A pre-test of the questions was applied to three groups outside the study frame but which also had long-term experience in Landcare. The rating system was altered from a 0 to 5 scale to a 0 to 3 rating and some questions were re-ordered or re-worded.

To measure social capital, factors indicating strength of bonding (using 0 to 3 rating) were: comradeship in overcoming hurdles; agreement on common purpose; and sharing ideas. A question on working as a team was rated 0 to 3 by the author. Bridging was indicated by questions about seeking new ideas from outside, inviting community members to activities, promoting actions in the community, seeking new members, contact with other Landcare groups, participation by community groups on projects, and support from local Council. Linking capital, the respect and trust between Landcare groups and institutional power or authority bodies (Szreter and Woolcock 2004) was measured primarily according to 0 to 3 ratings by groups of each formal institution above them for financial, practical help or information support, with 0 = nil, 1 = minor, 2 = moderate, 3 = splendid'. Another question on whether the Regional Landcare Facilitator provided the support wanted was also included.

The six integrated attributes of Maclean, Cuthill and Ross (2013) formed a basis for examining Landcare group resilience. However, some of those by Walton et al. (2013) were added, being relevant to resilience of small groups. The attribute 'ability to access funds', considered important for this study, substituted for 'diverse and innovative economy', with groups rated according to funding they had gained over the past five years. Although nearly all could gain small grants up to \$10K for RMG priority projects, those who could gain larger grants showed enhanced resilience.

Attempts to contact the 24 groups listed in the April 1989 Land Care Committee Newsletter (QDPI) yielded 19 groups still operating and six defunct. Face-to-face interviews were arranged and conducted with informants from fifteen groups (aiming to include an office-bearer with knowledge of recent years and a long-term member who knew what had happened in earlier years). The face-to-face interviews were conducted during a tight twelve-day trip from Atherton Tablelands, through Charters Towers to southern Queensland and return through the Burnett. At least two members were interviewed (sometimes three or four) for 12 of the 15 groups. Three phone interviews, completed the data set of 18 interviews. One group did not provide data.

Results were tabulated in a spreadsheet, data summarised and indicators of social capital and resilience assessed, with indicators of social capital rated 0 to 3. With resilience, results were qualitative as there was insufficient information on many of the relevant attributes.

Limitations As the study was limited to interviews of about one hour (with option to phone for further information), the several dimensions of resilience and social capital could not be explored in depth. Additionally, knowledge of earliest days was sometimes hazy, even though early members were sought out. For two of the groups, by necessity two members were interviewed separately rather than together as in other cases. Because of time constraints, case by case exploration of the way groups recovered from financial and social shocks is generally missing.

Results

Before examining social capital and resilience, responses to questions about composition, activity, perceived benefit to community, goals and status are summarised.

Composition of groups has changed over time from 83% rural producers on average to 58% now. Hobby (lifestyle) farmers increased from 9% to 19% and 'others' (for instance, council, government, teachers, urban citizens) now comprise 23% compared with 7% in early years. In early years, actions were predominantly about contour banks, property and catchment planning, reduced tillage and other forms of land management. Now, weed and pest animal projects predominate over soil management and many projects have an ecosystem or social flavour. Perceived benefits to the local community could be categorised as land management, ecosystem management, educational, financial and social. Some 'financial responses were: grant money spent locally; employment in land care projects; increased profitability gives economic benefit. Perceived social benefits included: socialising; community use of hall and botanic gardens; community reconnected with the mountain. Goals for the next few years included: continue/finish current projects; some specific new targets; survival; an motivation (encourage next generation to take over; refocus and recommitment; challenge recalcitrant landholders). For some it was to get the image of Landcare to change, or to 'get money for our priorities'.

Finally, groups were asked whether they were thriving, marking time or barely surviving. Six groups rated themselves as thriving, six of the ten rating themselves as marking time were reclassified as 'ready' to thrive if funds that match their objectives became available and four as 'stalled' through low member commitment or lack of capacity to secure funds. Two groups were classed as barely surviving. Of the six groups self-rated as thriving, one might face leadership succession problems and one is perhaps over optimistic.

Social capital

Table 1 summarises results for indicators of bonding, bridging and linking social capital.

Table 1. Averages across groups for indicators of social capital

Type of capital	Indicators	Average for all groups
Bonding	- work together well as a team	2.25
	- comradeship in overcoming hurdles	2.64
	- agreement on common purpose	2.62
	- group members share ideas	2.41
	Overall average	2.49: SD = 0.29
Bridging	- invite community members to activities -	2.06
	contact with other Landcare groups	1.69
	- group seeks new ideas from outside	2.41
	- group actively seeks new members	1.91
	- promotes its actions with community	2.38
	- extent of support from Shire Council	1.86
	- other groups participate in projects	1.78
Overall average	1.95: SD = 0.35	
Linking	- Regional Management Group	1.50
	- catchment management group	0.94
	- State Government Department	2.00
	- Federal Government	2.00
	- support by Regional Facilitator	1.22
	Overall average rating (excluding catchment group)	1.75: SD = 0.41

Bonding capital is reasonably strong, with overall average (i.e. average of the group averages for the four indicators) of 2.49, where 2 is moderate and 3 is high. Twelve of the 18 groups rated 2.5 to 3.

For bridging capital, the overall average of 1.95 aligns with a moderate rating. Three of the 18 groups rated 2.5; eight groups were in the 2 to 2.49 bracket. For the six groups self-identified as thriving, mean rating for bridging capital was 2.33 (SD 0.21) compared with 1.95 (0.39) for six active marking-time groups and 1.83 (0.31) for others.

Ratings for linking capital gained through interactions with relevant institutions (excluding catchment groups, generally no longer well-linked with groups), were lower than for bonding and bridging capital, the overall average rating being 1.75. One group rated institutional support 2.5 and five were in the 2-2.49 range. Linking capital was about the same for the thriving and active marking time groups (1.88 and 1.83) with the passive survivors at 1.61 (more dependent on grants from authorities but less successful?).

Standard deviations show a wider spread for linking and bridging capital than bonding.

Resilience

Results shown in Table 2 are qualitative observations, based on the six integrated attributes of Maclean, Cuthill and Ross (2013) and four selected from the Walton et al. (2013) set, without attempting to rate groups individually.

Table 2 Subjective ratings of overall strength of resilience attributes

Attribute	Rating	Indications
Knowledge, skills and learning	Moderate - Strong	Learning was universally claimed and almost all groups named some monitoring or trial activity (weeds, pasture, soils, water, biocontrol, tree plantings). Nevertheless there appeared to be a lack of long-term monitoring of key environmental issues.
Community networks	Moderate	The results shown for bridging social capital apply here. Refer to Table 1 and the Discussion section.
People-place connections	Strong	Connection to place and sustainable development are strong in Landcare groups.
Community infrastructure and access to services	Undetermined	Previous cooperation by Shire Councils has diminished with recent amalgamation. Need for administration assistance was mentioned.
Diverse and innovative economy	Variable	This was modified to 'diverse and innovative ways of securing funds'. Fourteen groups gained grants of \$10K to \$100K over the past five years, showing that they are not dormant and four of these had grants of greater than \$100K, showing strong ability to secure funding.
Engaged governance	Undetermined	This study cannot judge whether the RMGs engaging with Landcare groups displayed the qualities of engaged governance suggested by Maclean, Cuthill & Ross (2013). The groups did not appear to recognise these qualities in their relationships with their RMG. The reaction was more along the lines that groups only get money for RMG priorities; 'as if we are working for them'. For the groups themselves, the importance of leadership was well-recognised (rated 2.8 out of 3). Groups considered shared vision important (rating of 2.4) but there was no mention by any group of a strategic plan that identified the vision.
Succession planning	Weak	There was little evidence of succession planning; in some groups, members were willing to take turns as office bearers.
Effective use of resources	Moderate	In-kind contributions from groups are typically about 1.5 or more times Grant funds.
Commitment and perseverance	Moderate - Strong	Ability to continue operating for nearly 30 years, often with fund shortages, demonstrated commitment and perseverance, though sometimes by a few committed leaders.
Trust and respect	Strong	These are essential elements of bonding social capital, which groups self-rated as high.

Learning was a prominent feature of group activity. Field days, workshops, guest speakers, capacity building, and school interaction were all mentioned. On the other hand, efforts to learn through monitoring, for instance water quality and pasture condition, were rarely mentioned.

The quality of leadership had considerable bearing on resilience of many groups. Some groups told of declined activity under passive leaders or inappropriate leadership. In one extreme case, a group had to expel its leader who dominated with a single-minded agenda. In another case, it was only the commitment and perseverance of a dedicated core that resuscitated the group

after a leader had brought it to its knees. Another group now thrives through an inspired leader who rose to the occasion when a group was voting to disband.

Of the four groups successful in obtaining grants of more than \$100,000 within the past five years, two were 'thriving' and two were 'ready'. Although these two had recent successful projects, they did not class themselves as thriving because of uncertainty about gaining future grants, and additionally in one case because the key leader may need to scale back activity for health reasons, and succession was uncertain.

Discussion

Social Capital

Bonding High self-ratings, although possibly inflated, on the four questions related to bonding are to be expected from groups that have lasted thirty years working for a common ethic. However, this does not reflect tension that has occurred between rural producers and environmentalists. Perception by some rural producers that the Landcare movement has gone 'green' has likely led some to retreat. However, with high ratings when there is now quite a mix of membership (58% producer 42% non-producer), that disconnect might largely be in the past.

Bridging Most responses on the bridging items indicated moderate building of bridging capital. However seven groups showed low (less than the moderate rating) bridging. Closer examination of responses suggests that almost all groups could benefit from improved community networks. Community groups that had participated in projects were: schools (9), shire council (8), environmental group (5), industry organisation (3), scouts (2) and Lions, Rotary, Historical Society, Indigenous group, men's shed, contractor and produce store. This modest participation with the 18 groups over a number of years suggests that more could be done to engage the wider community. Groups could apply social network analysis based on Granovetter's (1973) strength of weak ties principle, as studied by Keith and Ross (2005) in two Darling Downs communities, to identify opportunities for connecting with other community groups. However this current study did find three exceptional examples of bridging to community by rural groups. The Dalrymple group runs annual city-country days with townspeople and Landcare members bussed to visit one or two properties; the Pittsworth group ran a Young Landcare Ambassador program providing leadership training and motivation for High School students; and the Condamine Headwaters group managed a Drought Resilience program for the Queensland Department of Communities, involving workshops, training and speakers on topics such as software, personal development, budgeting issues.

The responses to a question about connections with other Landcare groups showed generally superficial and spasmodic connections except for periodic meetings held by one network of groups (across two Regions). This type of bridging, with sharing of information, ideas and practical problems (akin to Victoria's network approach) seems an important way for groups to progress. It is not apparent why this is not used more widely in Queensland.

Linking Group ratings for hierarchical institutions with potential to support groups cause concern. The Queensland Government and Federal Government both rated 2 of 3, that is, moderate. Rationale for these is not given but for state government it was probably due to recent opportunities for funds through dog exclusion fencing and Everyone's Environmental Grants, in spite of the loss of extension support some years ago. For Federal Government, fund inputs were recognised, though probably clouded by recent reductions in funds available to groups.

Catchment management associations (or catchment care groups) were generally seen as competitors for funds rather than supportive. A potential for them to act as networking agents for groups in their catchment, similar to Victorian Landcare networks, seems a lost opportunity.

The low rating for RMGs reflected views that regional overheads and staff absorb much of the funding, with little getting to Landcare groups; and that funding provided is for RMG priorities. Groups rated RMGs as providing minor to moderate support, whereas a strong linkage would be expected. Some groups have realised that to thrive, they need to source funds elsewhere. Others, who rely on RMG funds, are concerned about their futures.

Technical and coordination support were provided by the Queensland Government before Regional Groups were established. The technical support now available through RMGs falls well short of the technical support once available through QDPI. As for coordination, some RMGs provide funds for part time coordinators for selected groups but most groups need to eke out funds for part time coordination officers from the administration portion of large grants or their own enterprise.

Since 2010, the Federal government has provided funds for a position called Regional Landcare Facilitator (RLF) in each of the 56 NRM Regions in Australia. The title would suggest that Regions have a person who would facilitate the development and effective running of groups; a person to assist the networking to generate bridging capital, including partnerships to seek major funds. However, the initial duty statement also allowed for direct running of extension activities and this has been adopted by many Queensland regions, almost to the exclusion of group facilitation. In one of the surveyed Regions, the RLF position is contracted to a conservation farming information and development body with its own extension agenda (under the guidelines, attachment to an RMG is not obligatory). This RLF connects spasmodically with Landcare groups but has a significant extension commitment to the employing body ('runs field days in competition with ours' according to one group leader).

None of the RLFs (from six regions) organise networking meetings of Landcare groups. When asked whether the RLF provides the support wanted, answers were mixed, some showing appreciation for assistance with advertisements, visiting groups if they were asked and offering small amounts of money from time to time (reportedly if a Region faces a deadline in spending on a particular project). But others were not impressed; the following response speaks for some groups: 'No, the only connection is the name. They work for the regional bodies and are committed to meeting their milestones'. The overall rating for RLF support was 'minor'. RLFs do not appear to meet the intentions of the position to promote opportunities for groups to access funds and provide an effective link between community groups and the regional bodies (from <http://nln.org.au/regional-landcare-facilitators-to-support-farmers-and-communities/>, outlining the Labor Government's commitment, with Minister for Agriculture, Fisheries and Forestry, Senator Joe Ludwig as spokesperson, 18-11-2012). Whether Landcare groups have contributed to the current situation by rejection of RLF efforts in the past is not known; nevertheless, RMGs have opportunity and responsibility to reconstruct a more helpful supporting relationship with Landcare groups. Although it is beyond the scope of this paper to propose how this might be done, it is noted that Marshall (2008) covers it well with guidelines for community-based governance under the regional delivery model, including: establish vertical trust; subsidiarity; build and maintain lower-level capacities; respect lower-level autonomy. Webb and Carey (2005) use the term 'synergy' to describe the link between what they call Bureaucratic Landcare and Landcare groups. Populist author Stephen Covey (2011) outlines the multiplying benefits of establishing synergy and shows how to do it. If RMGs were to channel Regional Landcare Facilitators towards building synergy between the groups and the regional body, both would benefit immensely.

Individuals who affect or are affected by the group would also be considered a layer of linking capital. The only information obtained on this was through questions whether the group made efforts to invite non-members to activities (yes), and whether members talked with non-members about land care practices (rated 1.7, minor to moderate).

Resilience

Surely significant resilience can be ascribed to all 19 groups that have lasted nearly thirty years from 1988-89 until now, although three (including the non-respondent) are barely surviving. Six of the 25 groups have folded; reasons are not known. Loss of finance, members moving on, and failure to get funds for preferred projects are partly blamed by barely surviving groups.

Observations show weaknesses to be: sometimes poor networking within the local community as discussed under social capital; lack of positive engagement with RMGs; and lack of internal strategic planning including succession planning. Strengths are a learning culture, high bonding through a common land ethic, and generally strong commitment and perseverance.

Ability to access funds is a major factor affecting resilience. Groups with a coordinator adept at pursuing grants from many sources are more resilient than those comprising landholders without the time nor insider knowledge to lodge successful applications and with no coordinator to assist. The Queensland Government stands to gain from viable Landcare groups in terms of both resource management benefits and maintenance of viable communities. These benefits are recognised by both NSW and Victorian Governments, who contribute millions of dollars to provide Landcare coordinators. A submission by QWaLC (2015) to the Queensland Government to fund part-time coordinators appears to have had no effect.

Bernier and Meinzen-Dick (2014) point out that adaptive capacities, preventive actions that communities employ to reduce the impact of predicted shocks, require different skills and resources from those required for merely coping with change. They claim that emphasis on coping has limited the capacity to innovate and respond to change in better ways. For Landcare

groups, capacity building that encourages thinking 'outside the box' in terms of fund-seeking and the way they can make a difference to local landscapes seems needed.

Although this analysis provides indications of resilience strengths or weaknesses, it has not fully probed how groups re-emerged from setbacks. Some of this has surfaced – the group that had to expel its leader, the commitment and perseverance of a dedicated core after a leader had brought a group to its knees, the inspired leader who rose to the occasion when a group was voting to disband. However, the number of attributes to consider and the brevity of interaction with groups have not permitted quantification or depth of resolution.

This study in wider Landcare context

The Landcare movement as a whole has faced criticisms that threaten its resilience. Tennent and Lockie (2013, 2015) claim that Landcare does not fit into modern agri-environmental policies, citing Commonwealth-State partnerships that use market-based tendering and stewardship payments directly to landholders as incentives to deliver environmental outcomes. One frustrated group leader suggested that 'the Landcare group we all know is being phased out', his observation being based on recent reductions in access to funds and the Region's provision of incentives to farmers directly rather than through Landcare groups.

Other threats to resilience cited by Compton and Beeton (2012), included:

- Landcare has not revolutionised land management; it is evolutionary rather than revolutionary, maintaining the status quo or making small incremental change.
- 'Group think' pervades, ensuring that interests of primary producers are not threatened.
- Landcare encourages participation by landholders who are less innovative.

This paper's response is to say that community Landcare is more about long-term improvement in social-ecosystem health rather than revolution. Most groups in this study showed substantial change in some arenas, incremental in others. Admittedly, there were lingering traces of 'group think', protecting the interests of primary producers from 'green' invasion, though this seems to have largely passed. Concerning innovation, if Landcare is working well, groups will embrace the late majority as well as early adopters, using the well-worn adoption paradigm of Everett Rogers (1983). Innovators are often absent from groups, so this is probably not unique for Landcare. However, Landcare groups should be on the lookout for new approaches and quick to learn about them, put them to trial and promote them. This was generally not apparent; for instance, neither the Certified Land Management System of accreditation nor Carbon Farming, both ideal for uptake on a group basis and both very Landcare oriented, were current activities of the groups studied.

Compton and Beeton (2012) identified 'status quo' as prominent in retarding Landcare group progress. They divided the Victorian groups studied into *inactive dependents* (perpetuating status quo) and *active independents*. In this Queensland study, the eighteen groups were classed as *thriving*, *marking time* or *barely surviving*. Six of the ten self-rating as marking time, although dependent on grant funds, are active, thus *active dependents* rather than inactive dependents. Of the others, probably four would fit the *inactive dependent* classification of Compton and Beeton terminology, the others stalled for other reasons. Protection of status quo did not emerge significantly amongst the groups.

One coordinator interviewed in this study, watching the demise of her group, suggested that a new model was needed for Landcare. Over the past few years, ways of refreshing or re-modelling Landcare have been sought. Campbell (2009), Curtis et al. (2014) and Gleeson (2015) are among those who have visited the issue. Gleeson's model for 21st Century Landcare controvertibly fails to mention community groups, while conversely, Greg Hunt, then Federal Minister for Environment, announced to the 2014 National Landcare Conference, that he had turned priority-setting on its head, with communities to work with NRM groups to set priorities, rather than being set by Canberra (Hunt 2014). The groups interviewed did not recognise that it had happened; instead, they emphasised reduced funding through Hunt's National Landcare Program.

In more positive vein, Landcare NSW claims 3000 groups (including of course Bushcare, Dunecare and others). While concerns are raised in southern states as well as Queensland about decline or passiveness of groups, Landcare remains a substantial force for environmental management. Landcare NSW defines Landcare in a way that highlights the person-place connection, the social capital that goes with improved natural resource management: 'Landcare is an egalitarian, inclusive, democratic movement driven from and for the community, embracing localism as a means for engaging and motivating communities' (Landcare NSW 2014,

p. 40). The document adds that groups provide supportive social networks for communities, with positive impact in building community resilience and adaptive capacity.

This is not a new model, though perhaps a more developed expression of the social-ecosystem ethos that generated the Landcare movement. The social dimension is practised by at least some Queensland groups, as evidenced by the Condamine Headwaters initiative to manage a Drought Resilience program and the farmers of the Allora Landcare group working with both local historical and Indigenous groups to weave history and culture into their environmental walks.

Landcare groups need to demonstrate their social capital strength as a distinguishing feature over perhaps more direct ways for fund providers to achieve environmental goals.

Conclusions

Twenty-five groups, nineteen still operating after nearly thirty years (though three of those are barely surviving), six groups defunct – how does that score in terms of social capital and resilience? Congratulations certainly seem due to the sixteen still functioning above the 'barely surviving' level'. Ten of these rated themselves as marking time, needing more assured funding or concerned about ageing membership. In this study, marking time did not appear to equate to status quo or blocking through high bonding. From face-to-face discussions and data analysis, factors slowing progress and casting a shadow over resilience appear to be:

- lost opportunities for alternative funding due to sub-optimal bridging
- linkages between RMGs and groups in need of repair
- lack of skills in sourcing and acquitting funds in absence of coordinators
- narrow base of enthusiastic leaders in some groups – if they need go, the passive remainder might not respond
- ageing membership; no longer ready for on-ground work to repair land and vegetation, but unable to attract younger people to take it on.

Suggestions have been made for improving bridging and linking capital through social network analysis, Regional Facilitator help and reconstruction of synergy between groups and Regional Groups; accompanied by more Federal funds earmarked for community groups. In the interests of State Government's goals to foster viable communities, coordination assistance for Landcare groups would help to maintain the social capital they build. The Landcare Ambassador program undertaken by Pittsworth Landcare group might give a lead to others facing the issues of leadership succession and engaging the young.

Social scientists have shown that Landcare groups build substantial social capital and this study supports this. Although about two-thirds of the groups studied have continue to display resilience through nearly thirty years, some were in need of stronger support to survive and six of the original 25 groups had collapsed. Apart from diminished landscape repair when groups collapse or hibernate, social capital is lost. From this study it seems that many groups could re-energise with better institutional support. Although capacity to thrive independently of institutional support would be ideal, in reality support is much-needed to retain the environmental and social benefits provided by healthy groups.

Although the groups studied are a special tranche, not necessarily representative, the suggested changes to help them might also bolster other groups so that they regain productive energy.

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