

Designing Robust Common Property Regimes for Collaborative Arrangements towards Rural Resource Sustainability

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1. Introduction

Sustainability of many human communities in agricultural and pastoral regions is diminishing. In many parts of the world, a significant contributor is natural resource degradation within these regions. The Australian *National Action Plan for Salinity and Water Quality* (Commonwealth of Australia, 2000) estimated that land and water degradation costs Australia at least \$3.5 billion annually. The real cost to society is probably much greater through the interdependency of social-ecological systems. The effects on rural communities, their social systems and economies are increasingly visible.

Institutions – socially-accepted rules for interaction of humans with one another and nature (see Ostrom 1990, Bromley 1992) – affect the resilience of ecological systems. Ecological and social resilience in Australian rural communities appears elusive within contemporary policy frameworks (Reeve 1992, 1997, Dovers 2000). Despite increasing efforts to reduce social and environmental costs by encouraging structural adjustment in agriculture, there remain substantial obstacles to adjustment. These obstacles include existing institutions, social values and cultural norms relating to land use (Reeve 1998). Conventional attempts to address these issues are hampered too frequently by an entrenched narrow focus on individual property rights (particularly in respect of land tenure), as well as by institutional arrangements implemented at inappropriate scales for sustainable landscape futures (Lee 1993, Reeve 1997, 1998, Brunckhorst 2000, 2001). Intertwined with the cultural dimensions of property rights and its influence on natural resources management is a complex social ecology. This social ecology is a web of both formal and informal social behaviours and structures that influence landowners' attitudes about issues related to property rights and the environment. It also affects their willingness to support or oppose initiatives for improved sustainability.

It is important to clarify our understanding of the above-mentioned terms such as 'institutions', 'property' and 'property rights' in the context of designing more sustainable resource governance arrangements (see Smajgl and Larson, Chapter 1). The socially-accepted rules defined above as institutions comprise not only formal rules (eg, laws, regulations, contracts, memoranda of understanding, etc) but also informal rules (eg, customs, norms, conventions, etiquette, etc.). Rules are institutions where they are actually followed by most individuals to which they apply (ie, they are 'working rules') (Ostrom 1990).

The concept of 'property' encapsulates a claim to a benefit (or income) stream, and a 'property right' is a claim to a benefit stream that can be enforced against claims by others by virtue of the strength of prevailing institutions (Commons 1968, North 1990, Ostrom 1990). In other words they are endorsed, respected and upheld by humanly devised constraints, enforcement and, other interactions that effectively maintain their legitimacy. Property rights are thus the individual components of the sets of relationships comprising institutions (Schmid 1972). Conversely, property rights *regimes* can be regarded as institutional mechanisms people use to control their use of the environment and their behaviour with each other (Hanna et al. 1996). Bromley (1992) considered a property rights regime for a particular natural resource as the totality of social and institutional arrangements by which individuals are aware of what parts of the resource are their and others' property, and what duties are imposed on them by virtue of others' property rights.

The strength of the institutions underpinning property rights in a particular domain, and thus the enforceability of these rights in that domain, depends considerably on the legitimacy afforded the institutions by those expected variously to comply, monitor and enforce them. In some cases, the legitimacy afforded customary institutions (eg, verbal agreement sealed by shaking hands in the presence of witnesses) for defining a new property right (eg, for one landholder to borrow another's tools) may provide all the institutional strength desired. Other cases may warrant some supplementation of this customary legitimacy with the added legitimacy that may be gained by introducing higher authority. For example, a decision by a catchment management committee, on how to allocate incentive funds for on-ground works between groups of landholders may be regarded as more legitimate if the committee comprises representatives nominated from local landholders within those communities reflecting a particular domain. Moreover, the socially-accepted authority of the committee may provide all the legitimacy that is needed for many of the decisions arising within this domain, with decisions referred to yet higher levels of authority (ultimately to government and/or the legal system) only when its legitimacy in respect of such decisions becomes unduly stretched. Similarly

within particular land-use domains, indigenous cultural rights maintained and upheld over thousands of years have legitimacy, unwritten in law, that is increasingly accepted by land title holders.

Five types of property rights can be distinguished in respect of natural resources, namely rights of: access, withdrawal, management, exclusion and alienation (Schlager and Ostrom 1992). In turn, rights holders differ in how many of the different types of property rights they hold in respect of a particular resource. Only where rights holders hold all five types of property rights in respect of a resource can they be regarded properly as 'owners' of that resource (Schlager and Ostrom 1992).

The situation of 'non-property' or 'open access' exists either where a property claim has not been made or where the claim is unprotected by an accepted legitimate authority. This situation often characterises ecosystems which, because they overlap different land tenure systems, no single property holder is motivated to sustain in their entirety. Both state and individual land-tenure systems are increasingly implicated in observed failures to sustain such ecosystems (Reeve 1997, 1998). These failures stem in significant part from the high transaction (including political) costs of enforcing the rights and responsibilities established by these property systems, as well as from entrenched institutional arrangements for resource governance that deal poorly with ecosystem functions crossing interdependent scales (i.e., managing externalities; see Reeve 1992, 1998; Lee 1993; Brunckhorst et al., 1997; Marshall 2002, 2004b,c, 2005).

Given the tendency of property systems and associated ideologies inherited from the past to remain 'locked in' despite escalating change pressures from negative environmental externalities, there is increasing value in institutional experimentation designed to explore innovative paths forward. In this chapter, we are concerned particularly with the innovative use of various business structure entities that can provide supporting strength ('robustness', sensu Anderies et al., 2004) to collaborative arrangements of groups of landholders of multiple resources that occur across the landscape and land titles. We draw on lessons from practical on-ground experiments, which in turn were informed by multi-disciplinary research into long-enduring institutional arrangements for collaborative resource use and management often referred to as 'common property regime'. Margaret McKean (2000b p.30) describes a common property regime as "a property-rights arrangement in which a group of resource users share rights and duties toward a resource". The focus of common property research has been on understanding what gives common property regimes both the strength and flexibility required to manage natural resources sustainably in the face of uncertainty and flux. The institutional experimentation

reported here drew deeply from the insights gained from research on common property regimes and collective action by Ostrom and others (see for example: Ostrom 1990, 1992; Bromley, 1992; Berkes and Folke 1998; McKean 1992, 1997, 2000a, b; Ostrom et al., 2002; Marshall, 2005). Some of the features of successful common property regimes identified in this research for institutional adaptability in managing natural resources are summarised in the next section. Identification of such characteristics helps build our capacities for responding to accelerating change pressures on interdependent social-ecological systems (see for example, Science, vol.302, 2003).

A recent advance in this discussion has arisen from Anderies et al. (2004), who asked “what makes a social-ecological system robust?” Anderies and co-authors differentiated resilience, which arises from spontaneous self-organising processes within a system (such as an ecosystem or a social network), from robustness that arises in addition from conscious efforts to increase a system’s capacity to adapt to internal and external stresses. The more we understand how to facilitate robustness in linked social-ecological systems, the better equipped we become to design institutional arrangements capable of enhancing the resilience of those ecosystems we depend on (Anderies et al., 2004). The on-ground experiments discussed in this chapter seek particularly to understand how groups of farmers can move towards sustainable natural resource management and enterprise development by crafting institutional arrangements enabling them to manage their combined resources cooperatively. Such arrangements can contribute both resilience and robustness. In building robustness, we are particularly interested here in how to take advantage of opportunities the existing suite of business structures (supported by a state’s legal system) might contribute to robustness of common property regimes.

The “outback” of Australia represents a large part of the continent, and is characterised in large part by rangelands – arid and semi-arid landscapes with occasional monsoon-like rains and low productivity soils used primarily for grazing. These social-ecological systems can be differentiated as particular biocultural or landscape region, such as the northern savanna. Despite the sometimes large distances between neighbours, these are interdependent systems with external influences, including those of distant governments. In understanding, facilitating, or possibly re-designing institutional arrangements for collective action and resource governance in the outback, knowledge by local people of the design characteristics of robust community-scale institutions will be important. Appropriate business structures might offer a supportive framework for collective decisions that facilitate adaptive management enhancing sustainability and endurance.

After summarising the characteristics of enduring common property regimes, we draw on three projects we have been closely involved with to describe how legal entities or corporate structures might be employed to enhance robustness of the institutional arrangements. All are Australian grazing systems, one in the Mallee rangelands and Riverland in South Australia, and two on the relatively richer soils of the New England Tablelands of New South Wales. Each example involves the development of a form of common property regime for collective decision-making, action and governance of landholder groups and/or communities. Facilitating and supporting (but not stifling) this institutional development through legal entities or corporate structures can contribute robustness. Balancing individual versus collective rationale, and risk management of internal and external stresses enhances robust capabilities. Some corporate structures or combinations of entities might, in different ways, be useful in the development and evolution of robust institutional arrangements for collective use and governance of various resources across multiple scales of ownership.

2. Characteristics of Robust Commons

Numerous instances of long enduring common property regimes, referred to here as 'commons', have now been identified and studied. The fact that social-ecological systems of this kind are found so widely and often have a track record stretching over a long period, suggests they can be highly adaptive and robust. Their operational characteristics (Netting 1976; Ostrom 1990, 1992; Berkes and Folke 1998; McKean 2000a, b; Ostrom et al., 2002), if able to be generalised and translated to contemporary circumstances would help us respond to and manage change pressures, functions, and dynamics in ways that add resilience and robustness to existing social-ecological systems.

In building on the design principles of Elinor Ostrom's (1990) synthesis, and the work of others, McKean (1992, 1997, 2000 a, b, 2002) identified several internal and external features of common property regimes that help explain robust instances of such institutional arrangements. Features regarding relationships among regime co-owners or collaborators are termed internal features, and include the following (after Ostrom 1990, McKean 2000 a, b, 2002):

1. There are clearly defined boundaries to the resource system, and to the group of individuals with rights of access to resource units.

2. The collective owners of land, water or other resource rights are a self-conscious and self-governing group. Dynamics are best managed if the group is relatively small (or if large, consists of small sub-groups) and has a history of shared values and social capital (built on trust and social norms including reciprocity).
3. Within-group homogeneity of identities and interests assists cohesion. Heterogeneity of skills that contribute to group interdependence and capacity is also valuable. Members, including the young educated, with external networks to decision makers or others in positions of power can be useful.
4. The rules of engagement and operation are of local origin and design, easily understood, easy to enforce and ecologically conservative (to assist matching to ecological context and resource capacity).
5. Distribution of benefits from the commons is equitably proportional to the effort (time, labour, infrastructure, money) invested in the commons by members.
6. The group has an internal mechanism for resolving conflict.
7. The rules provide for monitoring of adherence behaviour and application of appropriate graduated sanctions.
8. Those guarding or monitoring the commons, and its officials, are accountable to the co-owners.

In a globalising world, pressures on a group of co-owners will come from an increasing number of different directions. A group's characteristics in terms of relationships between its members and the outside world are termed external features. In addition to those 8 internal features, McKean (2000a, b, 2002) identified three external features of successful common property regimes:

9. It is better for the group of co-owners to have independent jurisdiction or autonomy. Groups will be more robust when their members possess long-term tenure to resource rights and are free to design their own institutional arrangements unchallenged by external authorities. Governments that defend and support the group's independence can play an important role.
10. Both ecological and political scale and context are important to the success of common property regimes in managing natural resources sustainably. common property regimes operate better in managing resource allocation, monitoring and use when their boundaries match the scale and context of local ecological resources.

11. Across spatially extensive ecological resource systems and/or large groups of users, it is important to nest layers of governance for decision-making and responsibility.

Experimental common property regime models designed in accordance with these features can be expected to strengthen the robustness of the rural social-ecological systems into which they are introduced, and increase sustainability of resource use within such systems. The contribution towards robustness of a particular tactic in common property regime design is explored in the following brief summaries of projects with which we have been involved. This tactic involves a group of co-owners organising themselves through state-supported legal structures capable of accommodating and consolidating the eleven features listed above – feature 9 most obviously. These legally recognized business entities will henceforth be referred to simply as ‘structure/s’.

3. Contemporary commons in Australia: Reinventing commons through cross-property collaborative structures

Farmers in nations like Australia, Canada and the USA, are constrained (spatially, socially, economically and ecologically) in their capacity for sustainable resource use. Institutional impediments include an individualistic property rights system (Marshall et al. 2005) and a political-economic system that demands ongoing productivity increases to make up for declining terms of trade despite frequent accompanying declines in the productive capacity of the natural resource base. These demands typically come without commensurate pressures on farmers to account for the external costs, environmental or social, that satisfying them often generates.

A contemporary approach to institutional design for rural common property regimes acceptable to rural landholders and their families involves the parcelling up of individual titles of nearby farms to gain both ecological and socio-economic benefits. This would help overcome some mismatches between the scale of ownership for rural land, the scale of ecological functional capacity, and the scale at which costs are incurred from its utilisation. Three institutional experiments that pursue such an approach are discussed below. Each of these experiments follows a model wherein individual land titles were retained while bundling up a much larger collective resource pool having greater capacity to deliver economies of scale and manage the resources

within their functional capacity. The experiments were designed to answer key questions including the following: How do we design and implement cross-tenure resource use and management in a modern nation state? What business structures or entities are available to support design and operation of a common property regime? Can a common property regime supported by a formal business structure remain adaptive while protecting both the individual and collective interests of participating landholders?

3.1 Bookmark Biosphere: Common Property and Cross-Tenure Resource Management

The UNESCO Biosphere Reserve program provides an international umbrella for developing and testing community-based adaptive-management or 'learning-by-doing' models. This approach has begun to develop at the Fitzgerald River Biosphere in south Western Australia (Watson 1993), and at the Bookmark Biosphere in the South Australian portion of the Riverland region through which the lower reaches of the Murray River flow (Brunckhorst et al., 1997, Brunckhorst, 2000, 2001).

Riverland communities of South Australia, Victoria and New South Wales living along the Murray River are faced with a number of man-created environmental challenges. Soil loss, landscape degradation and species loss, combined with the infusion of saline ground waters, decreasing water quality, and disappearing wetlands collectively threaten the sustainability of all these communities.

The semi-arid Mallee ecosystems of lower Murray region are uniquely Australian, consisting of a few Eucalyptus species adapted to the harsh dry conditions. Productivity of the Mallee ecosystem is low. Soils are fragile and poor with deficiencies in structure and nitrogen content. Characteristically, vegetation is multi-stemmed and squamose, and possesses peculiarly shaped leaves enabling the canopy to intercept about 15% of available rainfall with a further 30% running down the multiple trunks. The region receives an average of 240 millimetres of annual rainfall with annual evaporation rates potentially greater than 2,300 millimetres.

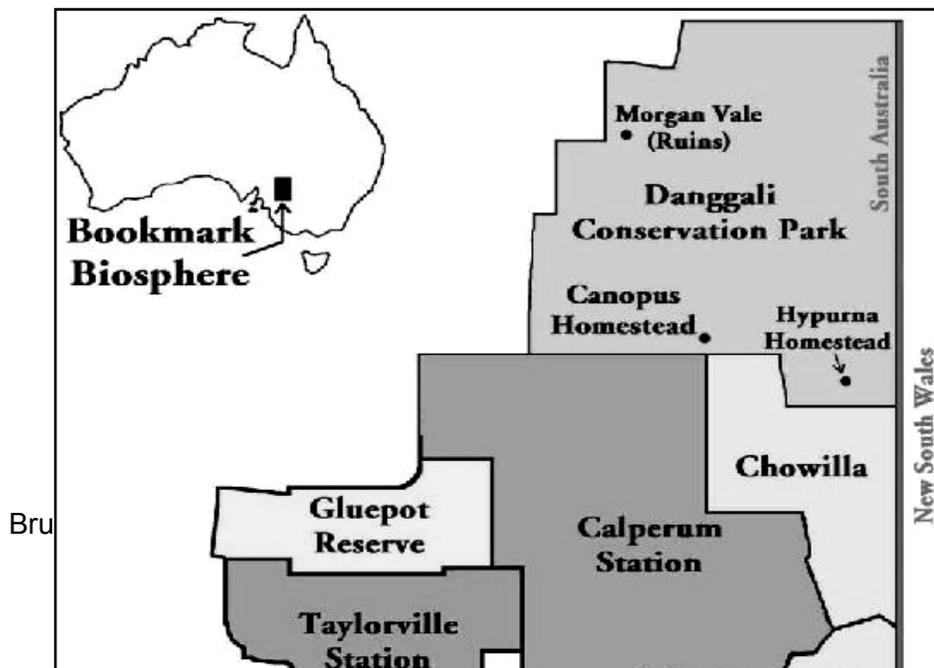
Droughts are frequent and are punctuated with erratic floods. The hydrology of the floodplain and wetlands of the Murray River has been altered by a variety of engineering projects designed to support agriculture and irrigation development. Problems of groundwater salinisation have been compounded by other factors, including loss of deep-rooted vegetation through land clearing

for timber and pastoral use throughout the past century. Many of the land degradation problems within the biosphere reserve are replicated throughout the drainage systems of the Murray River and its tributary, the Darling, which together drain one-seventh of the continent.

Bookmark Biosphere covers a region of more than 9, 200 square kilometres and encompasses the interconnected Murray river, its anabranche creeks and floodplain, and mallee-eucalypt dominated uplands. This is the environment that the local communities identify with – the ‘Riverland’. Several small townships occur in the region. Large-scale landscape recovery and species restorations are necessary and integral to the pursuit of ecologically sustainable development initiatives.

The Bookmark Biosphere common property regime is made up of 40 different parcels of land of varying tenure, including: conservation reserves; game and forestry reserves; national trust land; large (private) pastoral leases; and, individual private title (Figure 1). It was initiated in 1992, through the purchase of the 2,000 square kilometre ‘Calperum’ pastoral lease, with funds provided jointly by a Chicago benefactor and the Australian Government. The community was given title to, and responsibility for, the land and water resources through a ‘Deed in Trust’. This stimulated an evolving collaboration across many other landholders in the ensuing years. ‘Calperum’ became a community focal point to trial innovative sustainable land uses and large scale restoration. In joining this collective together, governments have vested the community with ownership rights and responsibility for selecting goals for management of this entire regional landscape for their future.

Figure 1. Bookmark Biosphere in South Australia. Generalised map showing major land parcels including the common property, Calperum (Map courtesy Australian Landscape Trust and Bookmark Biosphere Trust).



The flood plains of Bookmark Biosphere Reserve are recognised as internationally significant wetlands for waterfowl and migratory species (e.g., RAMSAR). 'Calperum', which incorporates many of these wetlands of international significance, is also the focal point for the community to experiment with novel ecologically restorative industries. This is not only on the land it encompasses, but also across adjacent privately-owned lands and government conservation lands (Brunckhorst et al.1997a).

The Riverland communities, through nominated representatives, manage the land within the Biosphere Reserve and accomplish required tasks through a citizen's committee known as the Bookmark Biosphere Trust, which is constituted under South Australian legislation. The Trust is the formal management body responsible for Bookmark Biosphere Reserve and for making collective decisions, organising, monitoring and controlling cross-land tenure activities. State and Federal agencies and private sector professionals assist the Trust in understanding and implementing management options.

Creation of the Bookmark Biosphere involved a bold commitment to support 'bottom-up' capacities to accomplish conservation goals, political harmony, and innovative working relationships for leveraging available resources, commitment and talent. It provides for a combination of capacity building from the 'bottom (community)-up', 'top (government)-down' and 'sideways (private sector)-in' (Brunckhorst, 2000). In addition to the community co-owned 'Calperum' land, it involves a common property regime institutional

arrangement encompassing multiple land tenures and parcels by means of a combination of structures.

The Bookmark region and its Trust are supported through several interesting capacity-building partners and structures. The first of these is a non-profit philanthropic foundation, the Australian Landscape Trust (ALT), a progeny of the Ian Potter Foundation. The ALT provides more than funds for innovative land management and recovery enterprises. It also contributes capacity building and analysis to support the community decision-making. Enterprises developed, such as a horticultural business producing drought and salt resilient cultivars, were established using limited liability company and non-profit foundation structures, but with some characteristics of co-operatives. The ALT and Bookmark Biosphere Trust, in turn, provide governance for a nested system of informal Landcare groups that have been delegated responsibilities for smaller areas (within or across properties) of the Bookmark Biosphere region.

3.2 Tilbuster Commons

The Tilbuster Commons is a common property regime established collaboratively by local landholders and facilitated as a deliberate experimental model by researchers and Land and Water Australia for a period of three years (see Coop and Brunckhorst 1999, 2001; Brunckhorst and Coop 2003; Williamson et al. 2003). It is located in the Tilbuster valley, on the New England Tablelands in northern New South Wales. The land covers approximately 1,300 hectares and is an amalgamation of the privately-owned parcels of land of four grazing families, with individual properties varying in size.

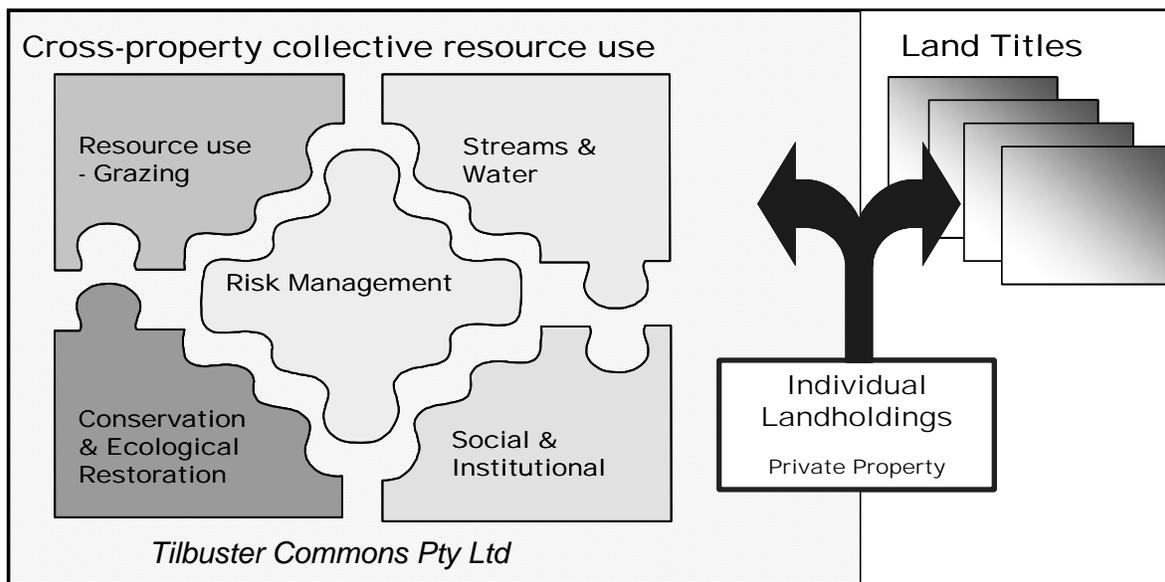
The social and ecological issues facing the landholders in the Tilbuster Valley are similar to those that face many rural communities. Amongst these pressures are an ageing rural population, small size of land holdings and, ecological and economic decline. Consistent also with many rural communities, the members of the valley tend to provide both a supportive environment and assistance to each another. Another factor in the selection of the Tilbuster resident landholders was their concern for the long-term future of the valley and their willingness to recognise many of the issues associated with collaborative management.

Four grazing families contributed land, livestock, infrastructure and labour to form the common property arrangement. The entire group as a single enterprise, collectively known as the 'Tilbuster Commons', manages these

combined resources. The members and their families are establishing a grazing arrangement with the aim of testing whether the common property regime model is capable of delivering improved economic returns while ensuring the sustainability of the productive resource. The model relies on achieving a scale of operation at which integrated management of resources for maintenance of ecological integrity, as well as grazing purposes, becomes possible (Figure 2).

After two years of discussion facilitated by researchers and a local leader, the landholders formed an informal (un-constituted) arrangement in 1999, known as the Tilbuster Common Resource Cooperative (Coop and Brunckhorst, 1999). While this had no legal standing, it provided an important social vehicle for the group to begin building necessary social capital required for the transformation towards whole system planning, resource allocation and collective decision making (Brunckhorst 2001, 2002; Brunckhorst and Coop, 2003).

Figure 2. Diagrammatic illustration of how the Tilbuster Commons refocuses strategic decision making from spatial units based on individual land titles, to considering the resource base as a ‘collective. This enables more efficient and appropriate use of the ecological resources, time and labour, while providing additional scales of economy and risk management.



The initial decision to participate was not based on a set of hard and fast rules that were already in existence. Rather, it was based on shared values and

aspirations, together with attempts to apply in practice some of the guiding features of successful common property regime institutions that were listed earlier. This 'philosophy' of explicit shared direction became, and continues to be, an important set of criteria against which to test decisions. This probably marks the beginning of the informal institutionalisation of the Tilbuster Commons. Since its inception, trust, credibility and acceptance of each other's strengths and weaknesses have grown. Over time, each participating member has been able to see the advantages of collaborating. A collective confidence was gained in the group's capability to negotiate equitable outcomes with multiple benefits (see Singleton, 1998; Wondolleck and Yaffee, 2000, on building trust, collaboration and cooperative informal institutions).

The group then started to consider the kinds of structures and corporate arrangements they needed. The group felt strongly that a simple structure providing flexibility would serve them best. The range of decisions included livestock management, planned grazing, pasture management, the strategic allocation of conservation and environmental rehabilitation areas, and operational issues. Operational rules began to evolve which reflected the design features of long-enduring common property regimes discussed earlier. Issues at the forefront of discussions included allocation of land to the common (excepting small areas nominated for private use, primarily around member's homes), selection of key infrastructure items, development of a 'formula' representing the interests of each member, and allocation of land/resources to maintaining ecosystem functions recognised as underpinning the productive sustainability of the common. Expected labour inputs simply became a matter of a landholder family looking after the herd of cattle when they were on their land, according to the collectively decided grazing plan. Labour inputs therefore automatically equated to the proportion of the land area contributed by a landholding family and their expected share of the net profits. The rules and processes that govern the management of the Tilbuster Commons continued to evolve through this collaborative process, guided by testing decisions against agreed values and goals (Brunckhorst and Coop 2003; Williamson et al. 2003).

The group considered various structures suitable to undertake the management and enterprise development of the commons, including Partnership, Trust, Co-operative and Company arrangements. They decided that a limited liability company (Pty Ltd) structure seemed to provide the best arrangement (Williamson et al. 2003). In a common property regime with this structure, there is a useful tension between individual landholders' interests and the collective interests of the group of landholders represented in the company. With both hats on, individuals must consider the options that best

benefit both themselves and the collective interests of the Tilbuster Commons Company. In other words, there is a healthy 'conflict of interest' for collective action across individual land tenure boundaries (Brunckhorst and Coop 2003).

The landholders, as directors of the company, each have a share calculated using the 'formula' agreed by all. The formula represents the proportion of original contributions of land, stock, equipment, expected labour input etc., contributed by individual landowners. It also forms the basis for sharing profits in the form of allocated dividend shares. As company directors they make collective decisions for running the enterprises of the company, and to manage the portion of the whole resource base represented by their land and the creek that runs through it (Figure 2). Initially an informal tenancy at will was created with the landholders as Lessors and the company as Lessee. This allowed the company to start rotational grazing across all properties. The arrangement was trialled as a renewable fixed term lease for the three years of the experiment, but was later renewed. A fixed term lease provides a mechanism with some stability and protection for both individuals (i.e. retaining land title) and the company (Williamson et al. 2003).

Individual and collective social benefits of this common property regime include freeing up of time and labour and the pooling of a variety of expertise. This in turn helps build robustness for common property regime institutions and resilience of the ecosystems supporting its resource base. Some simple but highly regarded benefits enjoyed by the Tilbuster Commoners include more efficient accounting and management practices, and reduced labour inputs, for example, by eliminating the need to crop for winter feed. This permits families to 'get away' to have a real holiday, and to leave gates open when the livestock are on someone else's landholding.

At broader ecological scales across the landscape, the common property regime provided opportunities for long-term conservation and maintenance of rare, basalt associated ecosystems and the restoration of woodland and stream environments (e.g., creek bed and riparian vegetation). The Tilbuster common property regime therefore incorporated several different levels of rights and rules – for example, limiting certain uses and fencing the creek across properties and facilitating stream bed and riparian restoration. Such landscape-scale resource use and restoration, based on assessment of the natural resources base across an ecological landscape and a regime of informally upheld rights, can build resilience and sustainability at the same time as providing good economic returns. As Ostrom (1999) has pointed out, the higher level authority of the group to devise future operational level rights is what makes collective-choice rights so powerful.

Under conventional individual ownership regimes, a typical landholding may comprise some high quality soil that is suitable for farming, grazing land that is generally not suitable for farming, and some poorer areas barely suited to grazing. The type and mix of these areas will vary depending on the topography and soils of the region. Faced with various family and economic pressures and with only these resources at the landholder's disposal, there is often no option but to over-use, or inappropriately use, each type of resource. The productive riparian land is inevitably cropped, possibly for both summer and winter feed for livestock. The mid quality land will be grazed throughout the year, and the poorer areas will slowly decline due to the impacts of livestock 'wintering over'. Input costs tend to increase to counter negative trends of water quality, parasite load and reduced natural productivity of both cropped and grazed areas.

A valuable aspect of the Tilbuster common property regime is the ability to allocate the available resources more efficiently, but within their functional capacity. It could be considered a modern version of the 'scattering' that occurred on the old agrarian commons of Europe (Dahlman 1980), but updated with new pasture management knowledge and aid from modern tools such as GIS. By recognising the distinction between resource allocation and land tenure, the Tilbuster Commons landholders consolidated their herds to graze them across all of their properties (Figure 2). This allows the utilisation of grazing techniques such as planned grazing regimes over wider spatial and time scales. The planned timed grazing is slowly returning a mix of native grasses and certainly maintains improved ground cover (80-95%), with additional benefits for water quality and deep soil moisture (Earl and Jones 1996, Savory 2000). Input costs have been greatly reduced and production increased.

Clear 'triple-bottom-line' benefits have therefore arisen from the Tilbuster Commons innovation. In addition to considerable environmental and grazing resource improvements, the system appears better at managing production 'risk', as evidenced by the resilience of the collective grazing resource during the recent drought. There has been a considerable 'freeing' up of time and labour as well as reduction in financial costs, and each landholding family's dividend also represents a better (farm) income than they had been able to achieve individually. The company business structure contributes robustness to the day to day operational rules, collective decision making and risk management (e.g., to destock early through the recent drought), and the sharing of benefits and responsibilities.

3.3 Furracabad Valley Group Farming Initiative

A further initiative concerned with exploring the potential of a common property regime to enhance the economic, social and environmental sustainability of rural land use has been underway since 2000. It is focussed on the Furracabad Valley some 5-7 kilometres from Glen Innes (also within the New England Tablelands). The valley consists of about 25-30 farms, varying from 10 to 1,500 ha in size. This initiative arose from the experiences of the valley's Landcare group, who have worked together successfully for over a decade in addressing their common environmental and natural resource management problems. These successes led the group's members to become interested in exploring how they might enhance their economic and social sustainability by building on the platform for collective action they had established (Marshall 2004a; Marshall et al., 2005).

Driven by this interest, they completed a Farming for the Future program offered by NSW Agriculture (now Department of Primary Industries). The program highlighted the economies of scale that smaller farms in the valley were missing out on. The view was formed that all farms in the valley could gain economically by pooling their resources into a 'group farming' operation, perhaps structured similarly to the Tilbuster Commons, and share the resulting economies of scale. Compared with the alternative where some farmers buy others out in order to capture these economies for themselves, it was anticipated that the group approach would better maintain the district's social fabric.

At a meeting of landholders held in May 2000, it was agreed that implementation of the concept would best occur as a formal project involving professional support and a staged consultation process. The ensuing application to the Commonwealth Government's Regional Assistance Program for project funding justified this approach as follows: "Farmers have traditionally operated in management isolation, making their own decisions and rarely having to make joint decisions that directly influence their financial future. It is here that the greatest challenge lies in ensuring that stakeholders fully understand the concept and the impact on them". The funding application was approved in early 2002. The aim of the project was to develop the group farming concept to the stage of a business plan and achieve sign-off from a critical mass of landholders on implementing the concept in accordance with that plan.

The landholders originally expressing interest in the group-farming concept were interviewed in early 2003, to determine whether there was sufficient serious interest to justify preparation of a business plan. While virtually all the

landholders interviewed acknowledged the concept to be good in principle, for most it was 'too much, too soon'. Of the 18 farm businesses interviewed, five indicated a serious interest in leasing their land to the proposed group farming arrangement within the reasonably near future. While this level of interest was less than hoped for originally, it was judged sufficient for starting to consider how the group farming enterprise might be structured, and to assess the financial implications of such a structure for participating landholders. It was noted that the 2,454 ha of land held in aggregate by these five farm businesses compared favourably with the combined land holding of around 1,300 ha upon which the Tilbuster Commons had been founded.

A workshop was held in July 2003, attended by representatives of four of the five farm businesses that had indicated serious interest in implementing the concept. Although each of these individuals stressed the perceived social and environmental advantages of joining a group farming arrangement, they agreed that their decisions to join would depend ultimately on evidence that they would benefit in economic terms. The workshop was facilitated by a consultant with knowledge of group farming enterprises established elsewhere in New South Wales. He explained that his experiences in this field had taught him the importance of apportioning economic rewards within a group farming enterprise in line with two key principles: (i) all contributions of inputs to the group farming enterprise should be remunerated commercially, and (ii) all remuneration should occur transparently.

The workshop facilitator suggested to the landholders present that joining a group farming enterprise would involve them contributing one (or more) of land, labour and working capital to a company that would run the affairs of the collective enterprise (hereafter referred to as 'the company'). Under this structure, the resources contributed by the participating farm businesses would generate a single pool of gross income to be shared between them. Deducting from this pool the variable costs of the various enterprises utilised to generate income, would yield the gross margin to the company. Deduction of the overhead costs of the company, (i.e., those not specific to particular enterprises) and the reward paid for labour and management would give the Gross Profit available for rewarding the land and working capital contributed by the participating businesses. The reward for the working capital contributed (Net Profit) would be given by deducting from Gross Profit the reward allocated for land. This Net Profit would be available for some mix (decided by the company directors) of paying dividends to the participating businesses and reinvesting in the company.

The landholders present at the workshop agreed that this structure was appropriate, and that the reward paid for labour and management should be

based on commercial rates matched to the levels of skill and responsibility required. They agreed further that the reward paid for land leased to the company by the participating businesses (that would retain individual title to this land) would need to offer adequate incentive for those businesses to themselves incur the expenses of pasture maintenance and improvement, fencing, and so on. For this reason, it was agreed that land rental rates should be based on the productivity of land parcels (measured by livestock carrying capacity).

It was anticipated by those present that individual farm businesses would contribute to the start-up working capital of the group farming company pro rata to their shares of the total carrying capacity of the land run by the company. Shares in the company, and thus in the total dividends remitted to shareholders, would be allocated in proportion to the working capital contributed by each participating business. Subject to the company's constitution, the potential would exist for individual businesses to vary their investment of working capital in the group farming company by trading or gifting shares.

Based on a budget identifying the financial advantages for the individual farm businesses from joining a group farming enterprise structured as outlined above, the farm business representatives present at the workshop indicated interest in proceeding towards a business plan for such an enterprise. Nevertheless, by the time that a further meeting was convened a month later, one of these businesses had lost interest in joining a group farming arrangement. This meant that the combined land area potentially available for such an arrangement had declined to 1,741 ha. Moreover, concerns were expressed that the arrangement might become 'unbalanced' with this level of participation, given that one of the remaining businesses would be contributing three-quarters of this area. It was decided that a group farming enterprise was not viable with this reduced level of committed interest, and consequently that the project could not be progressed to development and sign-off of a business plan.

The source of many of the obstacles to gaining the commitment of farmers to the group farming concept can be traced to time. This factor was critical in two ways. Firstly, circumstances need to be such that a 'critical mass' of farm businesses are ready to embrace the concept at the same time. Such a favourable situation seemed to prevail around early 2000, when the concept was conceived and the funding application was submitted. By the time that the project commenced, however, the situation had become less propitious. Some landholders committed to the concept had left the district. In a few other cases it seemed that the earlier enthusiasm for the concept had simply dissipated

with the passage of time, perhaps due to the morale-sapping effects of the drought, or disappointment at loss of interest from others they had looked forward to working with in the group farming arrangement.

The second way that time presented an obstacle arose from the conservatism of most farmers. Due to this conservatism, considerable time is often needed to change their attitudes. Probably the most formidable attitudinal obstacle in this respect derived from the widespread 'rugged individualist' self-image of many Australia farmers. Changes to attitudes of this nature do not occur overnight. In retrospect, it was optimistic to expect that the attitudes of farmers unfamiliar with the group-farming concept at the beginning of fieldwork for the project could be shifted sufficiently by its end (i.e., within three-quarters of a year) that they would give up their independence to join such an arrangement. As mentioned above, it took nearly two years of discussions before the four farm businesses now involved in the Tilbuster Commons agreed to form an informal arrangement (i.e. from 1997 to 1999). It was not until January 2001 that a private company structure was registered for the Commons, and not until the next financial year that the company began operating. Indeed, there are grounds for optimism that the seeds planted by the Furracabad Valley group farming project will bear fruit within a few years. Between circulation of the project report in early 2004 and the time of writing, there has been a further three meetings of representatives from farm businesses in and around the Furracabad Valley who are interested in the concept, and more are planned for the future.

Although the detailed structure of the company that would manage the affairs of the Furracabad group farming enterprise remained to be finalised, prospective landholder participants in the enterprise were clear they would not be satisfied with a business arrangement for which their only protection against future non-compliance was upfront promises and handshakes. Their proposed common property regime would include finer-scale institutions defining their common property rights (e.g., relating to the kinds of internal mechanisms for conflict resolution highlighted as important in the sixth feature of a robust common property regime listed in the previous section) and individual property rights (e.g., in respect of transferring access rights to descendants, apropos of the first listed feature). The structure and associated institutional arrangements finally adopted, it followed, would need to be ones that could be enforced with affordable transaction costs if necessary through avenues under relevant law and government administration. Several of the elements, described earlier (e.g., common property regime features 1, 2, 4, 5, 8, and 9 listed in the previous section), important to potential success of the Furracabad common

property regime would therefore be supported by a legal structure for their business arrangement.

If implemented, the common property regime arrangements associated with the group farming concept promise to deliver significant advantages in and around the Furracabad Valley over the longer term by increasing opportunities for multiple use of the land coming under these arrangements. For some landholders interviewed during the project, a perceived advantage of such arrangements was that they would allow pooling of land with similar non-agricultural qualities, such that the combined area of land with such qualities becomes sufficient for commercial exploitation (e.g., hunting, ecotourism, etc.). Also identified was the related advantage that the pooling of labour under group farming would provide increased scope for its specialisation. Some labour may then become available for non-agricultural activities, such as running farmstays or supervising wildlife tours. A further advantage identified along these lines was that group farming enables the participating individual businesses to share the risks of moving into non-agricultural uses of their resources, and thus may facilitate evolution of multiple use of rural land over the longer term. For these benefits the elements of feature 9 above could be provided through collectively agreed rules and operational plans within a legal business structure such as a Company or Trading Cooperative.

4. Structures and Entities to Support Cross-Tenure Common Property Regimes for Resource Management

Design features of successful common property regimes include clear boundaries around both the resource(s) and membership of user rights, as well as capacities to distribute benefits, manage external perturbations, and protect their decision-making autonomy. Various forms of structures and entities are available to help groups of resource users design such features into designing arrangements for contemporary common property regimes. The above examples of contemporary common property regimes in rural Australia are, or envisage, using structures similar to those found in most countries. Farm families are generally used to such entities and will feel comfortable with them. There are a variety of structures that might be useful for development of common property regimes in different contexts and circumstances, as well as for counterpart organisations (e.g., Landcare groups or non-profit organisations) that are purpose-designed for specific functions (including, as in the case of Bookmark and Tilbuster, for resource management and restoration). This section provides a brief outline of potentially useful structures. It is summarised from work undertaken for the (Australian) Rural

Industries Research and Development Corporation (RIRDC) that examined potential institutional and business structures for multiple use of natural resources, such as associated with wildlife and ecotourism cooperative ventures in outback Australia (Brunckhorst et al, 2004).

In Australia, Landcare groups have been the main form of collective action across land-holdings to undertake specific environmental rehabilitation works. For the most part, over the 'Decade of Landcare' during the 1990s, they were informal unconstituted groups with seed funds from an Incorporated Association at a regional level. There is now an increasing trend (and requirement from government) for Landcare groups themselves to be Incorporated Associations, although many still operate under a regional Landcare organisation or government agency. A limited range of formal structures exist for managing collective land management activities of non-profit entities that are created for the specific purpose of undertaking charitable or environmental activities by a group of members. Non-profit status is a prerequisite for registration on the Registry of Environmental Organisations (Federal) and for tax purposes, such as deductability, GST rebate, exemptions from various duties and bank charges. Such structures include 'Trusts' as non-profit foundations (such as the Australian Landscape Trust). They also include Incorporated Associations (under State government legislation), as many independent Landcare groups are constituted. The purpose and strengths of these types of structures in a resource management context lie in their ability to attract funding to undertake environmental activities, while adequately representing the interests of their members in these endeavours. In this role, such a structure can be a useful 'counterpart organisation' to a structure formalising a cross-tenure resource management enterprise. We return to a consideration of this role later.

Table 1. Summary of features of corporate structures that might be suitable for wildlife enterprise business entities.

Feature	Partnership	Company	Co-operative (Trading)
Potential role of entity	Primary Trading Entity	Primary Trading Entity	Primary Trading Entity
Establishment costs (for NSW; other States might vary)	\$126	\$1,200-1,600	\$171
Represents collective interests in decision making	Yes	Yes – through entitlement and number of voting rights is issued via voting share	Yes – rule of one vote per member Relationship between Co-operative and its members
Primary guiding instrument	Partnership Agreement	Constitution	Rules
Risk management	Provides no risk protection to partners. Liability of venture capital partners is limited to their investment.	Limited liability	Limited liability
Membership	Minimum 2, maximum 20	No upper limit	Minimum 5, no upper limit
Governing legislation	Partnership Act [in each state]	Corporations Act 2001 (Commonwealth)	Co-operatives Act 1992 (NSW) [similar for other States]
Taxation implications	Each partner responsible for own tax. Losses unable to be distributed.	Company pays tax on its profits. Dividends issued to shareholders, able to be franked.	Co-operative pay tax on profits, and may frank dividends. Dividends tax deductible.
Management by	Partners	Board of Directors	Members

Table 1 provides a comparative summary of the features of three entities (partnership, trading co-operative, and company). This information might be useful for cross-tenure enterprises, such as grazing, wild harvest or other wildlife enterprises, and ecotourism (see Brunckhorst et al., 2004).

Organisational structures or business entities suitable for conduct of enterprises supporting cross-property title, multiple resource uses (e.g., livestock grazing, hunting tourism, commercial wildlife harvesting, and ecotourism) include private companies, partnerships and co-operatives. Due to space limitations, a limited number of the most appropriate structures are examined here. These are based on Federal or New South Wales (State)

legislation and requirements that are similar across other Australian States and Territories ¹.

4.1 Partnership

The Partnership form of business involves an association between at least two persons carrying on business in common with a view to profit. Like the Incorporated Association and Co-operative, it is the Partnership Agreement that states partner responsibilities and reduces potential disputes.

Unlike the Incorporated Association and Co-operative, the establishment of a Partnership does not create a separate and distinct structure. Profits and losses generated by the Partnership activities are distributed to the partners, who are individually responsible for paying income tax. At the death of a partner, the Partnership is dissolved and a new Partnership comes into existence – unless the partnership agreement provides otherwise. There is no flexibility to easily transfer membership in the Partnership. Reflecting the absence of a separate Partnership structure, this business arrangement does not provide a risk management structure. Hence, partners face unlimited liability for losses incurred by the partnership. In addition, a partner may bind the other partners to a contract without their authority. This characteristic of Partnerships raises doubts regarding their usefulness for application in a collective decision making context.

Recent legislative reform by the Federal Government provides the option of a Limited Partnership. This structure distinguishes the general partners with unlimited liability and the investing partners with limited liability. This reform sought to provide partnerships with enhanced opportunities to access venture capital.

4.2 Company and Trust

The Company structure is a popular and flexible corporate form through which commercial activities may be undertaken. The Company exists as a separate legal entity in perpetuity. It provides limited liability to its members and interests in a Company are easily transferred.

There are several types of Company structures, including Companies limited by shares, and those Companies limited by guarantee. Companies limited by shares include Proprietary Companies (Pty Ltd), Unlimited Proprietary (Pty), and Limited Companies (Ltd). In addition, there are No Liability (NL) Companies. The Company is responsible for paying income taxes assessed on the taxation of its profits. Shareholders receive their entitlements to profits by

way of dividends. Tax paid by the Company can be passed to the shareholders by way of franked dividends.

For the purposes of supporting a group of landholders or other rights holders interested in developing a common property regime for more sustainable rural resource enterprises such as those being considered here, the Proprietary Company might be appropriate and familiar to landholders. Proprietary Companies can provide shareholder flexibility, as well as allow for participative decision-making, ease of transfer of membership, and limited liability. The Company structure achieves flexibility in ownership and decision making by the collective shareholders through the ability to issue a range of shares that contain various characteristics. For example, voting may or may not be attached to financial interests of shareholders in the organisation. Management of the Company is the responsibility of the Directors or elected Board.

A Trust can be defined as an arrangement binding a person or corporation (the Trustee) to administer an asset (land, money, some object, a business, etc.) for the benefit of a person or corporation (the beneficiary). A Trust asset is owned dually. The beneficial owner is the real owner and gets the 'benefit of ownership'. However, the Trustee is the legal owner. For community organisations, this might take the form of the Local Council (as Trustee) holding a building (asset) in trust for the benefit of a specific community group.

Consequently, there are special requirements in establishing a Trust. There must be a difference between the legal ownership of the asset and the beneficial ownership. There must be property for which the Trust exists, and all parties to the Trust must know and understand the obligations regarding the Trust. The Trustee is usually subject to Trustee legislation, and the beneficiaries are subject to the Trust Deed ². There are three kinds of Trust arrangements (Fixed, Discretionary, Unit), each having a different way of managing entitlements, and sometimes assets.

There is potential for conflict with common property regime principles that require the beneficiaries (members) to be involved in the decision making of the enterprise – a role normally confined to the trustee who cannot be a beneficiary member. On the other hand, a Trustee that is well trusted by the members might contribute other valuable elements, such as monitoring and conflict resolution. Overall, the Trust is considered not considered a structure that is readily flexible for supporting cross-property enterprises (Brunckhorst et al, 2004).

4.3 Co-operative

The Co-operative is a business form that exists to deliver benefits to members, usually co-owners. Co-operatives are distinctive for fostering a democratic style of work, pooling of resources to be more competitive, buffering external risks or perturbations, and sharing skills. The Trading Co-operative is a particular type of Co-operative, structured so that the profits can be distributed to members. This type is suitable for commercial organisations, and would appear to support many of the design features of long-enduring common property regimes as discussed earlier.

The formation of a Co-operative requires a minimum of five members. Trading Co-operatives are more similar than other Co-operatives in form to the Company business structure. Like a Company, there are no restrictions on trading. In contrast to the Company, however, the Trading Co-operative distinguishes between the shareholding and voting rights of members. Each member of a Trading Co-operative is entitled to a single vote regardless of his or her financial interests in the Co-operative represented by shareholdings.

The Rules of the Co-operative establish and define the relationship between members and the Co-operative structure. The Rules therefore provide an effective description of the requirements and expectations of membership. Such rules might be an advantage over other business forms in that the institutional culture and the responsibilities of members are clearly defined from the outset rather than assumed. Nevertheless, institutional evolution can still occur since the Co-operative's rules can be altered over time.

The on-going costs associated with maintaining the Co-operative include fees that apply when amending these Rules. The administration requirements of a Co-operative are otherwise similar to those for a Company. The Australian Taxation Office views a Trading Co-operative as a 'co-operative company' and assesses these entities by the same taxation regime that they apply to a Company. Unlike a Company, however, the dividends paid to members are tax deductible. This provides an incentive to distribute all profits to members. More recently, Co-operatives have been granted the opportunity to frank part of their dividends, thereby assisting taxation planning of members.

An overhaul of the Co-operative legislation in the State of New South Wales in 1992 made it possible for Co-operatives to raise additional capital from non-members. Investment can be made through purchase of a special kind of 'share' called Co-operative Capital Units (CCU). These CCU's are flexible instruments that allow them to be designed to contain elements of both equity (representing ownership in the Co-operative) and debt.

The Co-operative structure appears to combine the provision of equity in decision-making processes with the flexibility needed to support multiple property (land title) resource use by the collective owners as members. Whilst a Company can be structured in a way to provide participatory decision-making by shareholders (as with Tilbuster Commons), it is the responsibility of the Company Board to undertake the management of the Company activities. A Co-operative can have a Management Board (a subset of Members), but the relationship of members with the Co-operative automatically includes 'ownership' rights and responsibilities (which a company shareholder may not have). This formal recognition of member responsibility is likely to enhance the social capital aspects of collective decision-making. Both the Company and Trading Co-operatives provide similar advantages for risk management (e.g., limited liability for members).

4.4 Business Structures for Enterprise Collaboration across Landholdings

A Company structure will work well for development of cross property enterprises involving grazing or a variety of other diversifications, for example, wildlife harvest and/or ecotourism. Through such a structure, different resource rights and responsibilities can be decided along with operational rules, and arrangements for reporting and monitoring, governance, trading and profit distribution. It can also have a Trust or Incorporated Association allied with it providing non-profit charitable or environmental activities, or it can act as a corporate Trustee. Company structures have worked well for the Bookmark Biosphere Reserve enterprises and the Tilbuster Commons model, both of which utilise an allied non-profit environmental organisation.

The Trading Co-operative business structure appears to have been underutilised in recent years. Co-operatives appear to provide the same benefits as a company structure, but offer additional flexibility. A Co-operative together with an Incorporated Association for environmental restoration and conservation could provide an efficient vehicle for sustainable wildlife enterprises and reduced cattle or sheep stocking rates. A collective of ecotourism operations (a common property regime) could be nested within such a cross-property primary production enterprise having differentiated resources and access (perhaps farm based, but with multiple property access enjoyed only by members of the Co-operative).

4.5 General Considerations for Development of Wildlife and Ecotourism Enterprises

Ecotourism tours, farm-stays and various wildlife harvest and value adding enterprises have potential to provide improved environmental and socio-economic returns for outback Australia. Harvesting of wildlife, such as kangaroos or emus, is likely to qualify as a primary production activity as it might be interpreted under a management plan as "maintaining animals for the purpose of selling them or their bodily produce" (Income Tax Assessment Act ITAA 97 sec 995-1 1). In this regard, the 'management' of animals is likely to be interpreted in a similar manner to fisheries.

Importantly, the wildlife harvest business structure is likely to maintain a primary producer status rather than the members or shareholders of the entity. There are several concessions provided to primary producers through the taxation system. Of these, the two that are likely to provide benefits for wild harvest activities are the Energy Grant Credit Scheme, and the Deductibility for Environmental Protection programmes. These are not described here. A variety of farm diversification taxation issues related to the commercial use of wildlife, tourism hunting and ecotourism are discussed in the RIRDC report 'Taxation of Primary Producers and Landholders' (Ashby and Polkinghorne, 2004).

Future developments of government policies for outback enterprises, such as value added products from wildlife harvest, are likely to be based on fisheries and the existing kangaroo industry. However, regulations regarding the kangaroo industry require some considerable overhaul in order to allow easier flows of wildlife products from harvest through value adding activities to markets.

4.6 Collective Enterprises 'Beyond the Farm Gate'

For products that are completely new to the market place, a processing, distribution and marketing system beyond the farm gate (the 'value adding' or supply chain) will not exist. It can be a difficult, time consuming, expensive and risky exercise for farmers to undertake value-adding activities by themselves. The array of skills and motivations required may not be shared by many landholders (see Stayner and Doyle, 2003). After all, farmers' special skills and interests lie in raising and growing things and in land management, rather than in off-farm business and marketing. Stayner and Doyle (2003) found that post-farm gate activities often ended up being hived off into separate businesses that have flexibility to respond to the competitive pressures of their own markets and than can be operated at arm's length from farming operations.

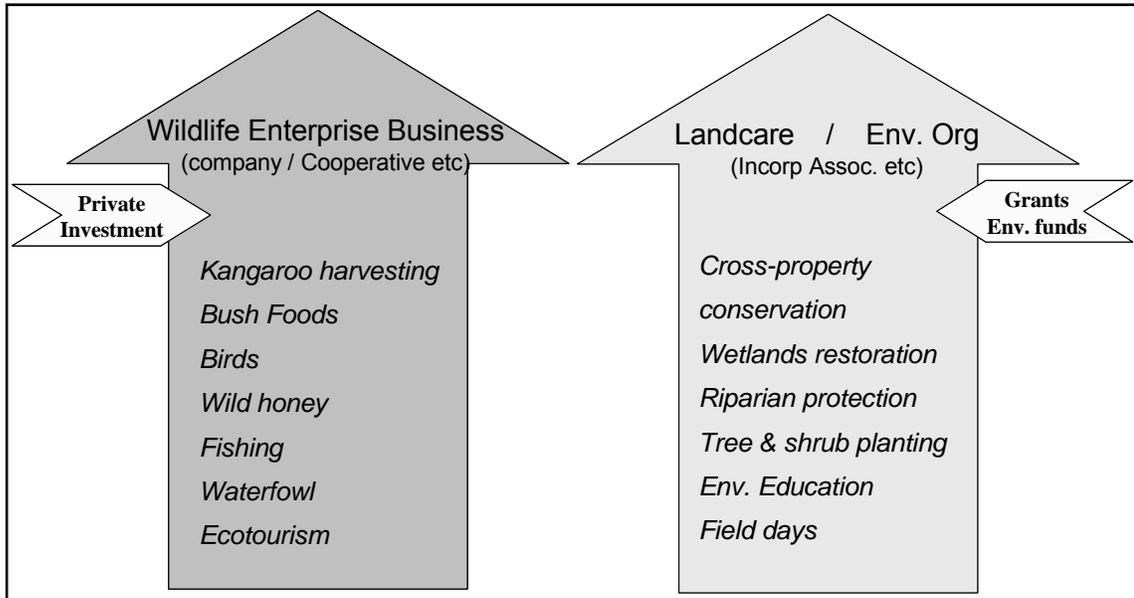
Indeed, in order to achieve the objectives of diversified enterprises it will be important for landholders to continue to focus primarily on designing and managing the multiple farm level production systems.

These findings, together with an appreciation that better returns can come to an agricultural community through participating in value-adding activities (e.g., additional employment and services), indicate that an appropriate way forward will often be for landholders to establish one or more co-operative businesses for value-adding activities that are separate from, but operate locally alongside, a common property regime established for running agricultural and associated resource management activities. Co-operating farmers or landholders should closely consider the sorts of relationships they will have with other participants in the value chain beyond their farm gates. In these cases, landholders or other community members might need to become involved as a collective to create such a value chain. A collaborating group of farmers might provide primary produce to a local community owned co-operative that undertakes processes, value adding and marketing. For example, an additional collaboration of two or more collectives with different business focus linked through resource value adding benefits such as a small abattoir producing meat and other products for a cross-tenure wild harvest of kangaroos and feral goats. Nesting of institutional arrangements, and possibly business entities, with a particular focus and role (for clear boundaries of operations and interactions) could be useful. Such relationships could require the negotiation of supply contracts or agreements with producer collectives, processors, wholesalers, retailers or exporters. Benefits might include reduced uncertainty and risks associated with producing a novel commodity. Landholders have, in recent years, experimented with various forms of producer alliances that establish relationships of one sort or another with the supply chain. Some beef producer alliances have been quite successful in value adding, providing lessons that could be useful to other enterprises of farmer collectives (see Pinnacle Management, 2000).

4.7 Counterpart Organisations and Combinations

In order to gain synergies for both economic and environmental benefits, it can be useful for a group of farmers to establish a variety of organisational and institutional arrangements to undertake different activities, whether agricultural production, ecosystem conservation and restoration, natural resource management, ecotourism, value adding, or marketing.

Figure 3. Complementary parallel arrangements to maximise synergies between wildlife enterprise businesses and environmental outcomes.



Separate but complementary organisations can provide some advantages for co-owners or members in integrating wildlife or ecotourism enterprises (across land titles) with environmental rehabilitation and education (Figure 3). Incorporated Association arrangements that some Landcare groups work under, or other non-profit environmental organisations that are registered under the Commonwealth Government's Register of Environmental Organisations (e.g., a Foundation such as the Australian Landscape Trust supporting Bookmark collectives), could play a valuable role and contribute additional benefits to landholder collectives (Brunckhorst et al., 2004).

Complementary or counterpart Landcare/business organisations, such as those used by the Tilbuster Commons and Bookmark Biosphere common property regimes, reinforce the close relationship between the environment, resource base and enterprises in the minds and actions of participants (Figure 3). In turn these relationships support capacities in robustness and resilience within and across the socio-ecological system. While these relationships are not analysed further here, we believe this as a considerable and potentially fertile topic deserving increased research effort (see Brunckhorst 2000, 2001; Anderies et al., 2004).

5. Lessons for designing robust cross-tenure collaboration towards sustainable rural development

Common property regimes have significant potential to bring about the cooperation across landholdings needed to achieve sustainable futures for outback Australia. Nevertheless, a group of landholders who decide to combine their resources in order to realise the advantages of this cooperation will probably find advantages in using a business structure recognised under law to lower the transaction costs involved in facilitating enterprise efficacy, distributing responsibilities and rewards, maintaining legal stability, and making and enforcing collective decisions.

McKean (2000a, b, 2002) identified several important features of enduring common property regimes that contributed robustness in terms of relationships of co-owners or collaborators with the world external to their common property regime. One is that members of the collaboration, as a group, have independent jurisdiction or autonomy (design feature number 9 above). Government instruments, such as statute business structures, help defend and support a group's independence to design and implement their own institutional arrangements. The use of a structure in development of a common property regime that is supported by law will also reduce greatly the transaction costs for the common property regime in dealing with issues like liability, insurance, asset and financial accounting, labour, and taxation. In this chapter, we have explored how different kinds of corporate structures and entities recognised by Australia's legal system can assist common property regimes to fulfil more closely the design features that history shows are important for their enduring success. These features can contribute robustness to the common property regime institution, without compromising self-organising capacities for monitoring, flexible re-organisation, and adaptation that contribute to resilience.

A Company or Trading Cooperative can provide appropriate structures for supporting the operation of a common property regime, including by protecting its autonomy. These structures allow landholders to retain individual title to their properties. They provide a mechanism whereby natural resource systems spread across individually-owned properties can be managed as single units, while at the same time setting clear boundaries around the group of landholders with rights to appropriate the benefits arising from more integrated management of those systems. They can serve as vehicles for diversification into enterprises for which success requires access to large-scale resource systems, such as wildlife, ecotourism and cultural tourism enterprises. They may also be useful to indigenous peoples seeking to 're-assemble' property and tenure systems for natural resources in ways that increase their opportunities to pursue new enterprises without detracting from existing ones

(e.g., benefiting from differentiated resource access across multiple land tenures). Building on existing efforts, further ‘on-ground experiments’ could be devised to build further understanding of such collectives; for example, a group of tour guides in a region working as a collective to secure and distribute returns from providing access to an ecotourism experience spread across multiple landowners’ properties. The landowners may or may not also be a collective for this purpose or for other larger scale resource use enterprises having collective benefits.

We conclude that adoption of business structures can appreciably enhance the robustness of common property regime arrangements in rural contexts for sustainable use of resources at larger scales – across the boundaries of individual land titles. Like Australia, many countries have legislation that recognises and provides support for particular kinds of corporate structures that might be useful in contributing robustness to common property regime institutional arrangements and operations. This advantage arises to the extent that adoption of a structure allows a common property regime to more effectively fulfil the eleven design features for long-enduring common property regimes discussed at the beginning of this chapter. It could be expected that adoption of an appropriate business structure for a common property regime would strengthen fulfilment of the following design features in particular: clearly defining the boundaries (1 in our list), clear definition of collaborating members or co-owners for self-governance (2), inclusion of locally-designed rules (4), equitable distribution of responsibilities and benefits (5), provisions for conflict resolution (6), authentication and support for the autonomy and independence of the group (9), and capacity to achieve appropriate scales (10).

Endnotes:

¹ It should be noted that this work is a generalised summary to provide background on structural arrangements for enterprises to operate across multiple land-holdings of tenures, such as wildlife utilisation or ecotourism, and is not to be construed as legal, accounting or investment advice. Other considerations not dealt with extensively and requiring further consideration include corporate governance, property law and possible licensing issues. In the final analysis, it will be up to individual landholder groups to seek such professional advice and to adopt a structure with which they are personally comfortable and meet the particular requirements of their common property regime’s context and domain of operation.

² Obligations may differ across State jurisdictions, so detailed advice regarding a particular State's legal requirements should be sought from a corporate accountant and solicitor.

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