4. Tools for successful NRM in the Lake Eyre Basin: achieving effective engagement

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Shortened forms

CMAs	Catchment Management Authorities
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DCQ	Desert Channels Queensland
JSCs	Joint Steering Committees
LEB	Lake Eyre Basin
NRM	Natural Resource Management
NTNRM	Northern Territory Natural Resources Management
NSW	New South Wales
NT	Northern Territory
QLD	Queensland
QMDC	Queensland Murray-Darling Committee
SA	South Australia
SAALNRM	South Australian Arid Lands Natural Resources Management Board
WCMA	Western Catchment Management Authority

Summary

This chapter was developed as part of the 'People, communities and economies of the Lake Eyre Basin' project. It has been written for communities, government agencies and interface organisations involved in natural resource management (NRM) in the Lake Eyre Basin (LEB). Its purpose is to identify the key factors for successful community engagement processes relevant to the LEB and present tools and principles for successful engagement processes. The term 'interface organisation' is used here to refer to the diverse range of local and regional organisations (such as Catchment Committees or NRM Regional Bodies) that serve as linkages, or translators, between local communities and broader Australian and State Governments. The importance of fostering and harnessing effective processes of community engagement has been identified as crucial to building a prosperous future for rural and remote regions in Australia.

The chapter presents an overview of the literature on successful community engagement processes for NRM, as well as an overview of the current NRM arrangements in the LEB. The main part of the chapter presents findings of the series of interviews conducted with the government liaison officers representing both state and federal organisations who are responsible for coordinating and facilitating regional NRM in the LEB, and with the members of communities of the LEB.

The literature review begins with an acknowledgement of the importance of community ownership, which can be promoted by providing avenues through which local voices can be heard, and providing those who want to participate with the opportunity to do so. The findings from the community-based research show not only the community's willingness to participate, but suggest some clear 'rules of engagement' for planners and policy makers. Of significance to many of the people interviewed was that engagement needed to occur at the local or property level, preferably face to face. Given the finite amount of resources for personnel and travel, and the low population density of the LEB, this requirement presents a considerable dilemma. In considering this issue, a key finding from the government interviews was emphasising the importance of on-ground facilitators, who have such a crucial role in the engagement process.

Also related to the building of trust and partnerships which, from all evidence, appears to be crucial for effective engagement, is the issue of 'independence' of organisations such as NRM Regional Bodies. Independence was raised in the literature review; however, the community interviewees did not use this term, but spoke instead of the importance of knowing that interface organisations are locally, rather than government, driven. A number of people interviewed felt that interface organisations were replicating the functions of government, particularly because of the bureaucratic nature of dealings with them. This led to the recognition by many that there needed to be 'less talk and more action', and less paperwork.

The chapter demonstrates that government representatives emphasise that the regional delivery of NRM processes was indeed an extension of government programs; however, they clearly recognise the need for flexibility and local adaptation for their implementation. A critical issue for achieving on-ground action under this system is attracting and maintaining credible staff. A feature of remote areas seems to be having fewer people to play more roles, so finding and supporting staff who are effective in conducting multiple roles is crucial to successful engagement processes, which frequently involves balancing multiple dimensions: communicating with a wide range of stakeholders, understanding local and regional systems and interacting with different government organisations, all of which are changing over time. For these reasons, a further distinct feature of successful engagement in remote areas is the high importance of enthusiasm and determination, given the dispersed social environment and the larger distances, which make access to resources and information more difficult.

The low population density of remote areas does not relieve the complexity of managing natural resources. If anything, sparse populations and large geographic areas intensify the problems and create their own tensions and contradictions. For example, the preference of the local people to engage in fewer 'talk-fests' was also countered with a concern that there needs to be more face-to-face, or one-on-one interaction at the property level. While this is beneficial in terms of coming to terms with the concerns of the local people, it is also costly and time consuming, and competes with the ability to effect 'on-the-ground action', which was also a priority for those interviewed.

Similarly, despite a dislike for paperwork, people also appreciated good communication and good governance, seeing newsletters as evidence that interface organisations were effective. Without media such as websites and newsletters, transparency of processes, and therefore accountability to those people who live in remote locations, would be difficult to achieve. Importantly, the need to build local capacity in communication technologies was identified in the community interviews and was seen as a process that could overcome some of the issues of scale, time and transport costs. In a related way, the Government interviews emphasised the need for flexibility and adaptation in NRM engagement, for example, the need to use initiative to communicate across dispersed communities.

The importance of defining the appropriate scale and scope for good engagement was recognised throughout the literature review and also resonated with the findings of the interviews. For community interviewees there was a strong local dimension to many of the success factors that were identified. For example, there was a tendency for people to focus on small-scale, local issues such as the preservation of a specific species, or waterhole, rather than conceptualise 'success' in terms of the LEB as a whole. The government interviewees agreed on the need for 'on-ground action' but also emphasised the need to be aligned with government programs that are focused at the state or national level. This is not surprising, given the sheer scale of the LEB and the various landscapes, land uses and localities it contains. Ideally, a place-based approach can assist to link these scales, by tying local action to national issues.

Some of the barriers to successful engagement have the potential to be overcome given sufficient human resources, technical expertise and money. Maintaining credible staff and avoiding community burnout are major issues for NRM in general, and this research demonstrated acute reliance on particular individuals throughout the LEB who take on multiple roles. There is merit in questioning whether better resourcing of such 'community champions' might alleviate burnout – or whether emotional fatigue stems from structural factors, such as a small population, rather than the lack of resourcing or recognition of their work.

In considering the success factors presented in this research, it is clear that NRM engagement requires a multitude of seemingly contrasting characteristics: to be independent yet maintain effective partnerships; to be the voice of the community while being in alignment with government priorities; to be determined yet adaptive. This demonstrates that the very nature of interface organisations poses a challenge in terms of having multiple and frequently competing aims and priorities. However, at least it is clear that these challenges are recognised by community members and government officers alike, as was the importance of supporting successful engagement processes. This was reflected in the high degree to which the participants who took part in this research were keen to hear of the outcomes of the study, to contribute towards and receive the outcomes of the 'factors for successful engagement' presented in this study.

Summary: Tools for successful NRM engagement in LEB

1. Work strategically in the system

Successful NRM engagement relies on maintaining community trust while carefully navigating governance processes.

Learn how the system works

- Understand the rules and cultures and know how and when to use them.
- Ask about the meaning between the lines when policy is ambiguous
- Be strategic: look for the right mix of regional independence and fitting in with federal and state government priorities.

Be adaptive

- Over time community perspectives and priorities change
- Adapt to changing governments and processes

Use partnerships effectively

- Recognise the value of long-term collaborations
- Link with agencies, research and industry
- Meaningful inputs require meaningful outputs

Maintain transparency

- Let the public know about decisions taken
- Publicise outcomes effectively e.g. online
- Maintain necessary documentation
- Keep people informed: knowledge is power

2. People play multiple roles in sparse populations

Recognise the different roles you play

- Interface organisations have different roles, from delivering government programs to eliciting community views
- Wear the right hat for the job

Develop community ownership

- If possible, avoid acting just as 'another arm of government'
- Listen to community perspectives and be mindful of community concerns
- Engage community sectors in meaningful decisions that affect their interests

Build and maintain trust

- Acknowledge, accept and respect different perspectives and interests
- Negotiate fairly and openly

Desert talk

- Face-to-face communication is best but expensive across large distances
- Be flexible with technology when face to face is not an option
- Plan to make communication inclusive

3. Recognise desert champions

Remote NRM depends on key individuals. Recognising and supporting these people is crucial to successful engagement.

- Individuals can make or break NRM projects in remote regions
- Build and support community advocates
- Long-term staff are more likely to have the experience, respect and credibility.
- Encourage people who are good on the ground, natural communicators

4. Take advantage of opportunities

Opportunities can be unpredictable and infrequent in remote regions. Like with desert rain, take advantage of circumstances when they come.

Access resources when you can

- Look out for changes in funding environments
- Take advantage of visits – a friendly talk can make a big difference with the right people

5. Focus on desert time frames

Thinking ahead and maintaining commitment are crucial to long-term survival.

Think of long-term results from short-term initiatives.

- Work towards an agreed vision
- Plan for future opportunities
- Call in a favour when you need to.

Be determined

- In remote regions, maintaining enthusiasm and commitment is crucial
- Initiative and perseverance help get access to information and resources

1. Introduction

This chapter was developed as part of the 'People, communities and economies of the Lake Eyre Basin' project. It builds on earlier work, including a regional profile of the Lake Eyre Basin (Herr et al 2009) and a discussion of institutional arrangements (Larson 2009).

The Lake Eyre Basin (LEB) is situated in central Australia and spans the borders of South Australia (SA), New South Wales (NSW), Queensland (Qld) and the Northern Territory (NT). At approximately 1.2 million square kilometres, it covers around one-sixth of the Australian landmass and is among the world's largest internally draining river systems. There are few large towns in the LEB and population density is generally less than 1 person per 1000 square kilometre. Aboriginal populations are low in most of the region, although there are 59 Aboriginal language groups. However, there are some settlements where Aboriginal people are the majority of residents (Herr et al. 2009). The mix of economic activities includes mining, pastoralism and tourism. The LEB is valued for its unique ecosystems, which support rare and endangered plant and animal species such as the Greater Bilby, the Kowari and Waddi Waddi trees. Given the remoteness of the area, human populations are dispersed.

It is important to recognise that there are features specific to natural resource management (NRM) in remote locations such as the LEB. As a result, a generic list of 'factors for successful engagement' may not suit the unique circumstances of this region. Issues that are common to rural Australia – such as drought, declining terms of trade, threatened profitability and population decline – are compounded by the sheer size, isolation and harsh climatic conditions in remote and arid lands (Herbert-Cheshire 2000). The aim of this study was to assess how the 'special features' of the LEB affect engagement factors and identify strategies that fit these specific circumstances.

The next section presents an overview of the literature on successful community engagement processes for NRM, and includes an overview of the current NRM arrangements in the LEB. Section 3 summarises methods used for the collection of the primary data through interviews with the government representatives and the community members. Findings of the interviews with eight government liaison officers representing both state and federal organisations who are responsible for coordinating and facilitating regional NRM in the LEB are then presented in Section 4. In Section 5, community perspectives on successful engagement processes are presented, drawing on a novel research methodology, namely community-based research. The aim of reporting this methodology is two-fold: to provide transparency in the research process itself and to assess the efficacy of the community-based research model for studies of this style. The chapter concludes with a discussion that links the findings of the literature review, the government interviews and the community interviews and summarises the key 'tools for successful engagement' (Section 6).

Summaries of the key findings from this research are also presented in the executive summary and the non-technical summary at the start of this chapter.

2. Overview of engagement processes and remote NRM

The following section sets the scene for community engagement in the LEB by assessing the literature on this topic. First, the contextual backdrop of 'regionalism' is explored, followed by an overview of community engagement for NRM. The remainder of the literature review draws upon Aslin and Brown's (2004) detailed account of community engagement, providing a template of community engagement criteria through which to compare the efficacy of community engagement within the regions of the LEB. While Aslin and Brown's (2004) 'terms of engagement' provide the theoretical framing for this study, other literature is also drawn upon to provide a critical overview of the process of community engagement for effective, collaborative NRM. Special attention is given to literature relating to engagement and NRM in arid areas with low population density.

2.1 The context: regional natural resource management

The regional NRM policy environment, which has characterised recent years, reflects a focus on decentralised processes as a key strategy for effective community engagement. Central to the current NRM context is the role of regional institutions that interface between local groups and issues, and national funding priorities. Given the combination in Australia of frameworks such as the National Action Plan for Salinity and Water Quality and the Natural Heritage Trust, and the regional application of those frameworks, these institutions take the form of NRM citizens' boards and statutory committees concerned with implementing on-ground change at the regional level (Farelly 2005, Lane et al. 2004, Lane et al. 2005a). For the purpose of this project, we use a broader term 'interface organisations', as this concept allows us to also include institutions such as regional associations and committees, which fulfil a similar role in terms of regional interface in the LEB but are not necessarily recognised as formal NRM regional bodies. Therefore, the concept of 'interface organisation' refers to those organisations that serve as linkages between broader NRM policy frameworks and the on-ground, regional application of those policies.

The focus of this research is to improve the function and design of interface organisations in order to build their capacity to engage with NRM issues of relevance to the LEB and to help them become more adaptive to the changing needs of the NRM policy environment and the LEB itself. The role of engagement is central to this capacity to manage and to adapt, as demonstrated by a strong focus on the role of engagement in both theoretical and applied contexts (Leach et al. 2005, McDonald et al. 2005).

While recognising the key ingredients of successful community engagement within the regions of the LEB, it is also worth taking a step back to briefly address the concept of 'region' and the current trend in the US, Europe and Australia towards regionalism (Moore & Rockloff 2006). In this context, regionalism refers to a process of governance whereby the state devolves responsibility for regional decision making, planning and service delivery to the regions themselves (Abrahams 2005, Everingham et al. 2006). Partnerships, such as those between civil society and 'the government', have become an increasingly popular way to respond to environmental issues such as soil erosion and salinity, resulting in the emergence of new relationships between previously disparate groups such as the farming sector, conservationists and Australian and State Governments (Lockie 2006). As such, 'the community' and 'localities' become the new territory for governance.

In considering the factors affecting the success of community engagement processes, it is crucial to consider how community is defined, given the multiplicity of ways that the term is used in the social sciences (Jewkes & Murcott 1996). The term 'community' has been a contentious term in social research for at least the last 100 years, but it represents an important, multi-dimensional concept for NRM in Australia (Broderick 2005). For these reasons, it is important to consider who is the community involved in a given engagement process, and what cultural and power relations are reflected in its definition (Liepins 2000). Within the context of this research, the community can be conceptualised as the residents and organisations involved in managing the natural resources of the LEB.

With these new localised community responsibilities comes the need for rights and resources. Rights imply that the community has the autonomy to make decisions, while resources such as skills, human capacity and finances are necessary to enable the creation and implementation of NRM activities, such as regional planning (Stafford Smith 2000). This is a particularly pertinent issue for NRM governance in the LEB, as Stafford Smith (2000) has noted, in recognising that the special characteristics of the Australian outback require regional organisation to facilitate more localised planning in partnership with the three tiers of government.

In these early stages of the new regionalism, it is not surprising that debates have arisen about the extent of governments' devolvement of rights and resources. Some have argued that the responsibility of NRM planning and management has been devolved, but not necessarily alongside the resources and power

to effect change (Herbert-Cheshire 2000, Lane et al. 2005a). Gaining consensus across government, business and civil society has also been a difficult and complex process (Whelan & Oliver 2004). Despite such perceived shortfalls, networked forms of governance can promote entrepreneurialism, long-term private commitment and landscape-scale management (Lockie 2006) and social inclusion (Whelan & Oliver 2004).

Regional institutional arrangements in the LEB, within the context of the policy direction of de-centralised governance arrangement in Australian NRM, have been described in Larson (RD REF 2007). The next section provides overview of that report and highlights how legislation and policy in the state jurisdiction have resulted in different institutional responses to regional NRM.

2.2 Overview of the NRM arrangements in the LEB

The LEB region NRM institutions are organised into four state-based bodies:

- South Australian Arid Lands Natural Resources Management Board (SAAL NRM)
- Western Catchment Management Authority in NSW (WCMA)
- Desert Channels Qld Inc. in Queensland (DCQ)
- Northern Territory Natural Resources Management Board (NTNRM).

This summary provides an overview of the current NRM arrangements in each State/Territory that has an interest in the LEB region, followed by an overview of arrangements directly relevant to the LEB. The summary concludes with potential key challenges for NRM in the LEB region.

Data and arrangements presented throughout this report were current as of March 2007. Further details on the formal NRM arrangements and related engagement issues can be found in Larson (2009).

2.2.1 State/Territory-level NRM arrangements

An overview is presented here of the current NRM arrangements in the States and Territory having an interest in the LEB. In accordance with Australia's regional system of NRM, all the regional bodies operating in the LEB have legal responsibility for the NRM activities they conduct, but there is a difference between the states in terms of whether or not those responsibilities are directly conferred on them by statute, or whether they operate within a wider legal framework of contractual law and delegated powers. The difference between NSW/SA on the one hand and Qld/NT on the other, is that the former have statutory authority and powers and the latter do not. Despite this, the Qld regional bodies still have legal responsibilities for the NRM programs they administer, which are contractual responsibilities. They also have legal responsibilities under their various corporations and companies' Acts, which are the basis for their existence. The various government officers on the Qld/NT Joint Steering Committees have delegated legal authority to administer Government NRM programs, but government ministers have the ultimate authority.

2.2.2 Regional NRM arrangements

This subsection summarises key characteristics of the NRM bodies administering the LEB region. The regional NRM plans have been finalised and endorsed by government for the NRM bodies responsible for the Qld and NT sections of LEB. The Plans are still in the development stage for the NSW and SA regional bodies. The main NRM themes, aims and objectives or key assets for the NRM work identified in the Plans or preceding documents, can be summarised as Land, Water, Biodiversity and Community. The NT plan also adds 'NRM institutions and knowledge' to the list.

Objectives of the engagement strategies are also specified in the Plans and related documentation. Queensland and NT NRM plans are based on an approach that identifies the key threats to the regions. They then proceed to set management areas and targets for overcoming the threats identified. Key threats identified in the Desert Channels Queensland (DCQ) Plan are ineffective community engagement

and inadequate planning, leading to inadequate sustainability targets. The Plan for the NT concentrates mainly on NRM data collection and provision of this information to the communities as the main objective of engagement. The Western Catchment Management Authority (WCMA) appears to see itself as a 'funding broker', as most of their engagement targets are in the area of assistance with funding and provision of technical expertise for development of projects/funding applications to promote community involvement in NRM projects. The 'Concept Statement' of the South Australian Arid Land Natural Resources Management (SAALNRM) Board presents three broad categories for engagement, all based on similar themes of education, capacity building and increasing public awareness.

2.2.3 Common threads and threats

The following threads have been identified as common to all four legislative regions of the LEB, compared with Australia in general:

- high percentage of land under leasehold arrangements
- high percentage of land under native title claims
- high percentage of land in Aboriginal ownership
- high percentage of Aboriginal populations
- sparse population resulting in quantitatively low human capital
- large physical areas under administration by a single NRM board.

The following key specific issues of the NRM engagement in remote regions of Australia were also identified (Larson 2009):

- No single 'right' scale for management exists: collaboration between regional and local levels and between regional level and key national (both government and commercial) players is needed. 'Horizontal' coordination between and among NRM bodies is also needed.
- Development of capacity of both agencies and communities is essential to enable effective engagement in the process, yet it is complex and expensive: complexity and expense of capacity development should not be underestimated.
- Tension between local knowledge and scientific knowledge needs to be resolved: better linkage of local knowledge and science with policy-making would not only aid in the development of more acceptable policy actions but also in development of robust monitoring programs.
- Availability of data on cultural, social and ecological values placed on natural resources in remote regions is limited: efforts of the NRM bodies are experiments in ecological interventions. They therefore need to be carefully and continuously monitored, recorded, audited and adapted.
- The vital role of volunteers in regional NRM needs to be recognised and supported. The role of 'champions', and ways of recruiting and maintaining their interest, warrants further investigation.
- Traditional owners need to be better acknowledged as key stakeholders. Engagement mechanisms viewed as suitable and appropriate by both Aboriginal and non-Aboriginal stakeholders need to be developed.
- The 'stakeholders' concept needs to be expanded beyond current limiting identification of 'stakeholders' with 'land holders'. Greater involvement of other segments of local community, communities of practice, commercial enterprises and others with interest in the region should be encouraged.

- The devolution of responsibilities needs to be concurrent with the devolution of rights and resources. Although this issue is pertinent to any NRM process, it is potentially even more significant in remote regions where human, financial and other critical resources are chronically limited.
- Significant retention of power with the Joint Steering Committees (JSCs) and/or Minister, depending on the State/Territory arrangement, might undermine stakeholder rights in the NRM process. More importantly, stakeholders' perceptions of retention of power undermines the perception of rights and therefore, in the long run, might undermine trust in government and government-based and funded institutions.

2.3 Engagement within regional frameworks of governance

Effective engagement between residents, managers and scientists represents an important aspect of sustainability in dryland environments and NRM in general (Reynolds et al. 2007). Given these new and emerging collaborations, the topic of civic, business and government engagement has been widely embraced from a range of different perspectives and disciplinary areas (for example see Leach et al. 2005, Boxelaar et al. 2006), although with perhaps more emphasis on 'engaging communities' rather than looking critically at how all parties can effectively collaborate. Oliver and Whelan (2003) also caution about the use of the term 'engagement' due to its militaristic overtones. It is acknowledged in this chapter that discourses concerned with how 'we' engage 'them' raise concerns about power and the true extent to which rights and responsibilities have been devolved. However, much of the literature makes genuine attempts at collaboration through 'engagement' without critically appraising specifics of power. The term 'engagement' is used throughout this chapter with this in mind.

Aside from the nuances of the terminology of 'engagement', the importance of fostering and harnessing community engagement has been identified as crucial to building a prosperous future for rural and remote regions in Australia and is a key dimension of regional NRM (Fenton 2004, McDonald et al. 2005, Rogers 2005, Smith et al. 2005). Campbell (2006) emphasises the critical role of knowledge sharing in engaging community sectors as well as the need to give proper status to local, scientific and organisational knowledge. Effective collaboration and engagement is fundamental to forming legitimate relationships between individuals and institutions. With new regional organisations such as regional NRM bodies at the centre of planning and decision making in regional areas, effective engagement between different knowledge cultures, and between policy and practices, is crucial. This has been demonstrated in a body of work that is concerned with 'boundary organisations', which serve to mediate between different knowledge cultures, such as science and politics (Miller 2001) or farmers and scientists (Carr & Wilkinson 2005).

The diversity of the population of the LEB presents a challenge for effective collaboration through interface organisations. While NRM interest groups within the LEB do contain scientists, farmers and politicians, there are other residents and interest groups, such as Aboriginal people, conservationists and extraction industries, whom regional decision making affects. Sectors of industry become actively engaged when they see that their understanding is relevant to decision making and that the outcomes of decisions affect their interests. Collaborating with such a diverse body of interest groups, across large and remote areas, certainly presents a challenge for engagement, as Whelan and Oliver (2004) have noted.

Successful community engagement in the Australian NRM context has been conceptualised as processes and practices in which different people work together to achieve shared goals. In Aslin and Brown's (2004 p. 5) conceptualisation, community engagement 'goes further than participation' and involves capturing people's attention and focusing their efforts on the issues at hand.

2.4 Success factors from literature review

A key source for practical guidance on successful community NRM engagement in Australia is the toolkit developed by the Murray-Darling Basin Commission (Aslin & Brown 2004). Neighbouring the LEB, the Murray-Darling Basin has its own challenges; however, Aslin and Brown's 'toolkit for engagement' presents a very useful starting point for assessing the key processes of community engagement, and their 'degree of fit' with arid zone NRM. Other important reference points include work by Carr (2002), Cheshire (2006), Lucas et al. (2005), Nelson and Pettit (2004) and Selman (2004). The following success factors identified in the literature will be discussed further in the sections below:

- community ownership
- promotion of inclusiveness, equity and trust
- inclusion of multiple interests
- focus on strategic outcomes
- transparency
- well-defined appropriate scale and scope
- sufficient resources and access to assistance
- effective communication.

2.4.1 Community ownership

A key success factor is the importance of community ownership of any given process. Part of this involves a recognition that defining and 'owning' a given NRM problem can be a matter of community self-determination and a basis for commitment to management processes (Andrew & Robottom 2005, Measham 2007). In part, this stems from participants having a genuine interest and ability to contribute. In addition, a key issue is making sure that people's voices are listened to and that feedback is provided (Lane et al. 2005b). A practical example of this issue in regional NRM contexts is presented by Walker and Lewis (2006), who found that listening to people's comments and making sure they were 'satisfactorily addressed' was one of the factors that helped to make their engagement process work when reviewing regional NRM targets in the Qld section of the Murray-Darling Basin.

One way to foster community ownership is to avoid relying on self-nominated spokespeople to provide adequate representation (Aslin & Brown 2004). The problem of representation is not unique to Australia. Marshall and Jones (2005) conducted research in Norris Reservoir Watershed in Tennessee, USA, to assess whether the citizens who participated in NRM processes were representative of the residents and stakeholders who were impacted upon by the decisions made. When compared with the residents who lived in the watershed, participants were found to be 'older, disproportionately male, more educated, and more affluent, and as having higher levels of political efficacy and trust in governments' (Marshall & Jones 2005 p. 731). This raises questions about the reasons for the lack of participation of a broader range of residents in regional NRM, leading Marshall and Jones (2005) to speculate whether this was due to low levels of political efficacy and trust, or whether the pursuit of genuine broad-ranging participation was an unattainable democratic ideal. However, legitimacy of the policy implementation develops more easily through shared collaborative actions (Considine 2004). Aslin and Brown (2004 p. 45) identify 'deliberative democracy' as a process that can break away from the domination by experts and pre-nominated spokespeople by using consensus-based decision making models such as citizens' juries, deliberative opinion polls and electronic voting.

Another element of promoting ownership includes developing and agreeing on foundation principles for engagement processes. For example, the values underpinning engagement in the Murray-Darling Basin are stated up front in their engagement toolkit and referred to throughout the text (Aslin & Brown 2004). Those that are relevant to this study include inclusiveness, commitment, respect and flexibility.

In considering community ownership as a success factor in relation to remote regions such as the LEB, it is important to explore how issues such as low population density will affect the strength of community ownership in regards to engagement processes (Stafford Smith et al. 2003). An adequate frequency of interaction may be hard to maintain due to the scale of the LEB and the time and costs in establishing and maintaining linkages and networks. On the other hand, a strong overlap between community of interest and community of place1 may play a role in facilitating community ownership of engagement processes in remote areas.

2.4.2 Promoting inclusiveness, equity and trust

The potential for inequality in terms of reflecting community interests has been well recognised in regional NRM and community-based approaches to environmental planning (Lane & McDonald 2005). For these reasons attempting to treat people 'fairly and without discrimination' has been noted as a key success factor in community engagement (Aslin & Brown 2004). These issues can be heightened when engaging with communities that have a history of tokenistic or manipulative engagement in the past.

While participatory equity is of concern at the regional level, where citizens engage with interface organisations such as NRM regional bodies, it is also worth evaluating the equity and inclusion at a higher scale: the relationship between interface organisations and governments. Whelan and Oliver (2004) note the difficulties in forming equitable partnerships between government and civil society, as represented by groups such as regional bodies. They offer the example of a south-east Qld NRM regional body that was charged with the development and implementation of a regional NRM plan, questioning whether this and similar partnerships can truly be equitable and autonomous when both the plans and subsequent funding have to be approved by committees that are steered by Australian and State Government officials.

The establishment of trust in organisations and institutions is necessary for the shift of rural governance from control to partnerships. Trust can be described as an element of social relationships where there is interdependence among groups, uncertainty or risk in relation to the behaviour of others (individuals or institutions) and the expectation that vulnerabilities will not be exploited (Rus & Iglič 2005). Rus and Iglič (2005) identify two different types of trust: interpersonal and institutional. Interpersonal trust is derived through strong links and ties between particular people. This type of trust is based on historical ties (kinship, long-term friendships) and the quality of the relationship between people or groups. Institutional trust is more generalised and extends beyond trust relationships of individuals. Institutions have capacity to build trust when they display socially acceptable characteristics, such as impartiality, justice and honesty, and mediate conflictual relationships (Rus & Iglič 2005). These are essentially measures of trust, to which can be added accountability and transparency. Theoretically, this generalised trust is necessary to forge strong cooperation where weak ties exist and to connect to different social circles. In the absence of trust, political/civic relations are precarious to say the least (Sztompka 1999). It could be further theorised that reputation is a form of 'pre-emptive trust' and is necessary to build and maintain linkages between diverse groups and institutions. This is particularly important in sparsely populated areas such as the LEB, where ties have the potential to be weak. One suggested approach to building trust is to employ expert teams that are independent of interested parties such as government departments or politically motivated organisations (Nelson & Pettit 2004). However, this strategy may be complicated for remote regions given that the expert teams, or even policy-based teams, may not be based within the region and may not be attuned to its particular characteristics.

Solutions:

- Give people the opportunity to participate.
- Develop and agree on principles for engagement processes.
- Do not rely on self-nominated spokespeople to provide adequate representation.

1 'Community of interest' refers to a community that is brought together around a particular issue, whereas 'community of place' refers to people that form a geographical community (e.g. town). In the case of communities within the LEB, these communities sometimes overlap.

2.4.3 Including multiple interests

Community groups are stronger when they are confident in their links to important information, community resources and key decision makers who can affect outcomes (Considine 2004). While it is not necessary for all members of a given community to participate in an engagement process, a generally recognised principle of successful engagement is that all members of a given community are able to participate in a given process, contributing ideas, energy and action (Democracy 2000). For example, in an engagement process for regional planning in the Qld section of the LEB, DCQ sought to include community development, conservation, education, Aboriginal, industry and local government interests, among others. In addition, they identified a three-tiered hierarchy of interest for their community: generally aware citizens, interested land holders and engaged land managers (DCQ 2004). This approach is consistent with the broadly recognised importance of creating opportunities for interaction among diverse groups in order to achieve successful engagement in NRM (Wondolleck & Yaffee 2000).

In northern Australia, recognising and accommodating diversity of interests has proved fundamental to successful NRM planning (McDonald et al. 2005). Similarly, in the Murray-Darling Basin, a key issue has focused on achieving balance. For example, in considering the engagement process developed for reviewing their regional NRM targets, the Queensland Murray-Darling Committee found that some important stakeholders were missing from the process, notably Aboriginal stakeholders. However, while some interests were missing, they also found that those which were represented were balanced in terms of the opportunity to engage, and this was a success factor in their process (Walker & Lewis 2006). Within the LEB, the range of land uses is likely to be fewer when compared with more densely settled areas, which should reduce the complexity of including multiple interests, as reflected by the community engagement processes conducted by DCQ (DCQ 2004).

2.4.4 Focusing on strategic outcomes

Working towards an agreed vision with clear objectives is a crucial issue for successful engagement. With a focus on acting for change, Aslin and Brown (2004) emphasise the importance of co-developing and sticking to agendas and warn against pursuing too many tangents. These issues were reflected in the regional planning, whose underlying principles had a strong focus on shared issues and using clear documentation, with a view towards effectiveness and seeking opportunities (for example, see SAAL 2007, DCQ 2004). Walker and Lewis (2006) found that maintaining some continuity of participants helped to maintain a link with the initially intended outcomes, and this helped participants to maintain focus on what was strategic. Keeping to the strategic points only and not broadening the agendas too much also minimises the overload with both information and the participation requirements in small communities. In relating this factor to remote regions such as the LEB, it is important to note that what is strategic is culturally defined, and therefore a significant Aboriginal presence can add additional challenges and opportunities to engagement issues. The key lesson here is, however, to look at NRM problems from multiple angles and be proactive about developing solutions (Wondolleck & Yaffee 2000).

Solutions:

- Be strategic: make the case why desert systems are worthy of government investment.
- Work towards an agreed vision.
- Know what you need in advance so you are prepared for funding opportunities when they arise.

2.4.5 Maintaining transparency

The importance of transparency has been emphasised as a success factor in many engagement processes. Lucas et al. (2005) emphasise the issue of transparency in decision making. Central to transparency is the need for open negotiations and avoiding hidden agendas. This includes being open about constraints to processes and outcomes to ensure these are understood. Openness about constraints in turn makes it easier to manage expectations and also promotes trust, as discussed above. A practical aid to achieving this is having clearly defined roles among the project team to help people to work together more effectively (Walker & Lewis 2006). The maintenance of transparency can be assisted by effective communication, which is discussed below. In remote regions, transparency can be challenging due to having engagement strategies that need to rely on technology (telephones, e-mail) rather than decisions being negotiated and sustained through face-to-face interactions.

Solutions:

- Keep people informed of engagement processes and opportunities for input.
- Let the public know about decisions taken.
- Conduct self-evaluation to keep processes clear.

2.4.6 Define appropriate scale

Scale is a crucial dimension to successful engagement processes, with regional interface organisations themselves reflecting a shifting thinking towards rethinking scales for management (Brunkhorst & Reeve 2006). However, it is important to keep in mind that recent socio-ecological thinking suggests that there is no single appropriate scale; rather, NRM processes need to focus on relevant scales for given questions and on working across the scales (Lane et al. 2005a, Reynolds et al. 2007). In practical terms, a key issue is to seek an appropriate 'fit for purpose', or to avoid the potential for mismatch between function, perception and operations (Aslin & Brown 2004). In this context, it is important to make clear at what scope the group is operating: what it is expected to do and what is outside its terms of reference. While the regional NRM model is strongly associated with the regional scale, it is worth noting that in some cases the sub-region or local scale may be more appropriate for successful engagement. This is because the local scale is important to the ways that humans interact directly with their environment and with each other (Lucas et al. 2005). One way to increase the success of engagement processes involving local stakeholders has been through promoting place-based formal and informal institutions, such as boards and forums (Selman 2004). This relates to the importance of a sense of place to the success of regional NRM groups in general. Sense of place in successful NRM groups does not need to be tightly defined but can involve a shared sense of identity, attachment to a given location and the associated meanings with given locations (Carr 2002, Gooch 2003, McDonald et al. 2005). Scale, in terms of the number and density of people compared with the geographic area, clearly raises distinctive issues in remote regions.

2.4.7 Sufficient resources and access to assistance

It is important to make sure engagement processes are sufficiently resourced (Aslin & Brown 2004). An important lesson from research on community-based catchment initiatives is that adequate resourcing is required in order to avoid emotional fatigue and a low sense of accomplishment (Byron & Curtis 2002). In particular, time requirements for successful engagement processes should not be underestimated. For example, Nelson and Pettit (2004) found it challenging to legitimately engage with communities on forest management and planning due to the restrictive time limits available for the process. In practice, even when acknowledging the issue of allocating sufficient resources, it is easy to underestimate the actual timeframes required for processes to work (Walker & Lewis 2006). Even when initiatives are supported by highly committed groups with well-structured processes, the implementation timeframes might be long enough to be impacted by change in political agendas and priorities or by gaps in budget

cycles. In remote regions, obtaining adequate resources for engagement processes is likely to be further hindered due to sparse populations, which have higher costs, in both time and money, for transport over longer distances (Stafford Smith et al. 2003). Counteracting this, the smaller community size may permit relatively more rapid agreements within community, if existing community networks are comprehensive.

2.4.8 Communicate effectively

Effective communication is an important success factor both in conducting engagement processes and dissemination of the outputs of these processes. One important aspect of communication is adequately documenting each stage of the engagement process and having documents available for referral at later stages of the process. In this way, communication is an important issue in maintaining transparency. Communication is particularly relevant to the provision of feedback as part of the engagement process. For example, to promote community engagement DCQ sought to effect communication with their community and encourage participation and feedback by using mechanisms such as newsletters, brochures, websites and information papers. They also used local media to disseminate information about their engagement process (DCQ 2004).

Personal contact has been found to be an important factor in effective communication. Rather than relying on written communication, direct face-to-face processes have been found to be more successful. Furthermore, tailoring personal contact (and communication in general) to suit different people and knowledge cultures is important (Selman 2004). The degree of personal contact is particularly relevant when certain elements of the engagement process are imposed or pre-defined, or when engagement includes trialling externally developed information tools (Nelson and Pettit 2004). However, it is important to remember that personal communication is particularly expensive in sparse and remote regions such as the LEB due to the distances involved.

2.5 Dimensions of success

A key discussion issue with the success factors for engagement, discussed above, is that they are highly contextual. For example, 'community ownership' is inherently tied to who the community is. In this way, the degree of community ownership relates strongly to the characteristics of the interface organisation concerned, their perceived objectives and their perceptions of who they should be engaging with. Furthermore, these broad success factors are interrelated. For example, the effectiveness of communication, and the level of personal contact in particular, rely heavily on the resources available for the engagement process under consideration. Equally, the principle of focusing on strategic outcomes is entirely context specific and relates directly to the principle of working at the appropriate scale for the context.

A second key discussion issue is that the success factors for engagement are intended to represent broad ideals rather than measurable criteria. For example, community ownership refers to a general sense of identification with the process, rather than a quantifiable attribute. On the other hand, some of the factors are measurable in their own right, such as trust. However, it should not necessarily be required to precisely quantify the success factors, but rather to determine the level perceived as sufficient by those engaged in the process at hand. Maintaining equity and including multiple interests are also readily listed as success factors for community engagement in the literature (e.g. Aslin & Brown 2004). However, several case studies considered in preparing this overview openly identified the fact that not all interests were included (e.g. Nelson & Pettit 2004, Walker & Lewis 2006). In this context the review emphasises the importance of promoting equity and seeking inclusion as much as possible to be the factors associated with success.

As the broad factors presented in this overview are interrelated, it is clear that citizens or interest groups who are not part of the process cannot have 'ownership' of the process, even if they aspire to. It is also acknowledged that seeking greater equity and attempting to include wide interests, and the 'ownership' that may flow from these, are important goals, but that they may never be completely fulfilled (Lane & McDonald 2005). In the same vein, focusing on strategic goals does not necessarily mean that strategic goals will eventuate. Rather, the significance of this factor is more to do with the focusing part of the process, in terms of distilling what is strategic in a given context. As a final note in line with the discussion above, this review makes no suggestion that what is strategic for one person or group is necessarily so for another.

3. Methodological approach

Having assessed the literature and identified a set of 'generic' success factors for engagement around NRM issues, it is useful to ask 'what are the factors that are specific to arid and remote locations such as the LEB?' The methodological framework used to consider this question is addressed in this section. Secondary data and literature collected and analysed for the purpose of this project are presented in section 2. Primary data were collected through interviews with the government representatives (section 4) and the representatives of the communities of the LEB (section 5). The following sections provide details of how this research was undertaken.

3.1 Government representatives

Key government representatives were identified as the Regional Liaison Officers responsible for achieving effective NRM collaboration throughout the LEB. Liaison officers were approached in the Australian and State Governments, leading to a total of eight interviews. Interviews were semi-structured and conducted by experienced social scientists working on the 'People, communities and economies of the Lake Eyre Basin' project. All interviews were recorded digitally and transcribed. The content of the transcripts were analysed to identify key themes with the assistance of NVivo qualitative analysis software. These themes form the basis of factors for success reported in section 4 of this chapter.

3.2 Community representatives

Unlike 'conventional' social research, this project tapped into local knowledge and networks by engaging and training LEB community members to collect information by conducting interviews in their local areas. The interviews with LEB residents were conducted by community-based researchers (rather than external 'experts') in line with methodological principles developed by Rea and Young (2006) and Leung et al. (2004). As locals themselves, community researchers can tap into existing networks of trust and are well versed in the challenges of NRM in arid and remote areas.

During the information collection stage of the study five community-based researchers interviewed 49 people who were each in some way involved in resource management. Those interviewed included pastoralists (who were highly represented), rural consultants, NRM committee and board members, people involved in landcare, local council officials, people connected to the mining industry, 'on-the-ground' project officers and other people well connected to their local community through paid or voluntary work. Researchers also ensured, as far as possible, that diverse opinions were heard; therefore, a mix of men and women and older and younger people were interviewed, as well as long-time locals and newcomers.

There are some limitations to this type of research in large, socially and geographically diverse areas such as the LEB. For instance, attempts made to engage a community-based researcher to talk with Aboriginal people within the LEB were unsuccessful. Similarly, most interviews were held in SA and Qld, therefore the views of NT residents are not well represented here. This section should be read with these limitations in mind.

The community interviews research involved four key steps:

- **Selection and recruitment of the community-based researchers**

  Community-based researchers were purposefully selected by Lynn Brake, a member of the research project steering committee with extended networks and a history of interaction with the LEB community. The general criteria for selection were that people lived in the LEB, were keen to participate in the research and that they were available to be involved in workshops and conduct interviews in late 2006 – early 2007. Community-based researchers were paid a modest flat fee and provided with digital recorders.

- **First workshops**

  Workshops were facilitated by Tim Smith and Cathy Robinson (CSIRO) in Adelaide and Brisbane in late 2006 to discuss the project requirements and seek input from the community-based researchers. During workshops, CSIRO and community-based researchers developed a short list of interview questions and piloted them in-house. Discussions were also held about the best way to select, approach and interview LEB community members.

- **Data collection and analysis**

  The next stage of the process was the fieldwork itself, where community-based researchers arranged and conducted interviews. Most researchers conducted between 8–12 interviews, depending upon logistical issues such as travel time and the availability of interviewees.

  The interviews were recorded, then transcribed and analysed by the project team, grouping responses into qualitative themes with the assistance of NVivo software, a computer-assisted tool for the systematic analysis of large volumes of written information, such as interview transcripts.

- **Second workshop**

  The second workshop was held at the St Lucia CSIRO office in Brisbane during April 2007. Two community-based researchers, Gemma Litchfield and Margaret House, attended the workshop, and Adam Bester and Sally Cripps contributed via a conference call. Lynn Brake, consultant to Desert Knowledge CRC, also attended the workshop. The workshop was facilitated by Cathy Robinson and attended by Carol Richards, both of CSIRO.

  The purpose of the workshop was two-fold. First, to assess the effectiveness of the community-based research model for understanding the social dimensions of NRM in arid, remote environments. Second, the workshop provided a forum for testing and verifying the findings that emerged from the NVivo analysis.

During the second workshop, community-based researchers reflected upon how they selected people to interview. Four broad criteria for the selection of participants were identified. These four criteria for selection are also represented diagrammatically in Figure 1:

- people who the community-based researchers personally knew or knew by reputation
- the realm of influence of the individuals (leaders, community-minded people, those on NRM boards and committees)
- ensuring diversity (such as age, gender, occupation, job status/level, newcomers and locals)
- logistics and access (distance, mileage, weather conditions, fuel costs).

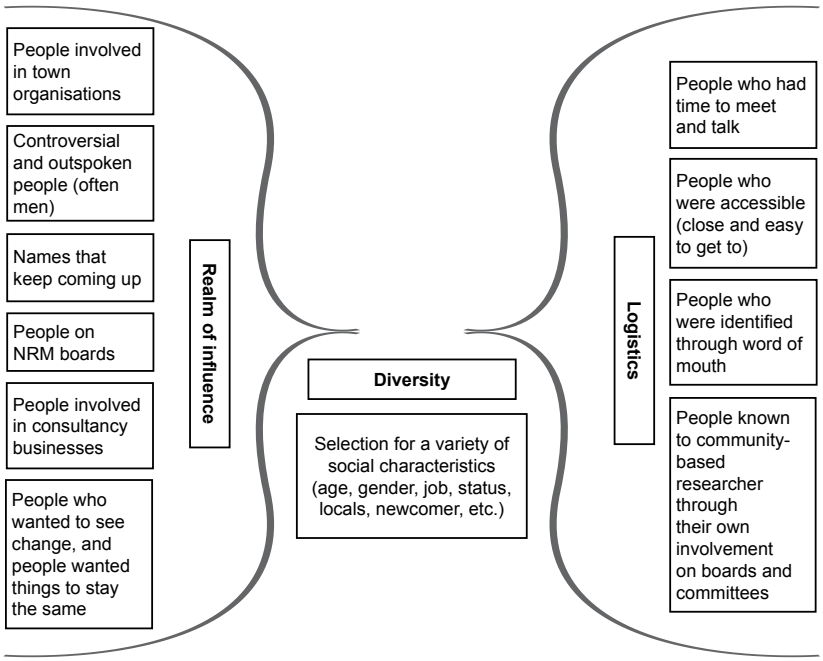

Figure 1: Community-based researcher 'mental map' of interviewee selection process

3.2.1 Mapping the interviewee selection process

Four broad criteria for selection of participants were identified by the community researchers. Each one of them is briefly discussed here.

Personal association

The majority of those interviewed were known first-hand to the community-based researchers, and on assessment it was also felt that those interviewed by each researcher would more than likely know each other, or would have had at least heard of each other. While this may have presented problems of confidentiality, researchers were carefully advised on the need for confidentiality and had explored the ethical aspects of conducting research.

Logistics

The people interviewed were connected through geographical location, as well as social, family, business and organisational links. One of the researchers noted that, had she 'cast a wider net', the links between each of her interviewees would have been more 'tenuous'. Time and financial resource restrictions were also a key pragmatic issue that affected the selection of people, as discussed further below.

Diversity

Community-based researchers were keen to ensure that their sample captured a mix of social characteristics. This included ensuring that the voice of the 'middle-aged male grazier' was not the only one heard. To this end, community-based researchers ensured they accessed a mix of younger and older people, men and women and newcomers as well as those who had longer-term connections to the district. In this way, it was anticipated that a broader scope of viewpoints would be heard.

Of the 49 people interviewed, there was a mix of men and women, pastoralists (who were highly represented), consultants, 'grass roots' people, local council officials, people connected to the mining industry and 'on-the-ground' project officers involved in species preservation work or working with

Traditional Owners on the 'joint management' of country (Table 1). 'Grass roots' was a term often used by the community-based researchers to refer to 'ordinary' people who engaged in pastoral or agricultural activities, as opposed to social or political elites.

Table 1: Occupational roles and gender of people interviewed

OCCUPATION OR ROLE OF INTERVIEWEES	NUMBER
Pastoralist	17
Traditional Owners	0
NRM board or committee (current or past member)	18
Board member of industry bodies (Agforce, etc)	4
Mining industry	3
Local Council elected official or officer	3
NRM officer (Local/State/Australian Govt.)	7
Consultants (agribusiness/pastoral/NRM/ecologists)	5
School principal	1
Joint-management officer (Aboriginal management)	1
GENDER OF INTERVIEWEES	
Male	16
Female	21
Not reported	12

Note: These figures are indicative only, as in some instances occupation, role and gender were not reported. Also note that many people had multiple roles, such as pastoralist and board member, which is why the figures do not sum to 49.

Community-based researchers reflected that a number of people were not reached, such as Aboriginal people and people who may have been influential or have a positive contribution to make but who were not accessible to the community-based researcher for reasons of logistics (for example, distance and costs involved in accessing particular people).

Realm of influence

Interviewees were also selected based on their 'realm of influence'. In many instances, the 'same names were heard over and over' by community-based researchers. Community-based researchers inferred that these people were 'the players' and were well known within their communities for being people who were involved in NRM issues. Some of these people were also known as being 'community people' in town, involved in numerous local projects and events, such as the rodeo, tennis club and the progress association.

It was also recognised that in some instances, such people were involved in local issues due to the fact that 'no one else wants to do it'. Community-based researchers also detected that some people might have been appreciated at the regional level (for example, on boards of regional bodies) but not appreciated at the local level due to the perception that they 'stir up the dust' or are seen as 'cracking the whip' and trying to effect change when the community was not ready.

Some of the key community figures were identified as being outspoken or controversial and were involved in committees and boards because they wanted to effect change, or conversely, maintain the status quo.

Insiders and outsiders

Some of the people interviewed were considered to be 'insiders' by the community-based researchers and therefore well connected to networks through local activities (such as local development groups, or the tennis club) and through membership of NRM boards and committees. Community-based researchers felt that these individuals were well connected and had the ability to 'translate' between the 'grass roots' and institutions.

Those who were considered to be 'outsiders' by community-based researchers were reported as being 'vocal and opinionated about issues' but not necessarily engaged with formal bodies or aware of projects that were occurring. In this sense, 'outsiders" were perceived to be more critical but less informed.

The absence of Aboriginal perspectives

At the second stage of the 'People, communities and economies of the Lake Eyre Basin' project, Aboriginal peoples' perspectives were not adequately incorporated into the research, despite efforts to recruit and support Aboriginal community-based researchers. This included one Aboriginal community-based researcher who agreed to be engaged in the work and another community-based researcher who committed to conducting interviews with key Aboriginal Elders, neither of whom could undertake the task for unknown reasons. An alternative method of capturing the viewpoints of the Aboriginal residents of the LEB is clearly needed, with further effort to engage with Aboriginal communities and representative organisations. This provides a rationale for further investment in understanding Aboriginal perspectives in subsequent stages of the project and studying the success factors for incorporating Aboriginal perspectives into NRM of the LEB.

4. Government perspectives on successful engagement

This section presents the results of the first part of the primary data collection conducted for the purpose of this study. As part of the development of the 'tool kit' for effective engagement, a series of eight interviews were held with government liaison staff, both at the state and federal level. The aim of the interviews was to gain better understanding of the perceptions held by the government staff about the factors of successful engagement. These interviews complement both the literature review and the community interview components of the research.

4.1 Perceptions of the LEB region

Among the government interviewees there was a strong recognition of the challenges for successful NRM engagement processes in remote areas. Compared with other NRM regions, there was a sense that remote regions are less topical, which in turn is reflected in reduced investment.

Given this relative lack of limelight, maintaining effective engagement processes in a remote location such as the LEB requires a high level of extra skill and commitment on behalf of the interface organisations themselves and those they engage with. From this point of view, successful engagement in remote areas requires a high degree of political awareness in order to attract support for resource challenges that have longer-term needs and impacts rather than being the 'hot topic' of the day. Furthermore, there was a perception that even within the LEB, the level of interest about it was variable.

For example, it was perceived by one participant that commitment to the LEB was relatively weaker in the NT. While not all participants agreed that the LEB was of less interest than other parts of the NT, it was nonetheless noted that it was only one part of a large complex planning region, which makes regional planning and regional engagement challenging.

The key to realising this advantage is to develop the most appropriate engagement processes for remote areas, which may need to be different from other NRM regions. A key role for interface organisations, as seen by one regional NRM facilitator, is to understand the perspectives and needs of LEB communities, for without this, management actions may fail due to lack of support.

Within the context of remote areas in general, and the LEB in particular, the following factors were thought to characterise successful engagement process.

4.2 Factors for success

Several themes of successful engagement have emerged from the interviews with the government representatives and are presented below.

4.2.1 Building and maintaining trust

There was a general perspective from government liaison officers that across Australia interface organisations, and particularly NRM Boards, varied enormously in terms of the degree to which they were perceived as 'community organisations' or 'another arm of government'. The way that communities engage with interface organisations was seen as intrinsically linked to this perception. In the case of the LEB, two of the main interface organisations (SAAL NRM Board and NT NRM Board) have specific statutory powers and operate under government legislation, while DCQ strongly distances itself from government and presents itself as an independent organisation despite receiving substantial government funding and support. It must be kept in mind, however, that interface organisations cannot operate independently, but continue to operate in accordance with political forces. Interface groups cannot operate outside government policy. They will not be funded and supported by governments unless they contribute to policy implementation. A key task for all interface organisations is to define their relationship between regional communities and governments as they build social capital with their constituents and continue to operate within their terms of reference. It was also noted that some interface organisations have multiple internal structures, such as committees and working groups, while others do not.

Solutions:

- Avoid acting as 'another arm of government'.
- Engage community sectors in meaningful decisions that affect their interests.

By their very nature, interface organisations provide the link between major government programs and local activities. Although considerable scope normally exists for negotiating terms of reference to meet community expectations, ministers still have the final say on the boundaries within which interface organisations must operate. Terms of reference normally contain program planning and implementation functions, as well as the responsibility to inform governments about community interests while communicating government policy and programs to the community. At times, however, tension can arise between, on one hand, delivering major programs and, on the other hand, representing community interests, which can involve commentary of government initiatives. In an environment where stakeholders generally lack trust in government, interface organisations need to find a balance between acknowledging their government program delivery role as well as the role of representing the interests of local stakeholders.

Provided interface organisations acknowledge the sources of their funding, it is possible to maintain a relatively independent stance in terms of balancing roles and responsibilities. In the case of conducting this research, being upfront about the work and who was funding it promoted trust among the LEB communities interfacing with this organisation.

Part of maintaining and enhancing trust is about familiarity, which can be enhanced by having personal connections and staff that reside in the region and are not transient.

Developing trust requires being able to demonstrate credibility, which takes time, making this a challenge for new organisations. Having functional systems in place and being seen as equitable are part of achieving this crucial success factor.

Building trust is also improved by having processes to 'listen to the community' and be mindful of community concerns, though not necessarily playing to these concerns in every instance. Successful interface groups learn to negotiate programs that address community concerns while delivering the returns that justify government investment. They build their capacity to respond to the interests and issues of the community as well as to the policy agenda of the government of the day.

In turn, trust and credibility are enhanced by improved capacity of staff – which brings us to the next success factor.

4.2.2 Attracting and retaining credible staff

Long-term staff are more likely to have the necessary experience, respect and credibility that underpin effective engagement. For staff working in interface organisations, engagement extends across both the community and government spheres. Staff need both the capacity to engage with government processes and agendas and the ability to engage with diverse community needs and expectations.

One challenge is attracting staff in the first place. A key issue to achieving this is being able to offer adequate tenure for new staff, a problem that is exacerbated by short-term and uncertain funding environments and one that has already been noted since before the regional NRM model was developed. The problem disadvantages remote areas because it serves as a disincentive towards attracting skills from urban areas.

While attracting staff in the first place represents one challenge, retaining staff and providing new staff with appropriate training are additional challenges.

One factor that would enhance successful NRM engagement is provision of longer-term contracts for staff. Job security could improve the ability of the organisations in remote areas to retain effective staff when already in place. However, such arrangements would require a long-term funding commitment from the government.

Credibility also depends on having 'industry knowledge', as demonstrated by this quote referring to the NT context:

Solutions:

- Look for people who are effective in multiple roles.
- Long-term staff are more likely to have the experience, respect and credibility to be effective.

Across the interviews, it was found that the success of an interface organisation depends heavily on its staff. Successful NRM engagement processes require particular skills and personalities in terms of how to approach different individuals and communities. However part of the challenge for interface organisations, particularly in remote areas, is the number of roles that individuals play.

Overall, finding and retaining credible staff who can perform multiple roles was identified by the respondents as one of the key factors for successful NRM engagement in remote areas. The importance of these factors was also noted by McKenzie (2007). These individuals play a crucial role in all the other success factors discussed in the interviews, through effective communication, building partnerships and realising on-ground action.

4.2.3 Visibility/local involvement

Government interviewees noted that getting out on the ground is an important factor in the success of engagement in remote areas. They were aware of the inherent challenges for doing so in remote areas, given the large areas and small numbers of staff.

In the NT, the staff have to cover the whole of the NT and are mostly located outside of the LEB. However, one officer is located in Alice Springs.

From the perspective of one such regional facilitator, the key to this role is to be active at the local scale in order to convey ideas and make it happen. Skilful facilitators learn to become translators between needs, aspirations and cultures of resource users and the language, culture and processes of government bureaucracies.

Part of being locally recognised is also the issue of being seen as being open to community input. Successful on-ground facilitators are approachable and know how to interact with different organisations and sectors.

4.2.4 Being adaptive

Successful NRM engagement involves reviewing and updating engagement processes. At the organisational level, this involves reviewing internal governance arrangements that provide the context for effective engagement to occur, including adjusting the composition of the board over time in some cases. At the individual level, staff also need to be adaptive in terms of how to engage with different sectors or organisations.

Solutions:

- Over time, community perspectives and priorities can change.
- Look out for changes in governments and mechanisms.
- Be flexible to the different conditions across the region.

Another way of viewing adaptability concerned the need to be aware of changes in the operating environment, such as government agencies and regional needs.

Part of this flexibility involves identifying emerging priorities and the most effective ways to address these. Being adaptive involves paying attention to new research on key issues, such as pests, and seeking to apply suitable technologies to address those challenges. It was also noted that interface organisations have a role in identifying gaps in knowledge and policy responses and being flexible about working with other agencies on those gaps.

4.2.5 Enthusiasm and determination

Related to flexibility are enthusiasm and determination, which play an important role in engaging remote communities due to the particular challenges of their environments. When applied together, determination, enthusiasm and being flexible about the manner in which engagement is conducted were found to promote successful engagement across the greater distances of remote areas such as the LEB.

Solutions:

- Long-term commitments are crucial.
- Initiative and perseverance help you to get access to information and resources.

Another way of looking at determination is patience and persistence. One government liaison officer suggested that in dealing with government agencies, a key to successful engagement is the patience and persistence to navigate complicated internal structures to reach the desired information.

4.2.6 Adequate resources and accountability

Effective NRM programs require significant resources. Government agencies have developed processes to ensure investments are accounted for and appropriate outcomes are achieved. Continued investment depends on being able to achieve the milestones that processes dictate. On the other hand, community support depends on timely and significant outcomes that affect community interests. Central to the success of regional NRM engagement is achieving the milestones *as defined by government agencies* to maintain transparency while interpreting these in a way that is regionally relevant. Apart from the strategic skill in navigating this, it is also recognised that effective engagement under the regional NRM model requires substantial resources in terms of time and money.

Solutions:

- Seek the money you need to obtain action.
- If you do not have the resources, look for innovative ways forward or around.
- Do not promise outcomes that cannot be delivered.
- Match expectations and responsibilities to fit with community capacity.

Another way of looking at the adequacy of resources is to examine how those resources are managed. Interface organisations have a degree of flexibility for managing their resources. Accountability is focused on reporting both to government through compliance related measures, as well as to the community directly. Achieving both of these is challenging but central to promoting successful engagement.

4.2.7 Effective use of partnerships

Recognising the value of partnerships and relationships is a crucial element of successful engagement, particularly in remote areas where timeframes can be longer for NRM processes.

While 'managing' relationships in many ways is up to the people involved, there is also a role for NRM arrangements to support the circumstances for partnerships to develop. Partnership assumes sharing of rights and responsibilities as well as interdependency of critical roles.

Partnerships can help overcome some of the additional costs of addressing extensive long-term NRM challenges in remote areas. It was noted that some of these issues were generally understood (e.g. weed and feral animal management), while others were less well understood (e.g. the effect of climate change). Both types of issue are more expensive to address in remote areas due to the distances involved and scale of impacts.

Other crucial partnerships noted for interface organisations were with the government agencies responsible for the problems in question, as well as with the research organisations, particularly when it comes to addressing new challenges.

Solutions:

- Recognise the value of long-term collaborations.
- Partnerships can help when resources are lacking.
- Cement partnerships by sharing meaningful roles.
- Learn from your partners when possible.

In addition, partnerships with industry groups and community volunteers can help to deliver on-ground outcomes. Partnerships can be conceptualised as both an outcome and a driver of successful engagement processes. They contribute towards developing an alignment of vision between different organisations and community members.

4.2.8 Representation and collective vision

Interface organisations need to reflect the NRM sectors that they interact with, including representation on boards. Related to this is having a balanced team that is effective across a range of capacities.

Some viewed representation as beyond representing particular interests; that is, good representatives have a range of skills and expertise rather than being spokespeople for particular interests alone. A good cross-section of local people was identified as one of the key dimensions to successful interface organisations.

Specifically in the NT, it was noted that representation should include being culturally sensitive, given the large Aboriginal population of remote areas. It should also include spatial representation, even though the boards of NRM organisations are designed to be constituted on the basis of skills and knowledge.

Another point raised was of having a shared vision of the issues at hand. A successful interface organisation is one which can capture that shared understanding.

Successful engagement might not be a one-way activity, but rather an activity that requires developing a degree of alignment from across the board, including adjusting policy focus so that other stakeholders can be engaged. An important strategy is to look for synergies but acknowledge conflicting and exclusive issues.

Importantly, collective vision cannot simply apply at the community scale. It also requires alignment across jurisdictions and scales of influence.

4.2.9 Communication

Most of the interview participants emphasised the importance of maintaining and improving communication. Communication was viewed as especially important for remote organisations where distance makes engagement more difficult.

The key to achieving this communication was in part related to flexibility and adaptiveness, such as through use of different communications techniques. Furthermore, successful engagement requires communication in both directions between government agencies and interface organisations, with adequate opportunity for feedback.

However, the problem might be in the disjunct between local interests and policy recommendations or responses, rather than in communication.

Effective communication is not just about being able to communicate with local sectors, but also about knowing how to use the bureaucratic system to communicate local issues; that is, being able to take local issues and make them into issues of interest on the government agenda. There might currently be too much emphasis on building capacity with the community and not enough on building the capacity of the NRM staff to communicate effectively with the ‘top’ levels.

Solutions:

- Face-to-face communication works best: use it where possible.
- Be flexible with technology when face-to-face is not an option.
- Use the internet to provide information.

It is through feedback that alignment and collective vision can be assessed and adjusted. Communication was considered important, not only between the interface organisation and its surrounding community, but also between various organisations in order to learn from each other.

What emerged from the interviews was that communication is both difficult and thus important in achieving successful engagement with all parties for interface organisations, including fellow interface organisations to help learning from each other.

4.2.10 Measuring successful engagement

From a government perspective a key measure of successful engagement is the same as measuring the success of interface organisations in general: delivering on-ground outcomes and achieving targets. Beyond these familiar targets, government representatives found that successful engagement is generally a difficult thing to measure. However, several participants did suggest that measuring engagement could be related to addressing many of the success factors identified throughout the interviews. For example, staff retention rates provide an easily measurable sign of building and maintaining a credible human resource base. Additional measures of successful engagement concerned the degree to which interface organisations were collaborating with partners, both in terms of the number of partners and also in terms of the nature of those collaborations. Another sign of successful engagement is the degree of awareness and understanding of key issues relating to targets. Some participants thought this understanding could be assessed among the staff of the interface organisations themselves as well as among members of the surrounding community. In a similar way, the degree of representation can be considered a way of measuring success, in terms of sectoral representation on committees.

Several participants noted that successful engagement is very hard to measure, because it is difficult to define measures of success. However, some potentially measurable definitions could involve:

- the ability to avoid or manage conflict
- representativeness of organisations in terms of skills and location
- having governance structures in place that allow dialogue
- degree of on-ground representation
- profile and awareness of interface organisations among stakeholders.

4.3 Discussion

Overall, the success factors identified through the government interviews are broadly consistent with those reflected in the literature review. Clearly, issues such as building trust, effective communication and adequate resources relate directly to successful engagement in a wide range of contexts. One issue that relates more specifically to a remote region such as the LEB was the critical role of attracting and maintaining staff. A feature of remote areas seems to be having fewer people to play more roles, so finding and supporting staff who are effective in conducting multiple roles is crucial to successful engagement processes. Much of this involves combining and balancing the multiple facets of regional NRM and communicating effectively with a wide range of people and organisations. Another distinct feature of successful engagement in remote areas was the high importance given to enthusiasm and determination. This was critical to achieving successful engagement among a remote and dispersed social environment, where larger distances make access to resources and information more difficult.

In considering the review of success factors above, it would seem that an ideal interface organisation has a seemingly impossible mission: to be independent yet maintain effective partnerships; to be the voice of the community while being in alignment with government priorities; to be determined yet adaptive. This demonstrates how the very nature of interface organisations poses a challenge in terms of needing to find the right balance among multiple, and frequently competing, aims and priorities. However, it was clear from the interviews with government NRM liaison officers and representatives that they recognise

the importance of supporting successful engagement processes. This was clearly demonstrated by the high degree of willingness to take part in the interview process and share their views on successful engagement. All participants indicated an interest in the study and a desire to read about the results. Moreover, government participants were aware that remote regions had particular characteristics and timeframes, and that it is also important for government stakeholders to be flexible too.

5. Community perspectives on successful engagement

This section presents results of the interviews conducted with the community representatives. The data used in this section were collected using community-based researchers. Therefore, the first section explores the experiences with the community-based research approach. This section is followed by the summary of the community's perspective on success factors.

5.1 Community-based research approach: lessons learnt

5.1.1 Experiences of community-based researchers

The community-based researchers were asked to reflect on their involvement in the project, including the positive aspects of the process and experience, as well as some of the challenges.

Trust and legitimacy

A number of benefits of community-based interviewing were identified. These included capitalising on existing local networks and trust in communities to gain credible input from the community. By drawing on these existing links, it was surmised that interviewees were able to speak openly and freely. As one community-based researcher summarised, 'It was easier for people to say what they really think'. Similarly, it was observed that the community-based researchers speak the same 'local language' and do not use scientific or bureaucratic jargon. This was seen as contributing to interviewees' sense of trust and legitimacy, which also ensured that, in the words of one researcher, 'Community researchers can get honest answers, as they would know if [the interviewee] was talking [nonsense]'.

Challenges

A few challenges relating to conducting interviews were identified. There was agreement among the community-based researchers that the time of the year, before Christmas, was not a good time to conduct interviews. At that time it was extremely hot, there was the threat of storms which made driving on dirt roads hazardous, and people were busy hand feeding livestock due to the drought. One community researcher experienced vehicle breakdown and needed police assistance. This incident highlights that vehicle failure is one of the risks of interviewing in remote areas.

Other challenges related to 'following someone else's interview questions' and uncertainty about the degree to which researchers should prompt interviewees or provide more clarification about the meaning of the questions. On reflection, the process could have been improved if there was an opportunity to test the interview questions in the field: researchers could then have compared notes via teleconference and further refined the questions to ensure they were meaningful to participants.

It was also suggested that it might have been easier to get some participants talking if people were interviewed in pairs or groups. Using this method, the information may have been more free-flowing with less reliance on the interviewer alone to facilitate discussion.

Some final reflections from community-based researchers

Community-based researchers reported that they enjoyed the experience, with one reflecting that it would have been good to talk to more people to get more viewpoints. It was also noted that it was 'nice to talk to people and help them get things off their chest'. Another reflected that she had 'learned new things about natural resource management' and had developed greater interest in this area. Despite the first few interviews being difficult, she found the experience valuable.

In summarising her experience of the community-based research model, one researcher offered, 'Community researchers sums up what we are … we have links to the community and can ask questions that scientists wish to ask in language that local people can understand'.

5.1.2 Benefits and challenges of the community-based researcher approach

There were a number of benefits and challenges involved in using the community researcher approach for this first phase of the research project. A key benefit of using this approach was that these researchers used 'the same local language' as the people who were being interviewed, which helped in an open discussion about key issues facing the Lake Eyre region. Another key advantage was the ability of community-based researchers to speak candidly to CSIRO researchers, particularly when it came to describing problems with the research. For example, at one point a team member discussed the content and progress of interviews with some interviewees, and this raised (real or perceived) concerns that interviewees and their perspectives were not anonymous. The workshops enabled these issues to be raised and confidentiality to be re-affirmed. They also ensured that the research approach itself (such as the interview questions) was not 'too academic' and could be understood by both parties involved in the community-based interview.

A potential downside of using community-based researchers was the lack of probing questions that would be used by trained researchers to provide insights into the deeper meaning of comments made by the interviewee. While it was beneficial to capture perspectives from people who would not ordinarily agree to be interviewed as part of a research process, many of the interviews conducted did not provide enough material for in-depth analysis of these perspectives. One possible reason for this lack of probing was the familiarity between community researchers and participants. There is no way of knowing if certain topics were avoided or perceived to be unsuited to the specific relations between the parties, compared with an interview undertaken by an external trained researcher.

5.2 Community perspectives

This section focuses on the research findings from the community, presenting some important lessons learned. Many of these findings resonate strongly with the success factors for community engagement that were identified in the literature review. For example, trust was found to be crucial factor of effective engagement in the literature, as well as in the LEB. Other issues were found to be unique to the LEB as a collection of desert ecosystems and a physically and socially remote space.

5.2.1 Engagement in the vast variable geography of the LEB

Inevitably, many of the challenges of managing natural resources in the LEB were related to its sheer scale. A number of the interviewees noted how the LEB area covered one-sixth of the Australian land mass, and contained a vast diversity of people, landscapes and management problems. With this scale also comes issues of distance and time, with many of those interviewed feeling that interface organisations were not always sensitive of the time taken to travel long distances to meetings. Those from the community highlighted the need to ensure that not all meetings were in central regions because 'people on the fringes feel excluded and they tend to disregard what's happening'. The 'huge amount of time and money' required for engagement, given these geographical realities, were also noted.

The following quotes capture some of the interviewees' sentiments on this matter:

> Interviewee: *The biggest problem was logistics of course; to have meetings all over the LEB costs a huge amount of time and money. If you centralise your meetings then the people on the fringes feel excluded and they tend to disregard what's happening.*
>
> Facilitator: *You think it's important to get out there for meetings?*
>
> Interviewee: *It certainly is, but it's one of the difficulties, one of the big challenges. To get around, logistically and financially as well. But you've got to include as many people and as many organisations as you can.*

Another person who was also concerned about the costs and time involved in attending meetings stated:

> *Distance is also a big one, trying to get people together is really hard. Some of the things like the NRM, we don't get travel time. So, if it takes two days to go up to a meeting, we don't get paid for that. Whereas, if you're in Adelaide, and you drive 20 minutes to a meeting, it's a big deal, and I think that's really hard, and puts a lot of people off.*

Similarly, there was advocacy for a greater understanding of the isolation of the LEB in terms of trying to conduct engagement activities:

> *One of the things that is always desirable, or people have always demanded I suppose, is that the meetings are held within the Basin. Each meeting is held within the Basin and the biannual ministerial forum, where all the heads of the States and the Federal Government get together and actually discuss issues and budgets and things, are actually held within the Basin. So that the community have a chance to take part and people get to travel around the Basin and learn a little bit more about the different parts of the Basin.*

Another interviewee noted that scale was the main difference between the LEB and other catchments:

> Facilitator: *Is there anything in particular that is needed in relation to the Lake Eyre Basin region that is different to other regions?*
>
> Interviewee: *It's a big area. So anyone doing that sort of work is going to have to do a lot of kilometres and cover a lot of ground. No. Other than that, I would have thought it was pretty much the same. Just the scales make it that much more difficult and problematic.*

Others sensed an inequity between the allocation of resources in urban and remote areas:

> *Down there [in Adelaide] they get a lot more money because there's a lot more people, but they're only spending it on a lot less land. I can't see why we can't get the same amount of money for less people up here because we've got twice as many issues across – it's nearly half the state.*

The size of the LEB also means that it spans a number of jurisdictions, state, regional and geographical boundaries. Participants identified a need for improved cross-boundary management:

> *No point in getting all the camels out of the Simpson Desert and then they all come back in from the Territory again.*

Another person noted the need to manage natural resources across jurisdictions was time consuming:

> *So, what are the problems I see? What are the challenges? National coordination is a big one. We find ourselves continually reinventing the wheel. I'm sitting here writing a general management plan, and I've got no idea what they're writing over in [other jurisdiction]. Why don't I know? Because I've got to get this out by Christmas, and I just simply don't have the time.*

5.2.2 Place-based or issue-based engagement in the outback

Having acknowledged that the sheer size of the LEB is somewhat overwhelming for interviewees in terms of LEB NRM management, there was evidence that change, both in terms of social attitudes and environmental outcomes, could be effected at the micro level. Many of those interviewed identified with more localised and smaller scale projects, also revealing how trusting working relationships could facilitate change. For instance:

> *Now ten years ago to have Birdsville Track land holders cruising around with a picture of a Kowari [animal] on the back of their motor car would be just ... you would be laughed at, you know, it would be absurd. But because of this project and their involvement they embraced this whole idea. You know, it changed a lot of attitudes. But those attitudes ... it's easy then if you forget the people stuff for those attitudes then to revert back to where they used to be, in the absence of good clear information and a trusting working relationship.*

Solutions:

- Processes of engagement should be sympathetic to the distance travelled and the time taken for people, who are often volunteers, to attend workshops or committee meetings. This may have significant resource implications.
- Communication technologies such as the internet, teleconferencing and networked whiteboards can resolve some of the temporal and spatial dimensions of engagement faced by LEB interface organisations. Training to enable some local and non-government interests to use these new communication technologies may be needed.
- Place-based or issue-based NRM activities offer a tangible focus for local engagement in a bio-region that has diverse and vast landscapes and jurisdictions.

The 'localising' of success factors in the LEB highlights how small-scale issues are more tangible and manageable but also suggests that 'scaling-up' to the catchment level might present challenges dependent upon the issue at stake, and the stakeholders involved.

5.2.3 Acknowledging desert timeframes

Issues of time overlap with issues of spatial scale, particularly in relation to the distances that need to be travelled to engage in meetings and workshops. This is dealt with in part above. However, there are other aspects of 'time' that are specific to remote and arid areas such as the LEB to which the quotes below attest:

> *It's very hard to allocate time and resources to doing what is considered extra, which is managing weeds, when you can't keep your stock alive and you can't pay the bills. It's very hard to be able to do anything else until such time as conditions improve. Certainly the weather is a limiting factor, I would imagine.*

Not only does the dry climate require more active input from land holders, but seasonal variability over long periods of time was reported to hinder the assessment of whether projects had been successful:

> *Weather cycles and things like that take so long, you know, trying to measure progress on projects when ... you only have a good year once every ten years, you know, how do you judge how effective a rabbit ripping program has been if you rip it in one of the droughts and it might be six years until you get decent rains and you get decent re-veg happening and stuff like that?*

Another interviewee had a similar viewpoint:

> *There's a local group who are doing work on a floodplain to assess if they can produce pasture and that sort of thing ... one of the problems they have is that funding, whether it's State or Federal Government, is for a period only. They say right, the funds are available*

for one year or generally no more than three years. In the environment sense, in the seasonal sense, to study something over three years often doesn't do justice to getting the correct answer. You may not get a flood in the three years or you might not get rain; or you might get a lot of floods and a lot of rain.

5.2.4 Acknowledging funding time-frames

On the topic of timeframes, an interviewee also noted that funding cycles did not promote continuity and consistency with staff over time:

> *For us I think it's the fact that almost all of our operational money comes from the Federal Government. It comes through grant programs. We don't have any security of funding. So we're at the whim of what's currently in favour for the Federal Government, and along with that then comes problems like 'Well, how do you attract some secure staff in the region if you can't offer them any more than a three-year contract?'*

Furthermore, the importance of aligning funding cycles with the natural cycles of arid environments was also a recurring theme throughout the research:

> *These things can fall through the cracks or be rated lower than they might otherwise be. So that's a significant challenge, getting resources to a lot of these projects. Arid land, in particular investing at the appropriate scale, is an issue. It can be much more expensive. Also, ensuring that you can cover things in the right time scale, because it could be many years before you even get the rainfall that you might need to actually make a difference to all of the management that you've been putting in place.*

A lack of awareness of the importance of continuity of personnel and projects was reported to have a significant impact at the local level:

> *Overall, the last couple of years, [the project] petered out a little bit and I think that was because, when it was at its peak, there was a person living locally in the region who was really driving the research side of things. When that person left the area, they, I guess, did lose that focal point that was really driving the project. So I think in the last couple of years, where that's been lacking, the interest and community support has perhaps petered out a little bit. But that's something that we're really trying to focus on, to get it back up and running again.*

Issues of funding also overlapped with concerns of community burnout, with some people identifying a link between the lack of resources and the greater potential for the goodwill of community members to be exhausted. For example, when asked about the challenges of NRM in the LEB, one interviewee made the following statement:

> *Funding! Funding! Put that in neon ... lights: Funding! And continuity of skills. We cannot burn out your [name of person] and expect someone to step into that role and take up where [person] left off. You must have continuity. Funding, continuity of your skills, continuity of staff and skill level.*

The issue of burnout will be described in more detail in the next section.

Solutions:

- Lobby for better alignment between project funding cycles and natural seasonal cycles to achieve both enhanced community involvement and improved NRM outcomes.
- Recognise the importance of continuity and consistency of funding for human resources to respond to NRM issues in remote areas.

5.2.5 Community burnout: sparse populations managing vast areas of land

During the interviews, many LEB residents noted that there were a number of key people who were community leaders in relation to NRM issues. These people were highly valued by the community and tended to be engaged with the community at a number of levels, often beyond issues of NRM. For instance, community-based researchers identified that these key people would also be involved in local progress associations or in organising the local gymkhana. One negative aspect of their involvement in numerous community projects and events was the tendency of these people to be overburdened, often taking on roles as 'no one else would do them'. Many interviewees identified this as an issue that was specific to remote regions, where populations are small and sparsely distributed. For example:

> Facilitator: *What do you think the challenges are for interface organisations?*
>
> Interviewee: *People in the bush, requiring a lot of consultation. You need to phone people all the time. Getting new people to be interested, I see it as a fairly big challenge. The old problem of wearing down the people that are always involved.*

Similarly, another person noted some of the problems of engaging people in NRM activities in remote areas:

> *It's a challenge because the cost is huge because of the distances involved and the logistics. The isolation is enormous. [There is] social exhaustion. There's such a small handful of people that you wear out and get exhausted.*

Another interviewee offered a similar sentiment:

> *It [is] just the same people get dragged into the same sort of groups ... trying to spread a lot of people too thinly, I think.*

Likewise, when asked about the challenges facing interface organisations, another person identified:

> *Funding probably. Staff burn-out because the project officers are just so run off their feet because ... the numbers that you can employ, I suppose. That's always a problem. Distances as well. [People] are not compensated and it seems to be to me that there is no avenue in the money that is provided by both State and Federal Governments to actually [compensate those involved] ... We're very good at allocating money for staff and vehicles and everything else and then giving a portion of that money on the ground; however, we're not good at looking after the committee members and as a result we don't get rejuvenation.*

Others saw that the interrelated issues of scale, time and resourcing could have an impact on the overall success, or even survival, of interface organisations:

> *I think as all individual boards were before, I think most of them were pretty successful. But I think a lot of them fell down in a couple of different ways, I suppose, and I guess it was true local things: the same people, the amount of time, commitments and all that; it gets difficult and costly.*

Solutions:

- Assess ways in which to encourage community engagement while also being cognisant of the potential for the community members to be overburdened.
- Identify tangible outcomes where possible to show the value of efforts.
- Demonstrate recognition and appreciation of efforts to encourage others to share the joy (and the burden) of engagement activities.
- Identify effective methods for recruiting and maintaining new staff and volunteers.
- Explore ways of ensuring that staff and volunteers are duly compensated for their efforts (payment for travel time, reimbursement of travel costs, payment for attending meetings, etc.).

5.2.6 Communications

When asked about the success factors of interface organisations, many of those interviewed placed high priority on communications. Crucial to the effective functioning of organisations, was the role played by key people in communicating. Interviewees identified that good communication:

- occurs when NRM personnel officers are able to talk to people, one to one
- can take place once an organisation and its personnel have clearly articulated their roles and where their organisation fits within the network of organisations across the Lake Eyre landscape
- reduces costs and the likelihood of 'reinventing the wheel'
- raises an organisation's profile
- enables interface organisations to assess the needs of the community, rather than pre-empt their needs
- happens when there are effective translators who act as an information conduit across diverse sectors, such as land holders, NRM bodies, and local, Australian and State Governments
- can facilitate stronger links, networks and relationships of trust.

One interviewee noted that the success of a particular project was due to effective processes of communication, particularly in ensuring that everybody had the opportunity to have their say:

> *Yeah. It really came down to communication with all the stakeholders. They need to be able to communicate and [be] involved in two-way discussion, that's not just them telling someone how it's going to be ... Things need to be well thought out and not just pipe dreams before they're taken to the community. So there needs to be some hard facts that can be divvied out and digested. There needs to be enough time for all the different people to be able to speak and make their comments. Whether their comments are taken on board, there needs to be some transparency in that process, so that people can kind of understand, yes, we're taking it into consideration, even if they weren't taken on board.*

Likewise:

> *The biggest thing is just communication. It means actually going out, onsite, and communicating onsite, in person, not through a phone or office, not via e-mail or whatever, because they're not valid methods of communication for a lot of people in the region.*

Similarly:

> *I think all the programs that I've been involved with, the most successful are those that are land holder driven. They come to you with the idea. When I was working in the Desert Uplands, running the [name of program] project was very successful. It allowed for one-on-one time and I think land holders really appreciate that, being able to visit their property and have the time to sit down with them and go through things on an individual basis, in their own home, is often seen as – I don't know. I find you get the best of it, that way.*

5.2.7 Networks of trust

Another 'side-effect' of effective communication was identified as building networks of trust. Interviewees identified a number of factors that facilitated greater trust relationships between local communities and regional NRM Boards and other organisations.

Solutions:

- Listen.
- Treat people fairly without discrimination.
- Respect different perspectives and interests.
- Maintain transparency in governance processes.
- Acknowledge and recognise the work that people are doing.

One interviewee reflected on how one-on-one interaction fostered greater trust and served to break down social barriers between different sectors:

> *The one-to-one contact is important. How many of them get out and just sit around the kitchen table individually with people? How many of them can get out and call a meeting every now and again and get people together and talk about things? I think if they can do that they seem to be setting up a bit of trust. People can say, I don't agree with what he has to say but at least I can talk to him. I think a lot of people don't value the involvement in that … I understand the bureaucrat or somebody on the committee with a time line saying, now I've got to have all these goals achieved by a certain time. But I think when you've got that pressure on you, you don't understand that that it's just talking to people – it makes them go away and think.*

Given the challenges in ensuring the inclusion of Aboriginal people in decision-making processes, it is valuable to consider how skilled coordinators were perceived to facilitate this process:

> *I mean, one of the reasons the programs worked so well, in addition to involving what people actually wanted to do themselves, was that the coordinators of the program were familiar with working with Aboriginal people and were also very motivated and committed to the project. So the liaison people within that assisted with the program were particularly helpful.*

The maintenance of good social networks through processes of communication and inclusion were identified as instrumental in effective NRM engagement:

> *At the level that I operate at, with steering committees and things and planning and strategy groups, [you need to] make sure that all of the key stakeholders are represented and able to have a voice, because if interests are excluded, that are key to things happening, then somewhere along the line you're going to fall down.*

Solutions:

- Identify the key processes of trust building, and incorporate them into future planning exercises.
- Maintain transparency of practices and procedures.
- Ensure that the community is able to access information that details what an organisation 'does' and how it links into other networks and organisations.
- Where possible, invest in face-to-face communication.
- Recognise the ongoing value of investing in skill development of personnel to facilitate or improve the flow of information cross-culturally.

5.2.8 Getting on with the job: less talk and more action

While recognising the need for effective and inclusive communication, there was also a strong, emergent (although somewhat contradictory) theme that there should be 'less talk and more action'. For some, this desire for more 'on-the-ground action' was due to the perception of the bureaucratic activities of interface organisations, where large volumes of paperwork were generated, and too much time was spent in 'talkfests'. For example:

> Facilitator: *Can you just identify some key measures you would use to judge the performance of some of these organisations? How would you judge how they work?*
>
> Interviewee: *Well, seeing programs actually happen, on the ground … that things don't work out to be a talkfest. You need projects like your [name of program], that actually get up and running and that, through people see things happen. Whereas, we haven't seen anything happen in the last 12 months. Like, with the [name of organisation], they coordinated several feral animal shoots and they were very successful. There was some weed control, spraying and what-have-you of weeds. So people need to see things happen on the ground, to be happy.*

For many, processes that occurred at the 'grass roots' level, or 'on the ground' proved that the local population was being listened to, confirming that they had an important role to play in NRM planning and actions. From the interview data, organisations are successful in achieving 'on-the-ground' action when:

- there is less talk and more action
- less time is spent in the office
- land holders have access to an organisation's staff
- staff constantly communicate with people and make an effort to visit properties and talk to people face to face
- local people are also skilled in working with organisations (for example, they have skills in using the internet or email)
- the local community 'drives' projects rather than just 'participates'
- organisations are in touch with 'people on the ground' and their needs.

The following interview excerpt demonstrates the frustration that many people reported when seeking resolution for NRM problems:

> Facilitator: *Looking at focusing on success factors for these interface organisations, can you recount a personal success story of an experience or program that's been organised through any interface organisations that you are or have previously been involved in?*
>
> Interviewee: *That's an awful question, because one of the things you will find is that it's very, very difficult to get on-ground action ... We could spend the next 10 years trying to understand the feral camel problem while the numbers are going through the roof when we do this. It's a very research-driven agenda to do more research. But at the end of the day, you want to go out and knock the ... things off before they do too much damage. Why can't we knock them off? Because of the national strategy; it's written by researchers who advocate that your priority activities – and they're sitting on them forever – is research, monitoring, evaluation, protocols, plans, strategies. So you're doing all this ... work, paying people millions of dollars, while the problem is spreading.*

In a somewhat animated response, an interviewee expressed his frustration that there was too much talk and not enough action:

> *I sat on [name of organisation] meetings for about five years when I heard people talk about rubber plants on the Stuart Highway. I used to think, why don't you chop [them] down? I don't want to go to another meeting and hear about this rubber plague that they keep harping on the Stuart Highway. It just drives me crazy. I could give you many examples like that. Talk, talk, talk, talk, talk, talk, talk, talk, talk, and no action.*

Solutions:

- Examine the balance between being able to provide more on-the-ground actions with the imperative to ensure that good processes of communication are implemented.
- Propose simple, outcome-focused responses where available.

5.2.9 Regional NRM governance structures

A number of comments were heard about the role of NRM Regional Bodies, and their role as translators between the community and the government. Some saw their role as problematic for a number of reasons, including:

- Governments have passed responsibility to regional bodies (as interface organisations) but not necessarily the power to set their own agendas

- Regional bodies appear to be another layer of bureaucracy with their own reams of paper work and numerous meetings
- Community members often relate to these organisations as 'de facto governments', as they are government funded and appear to do the work of government.

Despite a perception that NRM bodies operated as another tier of government, a number of people interviewed felt that many interface organisations did not have 'teeth', that is, the statutory powers and autonomy to effect change that was aligned to local needs rather than government policy. For instance:

> *If you had your own discretionary funds, you'd be able to go out and talk to people and when they raise issues you'd be able to actually respond a lot quicker and so the connection between the issue that someone has raised and the action would be a lot closer.*

Similarly, another person noted:

> *Unfortunately, they come from an advisory capacity. Their group performs more as advisory and ... [name of person] ... keeps saying that they're not performing and he keeps telling me the meetings are not performing, but they're not empowered to perform. I have talked about this with some other board members, but they have got no money.*

One woman considered the success factors of interface organisations and offered:

> *I think the committee has got to be pretty well together and be able to make decisions without dithering around for too long. You have to have good governance, execute all your projects and devolve the money in a very responsible manner so that you build up your reputation within the region or within the State. I think that's the way to success.*

However, another person who was involved in a regional body spoke about her experiences of the public perception of regional bodies:

> *Just about the NRM board in general. I think the feeling is: what have they done for us so far? They think nothing. They probably don't see a lot of the stuff that goes on in the background, but I think we're getting viewed as just a government organisation rather than a government interface organisation. I actually think that's sort of what we're being told too.*

Solutions:

- Promote balance between good governance and action.
- Reputations are based on cohesive decision making and good governance.

6. Collating the lessons

Four generic factors for achieving successful engagement were present throughout the research, from the most general literature reviewed through to the LEB-specific interviews. These factors characterise successful engagement in a wide variety of contexts:

- developing trust
- adequate resourcing
- effective communication
- being inclusive.

To these we can add some factors that emerge from the review of community-engagement literature, which has shown the importance of:

- being strategic
- promoting community ownership
- defining the appropriate scale for interaction.

In addition to these, we can incorporate some important success factors from a government perspective:

- being transparent
- being determined to achieve NRM initiatives
- adapting as required to reach outcomes
- aligning on-ground works with government priorities.

Finally, success factors from a community perspective focus on:

- being independent
- respecting the landscape
- getting on with the job
- avoiding burnout.

It is clear that environmental management organisations in the LEB need to balance a range of social and economic tensions relating to these different perspectives in order to achieve effective NRM. In principle they need to:

- be the voice of the community while being aligned with government priorities
- ensure that community deliberation leads to on-ground actions
- be independent while maintaining effective partnerships
- follow an agreed-upon sustainability strategy, yet be adaptive.

These factors represent a mix of desert specific and generic factors that apply in a wide range of contexts. Considering the notion of desert drivers (Stafford Smith 2008, and see below), it would seem that even general factors play out differently in remote areas, due to the intensity of challenges where scale and low population density has the potential to exacerbate difficulties in effective NRM engagement. As such, NRM governance in this area requires innovative and creative responses.

6.1 Specific issues in the remote desert areas of Australia

The existing literature on remote desert areas in Australia has argued that they share a number of key drivers (Stafford Smith 2008) that together distinguish them from more settled and mesic regions. The key drivers have been identified as:

1. climate variability at various scales in space and time (*climate variability*)
2. widespread low and patchy primary productivity (*scarce resources*)
3. sparse, mobile and patchy human population (*sparse population*)
4. distant markets and decision making (*distant voice*)
5. perceived unpredictability in markets, labour and policy (*social variability*)
6. limited research knowledge and persistent traditional and local knowledge (*local knowledge*)
7. particular types of people, culture and institutions (*cultural differences*).

The sections below systematise the impacts and responses to the key engagement principles emerging from this study against these key drivers.

6.1.1 Climatic variability

Climatic variability is of such over-riding biophysical importance to NRM in the LEB that interface organisations have to be strongly aware of its context for their activities, as shown in the consultations for this project.

- Be very aware of the effects of drought (and floods) on engagement processes: drought can increase engagement fatigue.
- The longevity of projects and detecting their success is also often dependent on climatic cycles.

6.1.2 Scarce resources

The limited productivity of most lands in the LEB means that options open in other regions may not be appropriate here; it may even greatly limit the ability of people to find time to participate in engagement activities, so that realistic funding is needed to support this. On the other hand, it highlights the importance for organisations or sectors with scarce resources to build partnerships with other organisations and sectors that are better (or more reliably) resourced, such as mining and local government and, in some cases, tourism.

6.1.3 Sparse population

As the over-riding social driver, the effects of small population size also reach into every aspect of interface organisation activities, both positively and negatively. While there are significant constraints in terms of numbers of skilled people, with implications for burnout, and long distances to travel for engagement between dispersed population centres, there is also the potential to reach agreement on goals relatively quickly. Small size emphasises the need for, and possible benefits from, partnerships among stakeholders. The sparse and patchy distribution of people means that travel and engagement costs are high, which needs to be allowed for equitably in budgets; alternative, innovative engagement options are also important.

- Be creative about partnerships with less-involved (possibly better-resourced) stakeholders to increase critical mass.
- Use the small community size to get strong agreements quickly.
- Allow for lots of travel in budgets and staff expectations.
- Have local on-ground facilitators.

6.1.4 Distant voice

Perhaps the most important consequence of a sparse population, isolation imposes a great need to make and sustain the case for remote regions to distant interests. This demands a particularly high degree of political awareness and networking. The constraints on livelihood strategies in remote regions may also mean that agreed community goals are qualitatively different from 'mainstream' expectations, so clear, persistent and enthusiastic articulation of these is vital. A consequence of past effects of distant voice is that remote communities tend to be mistrustful of distant experts and government decisions; however, the small community size does allow engagement more easily than might be imagined, excepting the cost of travel again. Hence, interface organisations need to tread a fine line between connecting with government and being seen to maintain independence. Agencies need to respect this when done well. The inherent challenge for all this is that interface organisations need to be accountable and transparent to both their community and government constituencies.

- Maintain some independence from government but respect the balance on both sides.
- Be prepared to think through and articulate why the region may need different approaches to elsewhere.
- Be aware of likely community distrust, but engage locally to overcome this.

6.1.5 Social variability

Unpredictability in staff turnover is a dominating concern for remote areas, with issues such as longer contracts, adequate tenure and support for long-term staff being paramount. Coupled with this is the need for staff in small organisations and communities to play multiple roles, which also need to be valued and supported with training. Variability caused by markets, policies, staff and climate all drive the need for staff to be tremendously flexible and adaptable.

- Be imaginative and flexible in creating longer-term contracts and attractiveness in regional NRM jobs.
- Value and train people for multiple roles.

6.1.6 Local knowledge

Detailed research will always be modest, and the vast areas demand sensitivity to local conditions in ways that are less important in small coastal catchments. Hence, it is strategic to emphasise local knowledge (including Aboriginal knowledge) in interface partnerships. However, these need to create the best possible alliances with agency and scientific knowledge where possible. Local community ownership of NRM planning and implementation activities is needed so that there is access to locally relevant knowledge. Horizontal learning among NRM groups (often themselves geographically far apart) is also important to speed up the rate of improvement; governments have a key role in facilitating this. Measuring appropriate factors – for example outcomes, staff turnover, collaboration, awareness, representativeness – can provide vitally important feedback for learning.

- Ensure representative engagement with the community to gain true community ownership that permits access to locally relevant knowledge.

6.1.7 Cultural differences

Government needs to recognise that all these factors mean that successful local organisations may operate rather differently to those in more settled areas, and allow specific flexibility in how organisations operate, that is, define the necessary components for accountability and transparency but then allow the community to self-organise. Conversely, the community must recognise and respect the fact that government staff have institutional pressures that do not match local priorities, and work with (and around) these rather than just discussing them.

7. Conclusion

Successful NRM outcomes require successful engagement processes. Understanding the 'rules of engagement', both written and unwritten, is of crucial importance for NRM regional bodies and all organisations at the interface between formal governance processes and community action. It is important to emphasise that engagement is as much about interfacing with governments as it is about supporting on-ground community action. The principles and tools for successful NRM engagement presented in this chapter have been identified, distilled and integrated from a combination of literature review and interviews with both government liaison officers (Australian and State Government) and community residents of the LEB.

Some of the tools and principles presented in this chapter are specific: concerned with respecting desert time frames and being opportunistic when resources and circumstances arise infrequently. Other success factors presented here are generic: such as building community ownership, communicating well and maintaining transparency. However, even this plays out differently in remote areas, where communication is complicated by distance and sparse populations. Maintaining credible staff and avoiding community burnout are major issues for NRM in general, and this research demonstrated acute reliance on particular individuals throughout the LEB who take on multiple roles. There is merit in questioning whether better resourcing of such 'community champions' might alleviate burnout, or whether emotional fatigue stems from structural factors such as a small population rather than the lack of resourcing or recognition of their work.

From the perspectives of LEB community residents, processes of engagement should be sympathetic to the distances travelled and the time taken for people to attend workshops or committee meetings and the resources required to achieve this level of engagement. Given the challenges associated with the vast distances of the LEB, it is crucial to consider communication technologies when face-to-face communication is unviable. Use of the internet, teleconferencing and networked whiteboards can resolve some of the temporal and spatial dimensions of engagement faced by LEB interface organisations. Training to enable some local and non-government interests to use these new communication technologies may be needed. The findings from the community-based research show not only the community's willingness to participate, but suggest some clear 'rules of engagement' for planners and policy makers. Of significance to many of the people interviewed was that engagement needed to occur at the local or property level, preferably face to face.

Considering the case studies that follow this stage of the research, two key topics stand out. The first is to build a better understanding of the mechanisms through which Aboriginal contributions to NRM are effectively included. This is particularly relevant given the challenges encountered in this stage of the project in representing the viewpoints of Aboriginal residents of the LEB. The second is an exploration of effective NRM engagement given the forecast demographic changes of the LEB and the potential for industry change relating particularly to the expansion of the energy and minerals sector in the LEB.

In considering the success factors presented in this research, it is clear that NRM engagement requires a multitude of seemingly contrasting characteristics: to be independent yet maintain effective partnerships; to be the voice of the community while being in alignment with government priorities; to be determined yet adaptive. This demonstrates that the very nature of interface organisations poses a challenge in terms of having multiple, and sometimes competing aims and priorities. However, at least it is clear that these challenges are recognised by community members and government officers alike, as was the importance of supporting successful engagement processes in remote regions.

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