

## **THROUGH THE LOOKING GLASS: ORGANISATIONAL ALIGNMENT FOR SUSTAINABLE COMMUNITIES**

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### **Introduction**

State extension projects within agriculture have traditionally focused primarily on facilitating productivity increases. Many current extension methods have evolved from this production basis and emphasise information provision and technology transfer as the key to innovation and change (Vanclay and Lawrence 1995). However, agricultural policy has shifted from a principal focus on productivity to the development of sustainable production systems. Current policy initiatives encompass principles of economic, environmental and social sustainability.

A growing number of extension professionals, program funders and researchers recognise that the information based transfer of technology model that has dominated the approach to innovation and development within agriculture, is inadequate as a comprehensive strategy to deal with the complexities of natural resource management issues (Woodhill and Roling 1998; Mullen, Vernon and Fishpool 2000). Researchers point to fundamental differences between commercial innovation and change that is driven by environmental imperatives (Vanclay and Lawrence 1995). Natural resource management issues have brought to the fore the social and moral dimensions of development that need to be taken into account. Furthermore, they have highlighted that the stakeholders in agriculture comprise not just the farming industry but also the broader community (Mullen *et al.* 2000). Solutions for sustainable development therefore require interaction and negotiation between these different stakeholders. As a result, extension programs are no longer addressing a problem of imperfect information, but are required to address and reconcile the diverse and competing interests of a broad range of stakeholders around productivity and environmental outcomes (Mullen *et al.* 2000).

In recent times this has led to the emergence of community based approaches to extension. The language of community participation has become prevalent and community self reliance and capacity building are emphasised as important in facilitating change for the 21st century. However, the language of community capacity building is often couched in terms of the agencies' relationship with the external environment. However, it is clear that natural resource management issues create

interdependencies between agencies and other stakeholders (Aarts and van Woerkum 1999) in a way that significantly changes these agencies themselves. As Hemidy and Cerf (2000) note, the relationship between the resource management agencies and their partners involves mutual testing and reflection about resources, knowledge and operational schemes, which promotes adoption of new practices by all partners.

Organisational responsiveness to internal and external community needs therefore cannot be directive but must be part of a broader reflective process that involves both the agency and the broader community. This involves the development of consciousness within the resource management organisation to complement the consciousness raising within the communities engaged in capacity building. This interaction and mutual testing between different communities of practice encourages the expansion of capacity building goals and the creation of a spectrum of triple bottom line outcomes. A recognition of difference is therefore essential to the process of change and innovation.

Clearly, the shift from production to sustainability heralds a radical change in the way we conceptualise the identities and roles of those working within agencies servicing rural communities. The implications of this shift are several, and importantly the process of alignment involved in organisational change is similar to the one resource management agencies demand of their client communities. For this reason, we have used the metaphor of Alice Through the Looking Glass to reinforce the importance of reflective practice and parallel lines of change within rural communities and the communities within agencies. Developing the organisational capacity for change is a key to address natural resource management issues effectively. However, the fundamentally changed relationship between state agencies and the broader community that is increasingly characterised by ongoing interdependencies, has important implications for the selection of appropriate change management methods to build both organisational and community capacity.

Overall this paper serves to highlight that in dealing with the issue of agriculture and the Australian environment, it is critical to explore issues of organizational capability. This paper was written in a cooperative effort between practitioners within a natural resource management agency and social researchers with the specific aim of exploring how the literature on organizational change could assist in making sense of the complexities of the current natural resource management context.

The Victorian state Department of Natural Resources and Environment (NRE)'s Product Development Team (PDT) in Tatura has implemented a multidisciplinary approach to address the issue of water use efficiency. The team is exploring a perspective of change that views it as local and incremental. This allows the team to make sense of and deal with the changes that result from their multidisciplinary approach and the interaction between people from different departments and groups within and outside the organisation. NRE's Developing Social Capability (DSC) project, on the other hand, has implemented a systems approach to change management to build both organisational and community capacity for change.

As Meyerson and Martin (1994) argue, it will become clear that a multi-paradigm view of culture that explores the contributions of top-down, bottom up and systems approaches to change management, will highlight the levers of change as well as those areas that are outside the control of state agencies. While there is a place for directive or top down approaches to change management, by themselves they are inadequate to deal with the complexities of the current context of change in natural resource management.

## **Challenging the top-down approach to change management**

Rational modes of thinking, objective knowledge and a belief in absolute truth have dominated thinking about change and transformation in our society. Value-free knowledge and science have been thought to provide the impetus for change and progress. In the change management literature this mode of thinking translates into an assumption that through analysis the environment in which organisations and people act can be fully understood (Gharajedaghi and Ackoff 1994). It is further assumed that this understanding provides a sound basis for planning subsequent actions. As such, a linear conceptualisation of the change process prevails, as knowledge is constructed as preceding and informing action. Furthermore, people and organisations are perceived as separate from and in control of their environment.

Change management practices that are consistent with this mode of thinking conceive organisations as hierarchically structured and centrally controlled (Gharajedaghi and Ackoff 1994). Within this view, organisational culture is considered as a singular entity, and organisational leaders are believed to manage culture and consensus among a diverse group of participants (Meyerson and Martin 1994).

This top-down approach to change management has been challenged. Critics have highlighted how central control and the direction of change is contested by subunits of the dominant culture. In contrast to the linear paradigm, this perspective of culture represents an open system perspective, in that culture is considered to form by influences from inside and outside an organisation. The cultural change process is viewed as local and incremental, and bottom-up approaches to change management are advocated (Meyerson and Martin 1994).

This approach to change management is explored below with reference to NRE's Product Development Team in Tatura.

### **Product Development Team**

NRE's Product Development Team (PDT) at Tatura is utilising a multi disciplinary approach to address the issue of water use efficiency. The catalyst for such an approach has been the lack of significant change in water use efficiency in NRE's northern irrigation region since 1994 (Linehan *et al.* 2001).

Initially the PDT was formed to increase the adoption of practices contributing to water use efficiency in the northern irrigation region. However, it soon became evident that change was not occurring as expected, and an approach was implemented which aimed to explore four aspects of the change process, namely stakeholder involvement, organisational change, understanding the farmer and understanding change mechanisms (Johnson 2001). A multi-disciplinary approach emerged which facilitated contribution to PDT projects from a range of disciplines including social science, economics and applied irrigation research, and from different people within and outside the organisation. The group is also working with several groups external to NRE, including the University of Melbourne and the University of New England.

This approach has led to consideration, albeit originally unintentional, of issues relating to organisational culture and the issues that can arise when valuing and integrating multi-disciplinary input, as required by complex natural resource management issues in a triple bottom line context. Resistance to the approach has resulted in a need to consider the organisational structure of NRE, and how the PDT needs to interact within this structure to ensure success.

Agencies are often referred to as consisting of silos, that is, structures of insular programs and projects that appear to focus on a particular issue or industry. Within these silos cultures prevail that are based on the roles, products and processes of the particular silo. These product/process cultures often dictate the behaviour of individuals to a greater extent than any overriding organisational culture (Lillrank and Kostama 2001), and this makes implementation of a multi-disciplinary approach within an organisation difficult.

In addressing these issues, a top down approach that dictates a monocultural worldview is likely to facilitate only superficial change as the product/process cultures will continue to exert a strong influence on people (Lillrank and Kostama 2001). Lillrank and Kostama (2001) therefore argue that change management and innovation processes need to take into account and respect these particular sub-cultures if they are to be successful. While organisation-wide processes that attempt to facilitate integration between departments are likely to take a more planned and directive approach, the PDT is exploring a paradigm of change management that recognises the local and incremental change processes that challenge the dominant culture (Meyerson and Martin 1994). This paradigm of organisational culture allows the team to make sense of the processes of change that result from their implementation of a multidisciplinary approach within prevailing product/process cultures. Furthermore, it suggests that by acknowledging conflicting and diverse views a multi-cultural view may emerge. To facilitate this process, Lillrank and Kostama (2001) advocate action research methodologies that bring these different views together.

The PDT has commenced pilot projects within programs and project teams, such as particular industry extension teams, or research projects that are interested in the research developed by the team. By working within these project teams, the research is applied and further developed according to the particular needs and issues of the project teams. The approach allows the information from the PDT to fluctuate in content and be integrated in ways that acknowledge and respect the particular values of people within the project teams. Overall, it facilitates a localised change process that acknowledges difference and diversity.

### **A systems perspective on change management**

A third view of the change process is provided by systems thinkers, who argue that change is neither top down nor bottom up. They view organisations and people as operating interdependently within social systems. As Gharajedaghi argues, the performance of the system at large is not the sum of the independent parts, but rather is the product of the interactions of the parts (Gharajedaghi and Ackoff 1994). Change and culture are considered to be emergent from this interaction between the stakeholders, and organisations do not respond to their environment, but actively construct it (Daft and Weick 1994).

This notion of culture and change as emergent from interaction between stakeholders, challenges the linear idea that theory or knowledge precedes action. It suggests that understanding and culture are

defined and redefined through the interaction within a system. Weick describes this sensemaking process as retrospective, arguing that we make sense of a lapsed experience or action to which many possible meanings could be attached, by selecting meanings and imposing coherence by framing things in a way that is congruent with our sense of self and our values and norms (Weick 1995). Seely Brown and Duguid (1994) similarly argue that organisational identities are not derived from centrally controlled theories about organisational activities, but from participation in the actual activities that are shared by members.

Some systems thinkers advocate a consensus-building approach to change management (Kersten 2000; Engel 1997). However, the assumption that at the end of change and cultural processes "... there lies the achievement of a whole and coherent 'society' or 'community'" (Hunter in Frow and Morris 2000) has been questioned. Approaches that aim to build consensus have been criticised for reconciling differences in a way that disempowers or excludes certain groups (Frow and Morris 2000). Other system thinkers therefore fully embrace diversity and consider differences within the system to be irreconcilable. This view of culture suggests it is multi-directional and fluid, and that cultural closure is impossible. The notion of a singular culture is rejected as culture is created constantly, simultaneously and differentially. Hence there is no central locus of control of culture (Meyerson and Martin 1994).

### **The Developing Social Capability Project**

NRE's Developing Social Capability (DSC) project has implemented a systems approach to change management, which brings together a broad but relevant range of stakeholders to explore the different perspectives of an issue and to identify possible courses for action (Engel 1997). Through this process, issues and solutions that would not emerge from a government or scientific perspective alone, come to the surface and the notion of a central driver for change is rejected. Instead it opens up the possibility of a multiplicity of solutions or pathways of development and innovation (Drinan 1997).

The DSC project has been developed to build the capability of people in agriculture to manage successfully in today's changing environment. It is based on a recognition that a social capability approach requires the development of appropriate organisational structures and skills. A report commissioned by the project, suggested that this capacity could be enhanced by involving staff in research into issues and opportunities for change (Monash Regional Australia Project and Centre for Research and Learning in Regional Australia 2001). A participatory action research approach has been implemented, involving a broad range of stakeholders, including not only extension staff, but also the broader community in the diagnosis of issues that will form the basis for further actions. So unlike most government projects, the DSC project did not begin with clearly defined outcomes and objectives that would be driven by a central agency through extension channels. Instead, the process involves extension practitioners and the broader community in the development of extension activities. As such it differs from traditional approaches whereby they only become involved once a problem is identified and a solution (or extension program) has been developed. Furthermore, this action research process links community development with organisational change processes (Monash Regional Australia Project and Centre for Research and Learning in Regional Australia 2001) as all participants inevitably change and are changed by their interaction in the process (Meyerson and Martin 1994).

Overall, the systems methodology that is implemented by the project recognises that NRE as an organisation does not act on its environment, but is located within it. As such the organisation

constructs and is constructed by this interaction within the broader system, and organisational change processes are not separated from change within the broader community.

### **Implications for extension agencies**

The integrated approach to dealing with natural resource management issues that is advocated by both case studies, collapses some of the distinctions between traditionally separate domains within the organisation, such as for instance policy development, research and extension. This not only challenges the identity of people working within the organisation, but also the structure and type of culture that is supported by that structure.

It is not surprising then to find that the results from the first cycle of interviews with participants in the DSC project suggest that many viewed the social capability approach as fundamentally disparate to NRE's structure and history (Mentor Consulting 2002):

*... that means there must be a shift in paradigms, and a shift in thinking, and perhaps a beginning of a cultural shift within a department ...*

*People are trying to do extension, but they are scientists ... Look at what people are taught – little social training ... [T]he selection criteria for the department is the degree in agriculture.*

Maarleveld (2000) explores some of the implications of the increasing interdependencies that are created by natural resource management issues for a groundwater management organisation in the Netherlands. This organisation used to derive its identity primarily from its status as a centre of hydrology research. However, as the organisation changed from driving change through technology to facilitating change through negotiation between interdependent stakeholders in groundwater management, the defining skills of staff became those of facilitation of co-management arrangements. In this process the boundaries of the department were realigned or even broke down. Furthermore, the style of the organisation moved from bureaucratic and formal procedures to interactive communication and collaborative action (Maarleveld 2000).

Similarly, as the change process within natural resource management creates interdependencies, organisations such as NRE are increasingly shaped by interaction with other stakeholders. This process, whereby the organisation and its members' sense of identity is affected, is inevitable. For an organisation like NRE it raises strategic questions about its role within the broader system of natural resource management.

### **Conclusion: A multi-paradigm view**

The challenge for state agencies is how to manage the inevitable emergent change processes and align these with broader organisational imperatives. While we must recognise the emergent nature of cultural change, change management practices will always comprise top-down approaches. Change processes visibly converge at the managerial level as this is where organisational culture is formalised (Daft and Weick 1994). Continued exploration of how managers facilitate and manage this convergence is important. However, it must be recognised that this convergence is always incomplete and problematic due to the emergent and therefore multiple nature of cultural change processes. Meyerson advocates a

multi-paradigm view of culture that incorporates top down, bottom up and emergent perspectives of cultural change in order to highlight the levers of change, as well as those areas that are outside the control of management (Meyerson and Martin 1994). Overall though, if we recognise the interdependence of participants within a system, then the position that change can be linear, comprehensive, singular in direction and controlled centrally, must be abandoned.

From the above it is clear that the context of change within natural resource management demands additional approaches to the traditional top down and linear approaches to change management. However, while systems methodologies are currently trialed at the operational level within extension programs, higher level strategy development and policy-making processes continue to operate primarily within the linear paradigm and are more likely to result in directive approaches. One of the ways in which state agencies may manage or facilitate the convergence of change processes that connects emergent processes with broader organisational imperatives, is by matching systems methodologies within service delivery with systems methodologies to strategy development (Mintzberg and Waters 1994) or policy making (Kickert, Klijn and Kloppenjan 1997). This will align strategic and operational activities within the agencies. Furthermore, it will bring into view the emergent change processes and diversity of perspectives that are often invisible within a primarily directive approach, and this will allow organisations to position themselves accordingly.

It is beyond the scope of this paper to explore this in greater detail. However, it is clear that the nature of the role of government is changing as a result of the interdependencies created by natural resource management issues and the resultant holistic and systems approaches they demand. While there is a place for organisation-wide approaches to change management, particularly in terms of managing the convergence of emergent change processes, we have argued that top down change management approaches are ineffective in controlling the complexities of the current context of change in natural resource management.

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