

Landcare in Australia and Germany: comparing structures and policies for community engagement in natural resource management

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Summary 'Landcare' is a specific form of community-based natural resource management (CBNRM) that is expanding across the world. Although Landcare is widely understood to have originated in Australia in the late 1980s, a similar concept, *Landschaftspflege*, developed in Germany much earlier, with *Landschaftspflegeverbände*, or 'Landcare Groups', having been established around the same time. The existence of other forms of CBNRM around the world diminishes Australian Landcare's claims to uniqueness but provides a richer context for further refinements of CBNRM models. Based on 57 qualitative key informant interviews and a thorough document analysis, this paper compares Landcare in Australia with Germany. A key finding is that there are substantial similarities but also significant differences. As a result of recent changes, it is likely that the differences will diminish over time. Recommendations for the design of initiatives to promote community involvement in environmental management are provided as are considerations for Landcare as it expands internationally.

Key words: ecosystem services, farming, landscape maintenance, multifunctionality, multi-stakeholder partnerships, stewardship.

Introduction

Community-based natural resource management (CBNRM) has become a major dimension of environmental management in many countries (Catacutan *et al.* 2009). Collaborative environmental planning, co-management and community-based planning are some models that imply a 'bottom-up' alternative to conventional 'top-down' approaches. There is much diversity with different organisational structures, including catchment committees, 'friends of' groups and various forms of community groups (e.g. Margerum 2008). We examine one model of CBNRM, Landcare, which is expanding around the world.

It is frequently claimed that Landcare originated in Australia and that Australia was responsible for its introduction elsewhere (Catacutan *et al.* 2009; DAFF 2007; Youl *et al.* 2006). However, organisations similar to Landcare have developed independently in many other countries (Cramb & Culasero 2003). In Germany, a similar concept existed from the early 20th century with operational CBNRM groups

(*Landschaftspflegeverbände*) being established at the same time as in Australia, i.e. 1986 (Güthler & Tschunko 1999). Many other countries established CBNRM groups around the same time. Thus, while Australia invented a new word, Landcare, it did not invent a new concept.

Defining Landcare is difficult. It can mean the same thing as CBNRM: involving individuals of varying backgrounds working in local groups to cooperate with government and non-government stakeholders to achieve sustainable production and environmental outcomes (Lockie 1997). It can also refer specifically to the Australian National Landcare Program (NLP) or to the system of Landcare groups in Australia.

The data came from several sources. First, in addition to a comprehensive literature review, an extensive document analysis was undertaken involving an examination of official material relating to Landcare in Australia and Germany, including formal reports, brochures and websites. Second, semi-structured key informant interviews (Gilchrist & Williams 1999) were conducted in 2006–2007 with 52 people involved in NRM in Tasmania

and Victoria (Australia), and five in Brandenburg, Saxony-Anhalt and Bavaria (Germany). Third, participant observation and discussions with participants were undertaken at the 2006 International Landcare Conference, various Landcare meetings and group activities. The research was approved by the University of Tasmania Human Research Ethics Committee (Reference Number H9195). The interviews were conducted to gain sufficient information for the authors to undertake an in-depth discussion of Landcare as it has evolved over time in each country. It should be noted that, as qualitative research, the key informant interviews were not intended to be a representative statistical survey of the views of participants, but to gain a range of opinions and views based on the respondent's position within the Landcare movement. The disparity in numbers interviewed between Germany and Australia occurred because there is much greater diversity in Landcare in Australia and thus more interviews were required before 'saturation' of information was achieved. Also, the lead author had much greater pre-existing knowledge of

German Landcare. Australian interviews focused on the States of Tasmania and Victoria partly for logistical reasons and to capture differing support systems for Landcare and differently structured regional bodies. Interviewees were selected on the basis of purposive sampling, where those to be interviewed are chosen because of their specific characteristics, positions and/or knowledge (Babbie 1999). The interviews were guided by a list of open questions that were adapted according to the position of the interviewee, e.g. Landcare group member, Landcare officer, NRM staff or representatives at regional, state or national level. Questions centred on the perception of Landcare and the regional NRM bodies, funding, group status and future, communication and cooperation, as well as the interviewees' involvement in decision-making processes and perception of their influence on decisions made. Data were analysed qualitatively following the procedures for descriptive coding and pattern coding. The views gained from the interviewees have extensively informed the below discussion of the similarities and differences between Landcare in Australia and Germany with regard to concept and organisational structure, group characteristics and activities, and support mechanisms. The aim is to identify the lessons that provide guidance for future policy initiatives and organisational structures to enhance the effectiveness of CBNRM, including Landcare as it expands around the world.

The Origins of Landcare

In Australia, Landcare began in 1986 in Victoria. Although there were earlier farmer groups, e.g. Farm Tree Groups (Curtis 1998), 'Landcare' originated when the Victorian Minister for Conservation, Forests and Lands, Joan Kirner, sought to develop a statewide, holistic land protection programme to facilitate locally based community groups. The term was created to appeal to a wide range of people and to combine production and land degradation concerns. Crucial support came from the President of the Victorian Farmers Federation, Heather Mitchell (Campbell 1994; Youl *et al.* 2006). Following its success in

Victoria, a NLP was established through an historic partnership between the National Farmers Federation and the Australian Conservation Foundation. As an initiative of the Federal Hawke Labor Government, AUD\$340 million was provided during the 'Decade of Landcare' (1990-1999) (Campbell 1994). A change in government in 1996 led to a degree of distancing from Landcare and the creation of the Natural Heritage Trust. However, strong groundswell support for Landcare meant that it survived and will continue to do so. The return to a Labor Government in 2007 restored some certainty about the future of Landcare.

Landschaftspflege developed in Germany in a very different way to Landcare in Australia. Since 1980, the importance of 'landscape maintenance' (a concept similar to NRM) increased for many reasons, including structural change in agriculture, changes to nature conservation legislation, the rise of the concepts 'multifunctionality' and 'endogenous regional development' and their implementation through the European Union's LEADER programme, development of habitat and species protection strategies and the initiation of several government funding programmes (Baals 2000). Structural change in agriculture driven by declining EU protectionism has reduced the amount of land being actively farmed and farm incomes, thus encouraging farmers to look for alternative sources of income. There was also considerable tension between farmers and conservationists.

It was in this context that a district forestry manager and later local politician, Josef Göppel, started, in 1986, a CBNRM group in Central Franconia (Bavaria) to address the ongoing conflicts between agricultural organisations and conservation groups and to assist farmers to access funding for landscape maintenance. Göppel called this group a '*Landschaftspflegeverband*', literally a 'landscape maintenance association'. The idea spread to the other German states, and by 2009, there were 144 active groups (DVL 2009). This figure is not directly comparable with Australia, not only because of the much smaller landmass - Germany is <5% of land area of Australia but has four times the

population - but also because of differences in definition, group size and activities. German groups contract out landscape maintenance activities to large numbers of farmers who do not necessarily have to be formal members of the group. For example, in 1996, one German group in Middle Franconia (Bavaria) had around 1000 farmers under contract to provide conservation services (Baals 2000). A total of 20 000 farmers are now under contract across Germany (Blümlein 2009).

These groups are commonly called Landcare groups, the term having been introduced to Germany in 1999 by a German group coordinator who visited Australia (Krettinger & Marriott 2002). The term may create problems because what is meant by the German concept does not coincide with how Landcare is understood in Australia in terms of group composition, objectives, activities and philosophy. Now that Landcare is an increasingly international concept, some understanding of these differences and similarities is warranted.

Comparing Landcare in Germany and Australia

Differences in concept and structure

In Australia, 'Landcare' has a range of meanings depending on the context. Predominately, it refers to local community-based groups of landholders, but it can also refer to looking after the land - 'caring for country' - as well as to a philosophy variously described as 'the Landcare Ethic' or 'the principles of Landcare'. It also refers to the federal government's funding scheme (the NLP) as well as to an overarching organisational structure where local groups are part of a network around Australia.

German Landcare has several antecedents and more fluidity. Its origins are in the ideas of *Landespflege und Heimatschutz* (land stewardship and homeland conservation) from the mid 19th century (Deutscher Rat für Landespflege 2005). It connects to the policy objectives of nature conservation and landscape maintenance articulated in the Federal Nature

Conservation Act of 1976. While there is an umbrella body, the German Landcare Association, there is no overarching philosophy or movement as in Australia, other than an underpinning assumption that the groups provide a forum for negotiation and conflict resolution where stakeholders with diverse interests cooperate as equal partners. Ultimately, this discursive space leads to broader acceptance of environmental concerns and coordinated action to ensure outcomes. Unlike Australia, where conservation and production are often perceived as being in opposition (especially at the policy level) (Vanclay 2004a), German groups are committed to integration and multifunctionality.

Differences in objectives

Australian Landcare began with a focus on 'fixing land degradation'. The goals of the Decade of Landcare promoted awareness and adoption of sustainable land-use principles and practices. Landcare groups' primary role was promoting more sustainable land management in local communities and contributing to understanding land degradation and its solutions through facilitating the sharing of information (Campbell 1994). Group objectives vary depending on the local context.

German Landcare groups have landscape maintenance with sustainable regional development as their primary purpose. Several objectives can be identified (DVL 2005; Göppel 2006):

- 1 manage natural resources on a sustainable basis in all cultural landscapes
- 2 develop the connections between different habitats
- 3 encourage endogenous regional development and environmentally friendly land use by promoting regional specialties and place identity
- 4 provide income to farmers through seeking EU and state grants for landscape maintenance and
- 5 provide support to farmers in marketing their regional products.

These objectives contribute to a broader social goal of preserving the socio-cultural landscape, which is both a

socio-cultural asset and a biodiversity refuge. Often they can only be achieved by maintaining traditional low-input farming systems, exemplifying the joint production of public and private goods. As these farming systems are no longer economically viable, subsidies are necessary, although it is not clear they will continue indefinitely.

At its inaugural meeting, Göppel (1993) emphasised that the German Landcare Association (Deutscher Verband für Landschaftspflege DVL) was neither a nature conservation group nor a planning institution, but an implementation mechanism. While government planning had produced a range of detailed land use, landscape, regional development and water management plans at different levels, their implementation was not always satisfactory. Landcare groups facilitate the implementation of activities outlined in those plans, negotiate the common ground between various interests, and identify actions that can be undertaken within the existing situation. Like Australian Landcare, German groups attempt to create an image of moderation so as to develop trusting cooperative relationships with community and government.

Although there are differences regarding specific objectives, there are similarities. Landcare in both countries is about the environment and conservation, farming and sustainability. Greater emphasis is placed on awareness-raising and the development of sustainable practices in Australia, while the implementation of existing conservation plans and providing farmers with income opportunities is the focus in Germany.

Differences in group definition, characteristics and membership

Characteristics common to groups in Australia and Germany are as follows: (i) they comprise local stakeholders and are community based, (ii) involvement is optional and (iii) groups are relatively autonomous. Differences exist in group composition and the way groups are managed. Comparing formal descriptions is difficult, especially for Australia, because definitions have changed over time, and there are

differences between states and between sources. Roberts' (1992) early definition of Landcare groups as popular farmer-led organisations, driven by committees comprising representatives of various sectional interests, resembles the German model. Campbell (1994, p31) broadened the definition to be 'basically 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'. Diversity is a feature of Australian Landcare. The precise number of groups varies because of differing definitions and difficulties in compiling the data. Sometimes only the farmer-based groups are included, and in 2006, there were approximately 3500 such groups in Australia (CIE 2006). At other times, the whole range of 'care' groups (Bushcare, Coastcare, Dunecare, Rivercare, etc.) are counted, with the number of groups increasing to over 5000 (Youl *et al.* 2006).

German groups comprise landholders and other interested individuals, as well as representatives of environmental groups, tourism and forestry interests, and the local and district councils. The only requirement of the German Landcare Association is that farmers, conservationists and local politicians should be equally represented on each group's committee (DVL 2005). Groups often also have an advisory board comprising representatives of relevant agencies. This is a notable difference to Australia.

This difference in group structure may be a reason why 'burn-out' - the exhaustion of volunteer leaders common in Australia - is not known in Germany. The leaders of German groups are often trained professionals with appropriate skills and background for project management and may well be making their contribution within work time. Many groups have sufficient funds to hire professional staff. In contrast, the executive roles in Australian Landcare groups are undertaken by volunteer local landholders who are not compensated for their contribution. Australian groups rarely have the resources to pay for professional project management.

In Australia, Landcare groups typically have personal liability and other insurance, most groups are legally incorporated, and

there is considerable awareness of the need for this. In Germany, because of a different legal and less-litigious context, insurance and the legal incorporation of groups are not necessary. Most groups are registered (*eingetragener Verein*) but are not legally incorporated as understood in Australia.

Owing to the diversity of Australian groups, it is hard to make comparative statements. Ironically, despite their incorporated status, Australian groups are perhaps less formalised than German groups. German groups tend to operate at district rather than local level, undertake larger projects than Australian groups, have several employees, develop strong ties with local councils, contract to supply services to local councils (all of which Australian groups are unlikely to do) and cooperate with neighbouring groups and other organisations (which Australian groups might do).

Differences in group activities

Activities of Australian groups include control of invasive weed species and feral animals, protection of native habitat, the creation of vegetation corridors and other revegetation activities, erosion and salinity control, improvement of riparian zones, monitoring water quality and the management of rare and endangered species. These activities are carried out on private and public land. Education and awareness-raising activities are conducted. Other recent activities relate to carbon credits, bushfire management, dealing with drought, and farm health and safety.

German groups undertake many activities, including the marketing of regional products, soil conservation, the management of hedges and meadows for habitat protection of threatened species, the preservation of traditional orchards and the management of Special Protection Areas under the European Birds Directive and Habitats Directive (or Natura 2000 sites). Group projects often include education and awareness-raising. There is obvious similarity between the Australian NRM and German landscape maintenance activities. Differences can be observed in the German focus on marketing of regional products and promotion of regional economic

development. The Australian focus on feral animal and weed control has no equivalent in Germany.

Differences in support structures and funding arrangements

Landcare has not developed in isolation from their respective national contexts. There are major differences in agricultural and rural support policies with neoliberalism being the driver in Australia, and the EU Common Agricultural Policy, endogenous regional development and multifunctionality being the drivers in Germany. Government policy and funding programmes, as well as the influence of other organisations and institutions, continually shape Landcare at a macro-level and impact on the activities of groups. A major difference is that the Australian Government provided funding for the establishment of groups, while German groups formed without government involvement.

In Australia, most states operate their own Landcare programme in addition to the national programme, but with considerable differences between states. In the past at least, most Federal funding to Landcare groups could be used for specific projects usually requiring an in-kind (labour) contribution equal to the cash requested. Sometimes there was financial support for the employment of a facilitator or coordinator, always on short-term contracts. Landcare is thus regarded as a volunteer programme with community members providing their labour for free, often with the rhetoric of instilling 'ownership'. In contrast, Landcare in Germany is not regarded as a volunteer programme (although participation is optional).

Potential sources of support for Australian groups include federal and state governments and environmental NGOs such as Greening Australia (which increasingly functions like German Landcare). Local government, environmental organisations and private consultants sometimes provide in-kind support or hosting arrangements such as office space or vehicles. Landcare Australia Limited (LAL) is the official not-for-profit company responsible for seeking sponsorship for and promotion of

Australian Landcare. LAL does not support the establishment of groups, but attracts corporate sponsorship for projects, runs campaigns, facilitates networking, compiles a national directory and promotes Landcare's national identity and logo. There is no comparable German organisation. Although the DVL has a logo, it is less known than the Australian 'caring hands'. Individual groups attract corporate sponsorship, but to a much lesser extent and only on a local scale.

German Government support contributes to the management of the landscape but was not designed to promote the formation of groups or to create a comprehensive CBNRM movement. Therefore, the government has no need to be concerned about group health or the numbers of groups and members. There is no monitoring structure and consequently much less information on outcomes. However, relevant ministries manage various funding schemes and compile data regarding the delivery of their programmes.

One difference between Germany and Australia is how groups obtain funding. In Australia, funding is almost exclusively through grant programmes. German groups have more funding sources including state programmes for landscape maintenance and conservation, membership fees, direct payments from district councils and municipalities, donations, sponsorships, lottery funds and support from compensation (or off-set) measures from projects that create environmental impacts (e.g. road construction) (Blümlein 2009).

Nature conservation is the responsibility of each German state. Most established programmes such as formal conservation agreements, landscape maintenance support programmes and species and habitat protection programmes. Landcare groups, along with other groups and individuals, can access these funds. EU cofunded agri-environmental schemes are also used for landscape maintenance, albeit with some complexity.

The German Landcare Association was founded in 1993. It aims to operate as a quality assurance mechanism for groups, to provide feedback and knowledge exchange to ensure professional delivery of services, to assist groups in accessing

funding and to influence policy (Göppel 1993). The Australian Landcare Council resembles the DVL in that it is an organisation at the federal level. However, the ALC was an official Australian Government advisory body with government appointed representatives from all states.

Although Australian Landcare is non-political, individual groups and their state-based networks lobby politicians and influence decision-making at all levels. The Tasmanian Landcare Association, for example, 'facilitates networking, lobbies politicians and departmental executives, is involved in statewide planning with government and promotes the movement' (Youl *et al.* 2006, p14). Landcare in Germany is non-partisan, but the DVL plays an important role in openly and actively lobbying politicians from the local level through to the EU.

The majority of German groups employ an executive officer. Depending on its size and the projects being undertaken, a group may employ several project managers. The funding for these positions comes from a wide range of sources including overhead charges included in project budgets. Generally, it is the responsibility of the executive officers to attract funding for projects and to recoup their own salary. The executive officer is responsible for technical and organisational aspects such as accounting, auditing and monitoring and evaluation. This differs from Australia where many groups undertake planning and project implementation without professional assistance. Coordinators play a crucial role in group functioning in both countries. However, there are differing demands on coordinators - in Australia the need for effective management of volunteer programmes and in Germany the need for professional project management.

Current Trends in Australian Landcare

Following an agreement in November 2000 between the then Federal Liberal Government and all states, Australia adopted a regional model of NRM delivery with 56 new regions being created somewhat arbitrarily across Australia. The

governance structure of these regional bodies varies, but in general terms each is managed by a Board, and each has developed an integrated NRM plan for their region and an Investment Strategy to achieve identified resource condition targets. The rationale for the new approach was to engage with the community to achieve NRM outcomes, support community capacity-building and improve governance.

Farely (2005), Keogh *et al.* (2006), Moore and Rockloff (2006) and Compton *et al.* (2009) have documented various issues associated with the regional model, such as the lack of community involvement in the formulation of regional strategies, lack of group support, conflicting priorities, accountability issues, differing perceptions about the role and purpose of NRM bodies (primarily whether they represent community or government) and varying levels of success in engaging different stakeholders. The regional model was implemented with little thought about the role of Landcare. The new NRM arrangements have effectively reduced the role played by Landcare, have potentially diminished its direct funding and have meant that Landcare has become one of many stakeholders in NRM rather than being the key player it was before. The NLP and other NRM programmes have now been integrated into the 'Caring for Our Country' programme, expanding the NLP's initial focus on soil, water and vegetation to address a wider range of issues such as wildlife and biodiversity, the viability of rural and regional communities, forestry, mining and air quality.

While the initial NLP was targeted at farmer groups, the Natural Heritage Trust programmes were also open to urban and peri-urban community groups carrying out non-agricultural environmental activities. The term, Landcare, now often includes all the 'care' groups (Curtis & Cooke 2006). Landcare and NRM are increasingly seen as synonymous, especially by people in the Landcare and NRM hierarchies. However, as our interviews revealed, perceptions among group members were different. For 'Landcare', they tended to infer caring for the land, working together doing local projects and improving the environment. In

contrast, the term 'NRM' had little meaning to grassroots people, was associated with top-down bureaucracy, but also with the 'bigger picture' rather than with local environmental issues.

With the regional NRM bodies being funded to deliver NRM outcomes, they are starting to commission Landcare groups to undertake NRM work in much the same way as occurs in Germany. Stewardship payments are increasingly being introduced, owing more to European ideas of multifunctionality than to Australia's stance supporting market liberalisation, although they are often being undertaken in a competitive tendering process. While Australian Landcare programmes historically targeted groups and group action rather than individual landowners, changes have seen funding become available to individuals making groups somewhat redundant, thus diminishing a vital aspect of Landcare. Also, the competitive basis of the tendering process contradicts the cooperation fostered by Landcare.

These changes create uncertainty for Landcare while it repositions itself to remain relevant. However, groups for local voluntary community environmental action will persist in one form or another, wearing the Landcare hat or not as may suit political sensitivities and funding programmes. This uncertainty is reflected in the declining interest in Landcare since 2000. After initial enthusiasm and sharp increases during the 1990s in the number of Landcare members, the number of groups and the percentage of farmers involved, the size of the movement is now hovering or even diminishing (Curtis & Cooke 2006). While the figures quoted in various surveys are dubious because of changing characteristics of membership and changing understandings of Landcare, it is evident that Landcare is not as vigorous as it used to be. There are many reasons for this including decline in political support, inadequate organisational management and poor institutional arrangements, burnout amongst volunteer members and paid coordinators, group attrition and a failure to recruit new members, increasing external pressures on farmers resulting in reduced time availability, as well as a decline in the numbers of

farmers in agriculture because of insidious structural adjustment and rural land-use change (Vanclay 2003).

Current Trends in German Landcare

German Landcare originated from the need to facilitate dialogue between conservationists and farmers. However, farmers and conservationists may still 'speak different languages', or not communicate at all, making shared discussion spaces difficult to establish. The view that farming and conservation are mutually exclusive, rather than being integrated, persists. In that respect, multifunctionality is a political concept applied at a national or district level rather than at the individual farmer level. Facilitating discussion between conservationists and farmers remains an important group activity.

German groups increasingly focus on profitable activities to achieve their aims. This is necessary because public funding for Landcare activities is declining and groups accept a wider range of tasks and therefore need more staff. New tasks include the marketing of products arising from group activities. The ongoing reduction in the viability of farming enterprises and consequent labour-shedding causes problems because there are insufficient skilled staff to undertake the necessary activities.

The EU's agricultural policy has a strong influence on land use. The German Landcare Association continuously lobbies the European Commission on aspects of rural development. However, while conservation issues were high on the political agenda in the 1980s, they have lost standing. This has reduced the rate of growth of German Landcare groups, although there remains a continual albeit slow growth in group numbers and overall membership.

Landcare groups have frequently supported or operated as Local Action Groups (LAGs) for the EU LEADER programme that encouraged rural communities to consider and develop the long-term potential of their locality. Ideally, LAGs are community-based groups with a broader stakeholder base than traditional Landcare groups.

Consequently, a Landcare group might cooperate with a LAG, initiate and coordinate projects or support its executive. The future of German Landcare is somewhat dependent on the budget for LEADER and subsequent EU initiatives.

Conclusion

In contrast to popular Australian belief, even if it did invent the word, the 'Landcare' movement is not uniquely Australian, nor was Australia responsible for its introduction everywhere in the world. Many CBNRM groups developed independently around the world in the mid 1980s. Australia did invent a catchy word in 'Landcare', something that means what it says and has widespread appeal. The necessity for concerted efforts by different stakeholders to come together to achieve sustainable environmental management became apparent and provoked a similar response across the world. This occurred with government support in Australia, but not in Germany. Despite their separate geneses, Landcare groups in Australia and Germany display many similarities but also many differences - although these differences are diminishing over time. Diversity is a feature of Landcare in both countries, but there is more structural coordination in Australia. Thus, despite the rhetoric of 'bottom-up', Landcare in Australia is remarkably 'top-down'! It is also apparent that there is much dissatisfaction amongst grassroots members with the overarching administrative arrangements in Australia, and some uncertainty about the future of Landcare, especially in context of new NRM administrative arrangements.

Despite its problems, there are many positive benefits of Landcare in Australia (Cary & Webb 2000; Curtis & Lockwood 2000) and in Germany (DVL 2009; Lerch 2004). Although it is arguable whether Landcare delivers on-ground outcomes (Lockie 1997), and despite concerns about decisions being manipulated to benefit certain stakeholders, Landcare makes a difference to most people involved and to the local community (Curtis & De Lacy 1996; DAFF 2003). Perhaps the most important impact of Landcare groups has been that they enhance communication between

farmers, conservationists and other stakeholders. This enables learning, facilitates the understanding of different views and provides opportunities for negotiating varying interests. Decisions are more widely accepted and supported if they are based on a common understanding of issues and where stakeholders have the chance to voice their concerns (National Research Council 2008). These social aspects of Landcare are harder to quantify than, for example, the numbers of trees planted, but they contribute to the social dimensions of sustainable development.

Landcare appears to have a more secure future in Germany than in Australia because: the existence of many funding sources reduces dependence on any one source; the increased need to demonstrate partnerships with local community groups in new EU funding mechanisms and the ability of German Landcare to provide this; the effectiveness of cooperation processes with local and district governments; the professionalism of staff and the effectiveness of the institutional arrangements in which they operate; and the level of funding provided by German Landcare to farmers leads to their ongoing interest. In contrast, Australian Landcare has been too dependent on government funding and volunteerism and is therefore vulnerable to changes in government and political interest. While Landcare Australia Ltd has attracted some funding through corporate sponsorship, it is not sufficient to sustain Australian Landcare to the extent needed.

There is much that can be learned from our analysis that could assist CBNRM around the world. Our findings are similar to many other scholars, but the significance of these issues makes them worth repeating. While there is a local sociopolitical and sociocultural context that needs to be considered, we recommend that any CBNRM initiative should:

- have a diversity of funding sources to reduce dependency and increase autonomy;
- include all relevant stakeholders to build the support-base and identify all relevant issues;

- possess a good understanding about what is reasonable to expect from volunteers;
- provide funding at a level compatible with the task and stakeholder expectations;
- have effective administrative procedures and institutional arrangements to avoid excessive red tape and to minimise frustration;
- ensure good communication and two-way information flows, for example through networks of groups, so that policy levels listen to feedback from the grassroots about the effectiveness of the initiative and its administrative arrangements; and,
- provide resources and opportunities for the effective training of staff so that they can provide a professional service.

As Australia's first National Landcare Facilitator, Andrew Campbell, advocates, Landcare is about sustaining landscapes, lifestyles and livelihoods (Vanclay 2004b). With Landcare becoming implemented around the world, it will inevitably develop multiple forms. Rather than a singular prescription, Landcare will become more fluid as it adjusts to different social, economic, political and cultural settings and to different farming systems. Nevertheless, there are some essential features of Landcare that will persist - at its core Landcare is a community-based, group approach to managing the land and the landscape at the local level for social, cultural and environmental values.

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