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The Australian Rangeland Society

IVORY TOWERS, SILOS AND THE REMEDY

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INTRODUCTION

This paper examines the reasons why knowledge about the rangelands is transferred so slowly and imperfectly between landholders, scientists, the policy community and politicians. There are two limbs to the analysis: dis-coordinated accountability and dis-coordinated insight-sharing.

FRAGMENTED ACCOUNTABILITIES

Governance of Australia's natural resources is dis-coordinated and, frankly, dysfunctional. One looks in vain to find all four of statutory or *legal power*, *financial capacity*, *technical information* and *skilled staff* present in the one organisation at the one location.

Those who know the rangelands and who are deeply committed to sustainable management lack the authority or the funds to make sustainability happen. Those who have the power and the budgetary capacity are preoccupied with other problems, or aren't interested, or hold flawed assumptions about what are the remedies.

FRAGMENTED INSIGHT-SHARING: COMMUNICATION CIRCLES

It is widely recognised now, particularly through the work of Land and Water Australia, that the greatest obstacles to improved Natural Resource Management (NRM) are social and institutional factors and not scientific. This conclusion surfaces regularly at conferences, often as a call for better "communication" between scientific disciplines and between scientists and practitioners. But it is "insight-sharing", not "communication", that is wanting. Surely we are drowning in communication.

Too often debate about contemporary issues proceeds in separate forums which do not adequately illuminate each other. Consequently, groups of participants do not share each other's insights in sufficient depth to forge enduring solutions. And participants hold deeply entrenched mindsets that steer participants *away* from learning and problem solving.

The stakeholders involved in managing the rangelands can be classified into various occupational or disciplinary groups that form **semi-closed circles**, *between* which communication is much less satisfactory than communication *within* them. All the following roles are stereotypes, of course.

Scientists

The endless outpouring of scientific papers in the journals is evidence that our understanding of the way that landscapes function is expanding rapidly. But this by itself doesn't seem to be enough to ensure that management of those ecological systems actually improves.

Scientists tend to share distaste for the imprecision of policy and political life and stereotypically prefer to remain aloof from messy, bruising public debate. Scratch a scientific conclusion in a political forum, and it can usually be reduced to "a likelihood" that "needs more research for confirmation". This caution is no match for the conviction of, say, economics that markets are the way that land and society and everything else should be organised.

Academic scientists gain recognition within the academic community by publishing papers in refereed journals, according to a well-defined set of protocols. The journals are read mostly by other academics and sometimes by the policy community, but almost never by landholders or politicians. Worse, scientific “popularisers” are commonly disparaged by their peers.

Farmers (sic)

Surveys of rural opinion repeatedly show that farmers hold and always have held a deep conviction that they should manage their properties sustainably for passing on to the next generation. Yet they are generally not exposed to the voluminous literature on environmental issues and can hardly be blamed for under-estimating the severity of the environmental crisis.

It is easy for the policy elite in the capital cities to opine that farmers must embrace the new globalised competitive world and shed traditional ways. But from their first days in secondary school, the tertiary-educated policy elites have been studying subjects that are painfully unfamiliar to stereotypical farmers, who may have left school at 14.

By contrast, the average farmer works under his father’s tutelage. Not only does he inherit his father’s approaches to pasture improvement, soil erosion and cattle breeds; but also his attitudes towards shiny-bottomed bureaucrats and the remote and uncaring city. His father is likely to pass on a suspicion of “airy-fairy” theoreticians and a belief in the noble self-reliance of the man on the land. His more intellectually curious brothers come home from studies or jobs in the city for a few days at Christmas. And perhaps worst, while his kid brother at 30 is a middle manager in a city firm with his own cost centre, the home-stayer won’t be able to make his own decisions until about 55, when father at 75 retires to town, close enough to take a weekly run out to see how things are going.

These features of communication among farmers become self-fulfilling. Farmers’ children who take up positions in academe or policy learn a different language. When peak farming bodies recruit, they seek those who speak the language of farmers. The consequence is that rural industry lacks analytical capability and spokespeople articulate in policy circles.

Policy community

The policy elites within academe, the public service, think tanks and peak interest groups work in an atmosphere of intensive intellectual stimulation from multiple sources. New ideas stream into their offices daily, carried from the four corners of the globe. They receive submissions, briefing notes, items in newspapers... from government departments, CRCs, RDCs, research institutes, interest groups, parliamentary committees, their own subordinates – by the barrow-load. These are written in educated English, suffused with jargon.

This does not necessarily mean that the policy community is well informed. At the practical end, the policy officer in the Premier’s Department may never have travelled west of Roma except for a family wedding. Purchaser-provider models of service delivery by which policy and operations may even lie in separate organisations can ensure that the traditional gulf between the practical men of action and the powerful bureaucrats who decide their future is even deeper and wider.

Then at the theoretical end, the policy officer’s world view is shaped for life by the mindset of their primary professional discipline: economics, law, science, sociology and agriculture each imparts to their practitioners a distinctive lens through which to conceptualise issues. By the end of the first degree, economists are convinced that people are driven by self-interest; and scientists can’t understand why plain evidence isn’t enough to convince erratic, non-linear human beings. Few economists or lawyers study any ecology. Yet half of most federal Cabinets are lawyers.

Politicians

The political community embraces ministers and other parliamentarians, their private offices, local councillors and their party supporters. Communication is one of the main functions of the politician: absorbing representations from those with axes to grind, advice from experts, commentary from journalists and shifts in public mood as ordinary people express their responses to forces and events within their society.

Two filters of diverse opinions hamstring the politician's perspectives. First is the tendency of busy, lonely politicians to rely upon a small coterie of advisers who filter out unwelcome pressures and evidence. The second is the predominance of lawyers and the almost complete absence of scientists in the parliaments.

CIRCLES EXPLAIN WHY INNOVATION IS SLOW

These are, of course, not the only circles. There are people who dedicate their energies to brokering communication across boundaries. The ABC and CSIRO have a proud record in this function. Is it coincidental that both bodies are on their knees, hobbled by budget cuts?

Another major unifying device is a conference like this. Professionals receive a buzz from conferencing with professionals from different disciplinary backgrounds, because reductionist circles are breached. We experience the synergy that comes from discovering how much we have in common with others. However, politicians, landholders and scientists tend not to mix in this way because they go to different kinds of conference, so the barriers remain.

TRANSLATING IDEAS INTO PLACE PRESCRIPTIONS

Let's now consider boundaries as spatial, not as intangible cognitive limits (as above). Boundaries are required for *administrative* purposes such as disbursing grants, implementing works and allocating financial resources; and also for *planning* purposes such as resource assessment and preparing place-based guidelines and strategies.

The pre-eminent coordinating forums dealing with NRM activities in rural and remote Australia are the regional NRM bodies/catchment management authorities. There is now little scope to vary their catchment-led formula without throwing away more than 10 years' investment in institutional arrangements. It is probably best now for other bodies involved in NRM to adopt the regional NRM boundaries as a best-fit option, then their various planning and implementation functions could migrate over time, at least as subsets or supersets.

BUILDING TRUST

Reeve et al (2002) explained that in small groups, trust and cooperative resource management are mutually reinforcing. Trust is critical to the ability of communities to adapt to changing economic circumstances. "People build trust by working together and greater trust enables them to tackle increasingly more difficult management problems, which builds further trust, and so on." This mutual reinforcement is a virtuous circle which can lead to increasing self-governance. Critical to success is to establish a forum to allow people to work together *at an appropriate scale*.

FUNCTIONAL SKILLS MUST BE TRANSLATED INTO PLACE-BASED KNOWLEDGE SOMEWHERE

Traditionally, government services are divided into portfolios *between* departments, along functional and sometimes disciplinary lines. The same applies *within* departments and local governments. This has the advantage of allowing disciplinary technical expertise to flourish. However, this 'silo' method has a significant defect when it comes to managing areas or places: it requires strong coordination between the disciplinary specialists in order to obtain well-rounded outcomes. The nearest disciplinary specialist might well be 1000 kilometres away and it is rare for a cluster of them to be found in one locality outside the State capital.

Superimposed upon the functional (disciplinary) splits is a science-policy-operations axis. Again, this set of silos is not place-based. Yet the environment and natural resources inevitably are managed locally as places. The question for governance then becomes, at what scale should the knowledge of the functional and agency specialists be translated into capacity of the place-based managers? At present, this happens mainly on individual properties, within the brains of landholders and any local Landcare group. At what scale should there be some place-centred coordination of capacities to support landholders?

The 56 NRM regions are too broad to engage the majority of property holders directly. Why? First, many planning processes such as pest management planning make sense only at the district scale. Second, meetings at the district scale can draw representation from all sectors of the community. More remotely than that, communities speak primarily through representatives. Third, at the district scale, policy and operations can mesh together. More remotely than that, there is a stronger risk that planning will become disconnected from implementation.

NRM works are inevitably implemented at the scale of individual properties, on which landholders are sovereign. For most of the time, the horizon of most citizens preoccupied with their daily lives is not broader than their district / neighbourhood. So district forums are required.

DISTRICT ADVICE OR DISTRICT GOVERNANCE?

Some functions that could assemble science, policy, operations and expertise in districts indicated in the abstract above. The functions, however, can be no more than simply advisory to the State and local authorities, *unless* the authorities bring their powers and capacities to the table.

CONCLUSIONS

More scientific research or legislation or funding by themselves will not be enough to ease distress in the rangelands. More fundamental insight-sharing is required; and the stakeholders must be persuaded to pool their legal, financial, informational and personnel capacities. Long term, the remedy lies in multidisciplinary education. But there are some practical steps that rangeland stakeholders can take in the meantime.

First, improve insight-sharing and pooling of capacities within regions incrementally, even without the active support of the State and local authorities. Steps to do this include defining and settling on 'NRM districts' for engagement by governments, communities and place managers; encouraging existing committees to adopt the same boundaries; building up existing Landcare committees and regularising meeting schedules. Second, make every effort to encourage the State and local governments to adjust their own boundaries, staffing structure and lines of budgetary allocation to match - difficult, but possible. Third, make every effort to encourage the central agencies, notably Treasury and Premier's, to visit the regions and see at first hand the degree of need and the circumstances about which they are daily making strategic and influential decisions.

Who should take the initiative? The regional NRM bodies (in Queensland least) are the only prominent network of organisations who are actively crossing disciplinary boundaries in land, water, vegetation and heritage; and crossing geographical boundaries between the property up to the Commonwealth scales. What is lacking is a good conceptual model towards which existing efforts at coordination can incrementally migrate; and commitment by the State and local governments to support this process and to align their administration to suit. This paper aims to nudge insight-sharing along by supplying the conceptual model.