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THE ECONOMY OF AUSTRALIAN RANGELANDS – MYTH OR MYSTERY?

J. Fargher, B. Howard, D. Burnside and M. Andrew

URS Australia Pty Limited, Level 1, 25 North Terrace, Hackney 5069

ABSTRACT

Australian rangelands have been perceived as supporting a pastoral economy for more than 150 years. This perception originated from colonial expansion in a frontier economy, with State and Commonwealth institutions established to support rangeland pastoralism. As Australia's economy shifts in focus from frontier expansion to sustainable development within a free and unprotected market, a new economic and social paradigm is needed for the rangelands. This is essential for strengthening of those uses and enterprises that can survive in a globalised economy, preservation of environmental values in Australian rangelands, development of new land-use opportunities, as well as to facilitate a dignified exit of those remaining frontier families who are increasingly marginalised from the mainstream Australian and global economies. This paper explores the significance of rangelands, and the insignificance of rangeland pastoralism, to the Australian economy, and proposes an alternative economic paradigm for rangelands in the next century.

INTRODUCTION

For 150 years, Australian rangelands have been perceived as supporting a pastoral economy. That has been a convenient and romantic myth for the most urbanised population on earth, perceived as the place where the raw Australian character was moulded and the notion of mateship and community was born. But as the global economy evolves away from frontier expansion towards sustainable development, and as Australian businesses are increasingly required to compete in a free and unprotected market, the pastoral industry needs to move forward under a new economic paradigm and with attitudes that meet the needs of the "outside" world. Indeed for a healthy set of rangeland uses to develop into the future any form of pastoralism needs to see itself as part of that outside world. Developments in the large corporate pastoral enterprises such as Stanbroke, S. Kidman & Co. and AACo reflect this thinking.

The new economic paradigm needs to value and manage the multiple values that Australians see in the rangelands – including indigenous, mining, petroleum, tourism, grazing and biodiversity values. It also needs to enable struggling pastoral families who are locked in the frontier paradigm and marginalised from Australian and global economies, to leave or otherwise change with dignity.

Rangeland resources are significant to the Australian economy, but at aggregate scale, rangeland pastoralism is not. In fact the Australian economy would be better off without rangeland pastoralism overall because in most regions it costs more than it contributes, in straight financial terms. If economic measures for indigenous, biodiversity and other existence values are included, the net cost of rangeland pastoralism in most regions of Australia is far greater and the case for reform even stronger.

THE ECONOMIC SIGNIFICANCE OF RANGELANDS TO AUSTRALIA

More than 75% of Australia is broadly defined as rangelands (Harrington, et al. 1984). The mining, tourism and pastoral industries operating in this large area generate less than 5% of Australia's GDP. Australian rangelands generate wealth for Australians through mining (approximately \$12billion each year or 2.4%GDP) and tourism (approximately \$2billion each year or 0.4%GDP) (NLWRA, 2001). In addition, pastoral enterprises raising cattle and sheep generate gross revenues of approximately \$1billion each year, or 0.2%GDP (CSIRO & URS, 2001). However, the net economic return from rangeland pastoralism is negative, as explained below.

The changing value placed on Australian rangelands can be seen in tenure changes during the past 50 years (NLWRA, 2001):

- Rangeland set aside for nature conservation has increased more than 15-fold since the 1950s from 29,100km² to 441,200km² or 7.8% of the total rangeland area.
- Rangeland owned or used by Indigenous people increased from 347,200km² in the 1950s to 925,200km² in 1999 - 16% of the total rangeland area and an increase of about 2.5 times.
- Total freehold and leasehold land has remained substantially the same – about 57% of the total rangeland area.

Despite the significance of this multiple use of rangelands, data on non-pastoral economic activity is difficult to come by. The focus of the Australian Collaborative Rangeland Information System is on biophysical resources that emphasise pastoral and biodiversity conservation uses. There is no information on economic activity from mining, tourism or indigenous sectors in the proposed system (NLWRA, 2001). Socio-economic indicators used in the system focus on pastoral enterprises and ignore the socio-economic effects of other uses of the rangelands. The myth is set to continue under this proposed regime.

To highlight this, consider important rangeland centres such as Alice Springs and Broome where tourism accounts for 11% and 14% of total employment respectively (Bureau of Tourism Studies, pers. comm.). Consider a rangeland region such as the Pilbara where mining and Aboriginal services sectors both employ more people than does the pastoral industry. In Australian rangelands pastoralism is an insignificant economic activity.

THE INSIGNIFICANCE OF RANGELAND PASTORALISM AT NATIONAL AND REGIONAL SCALE

In 1996/97 the gross revenue from rangeland pastoralism in Australia was less than A\$1 billion, or less than 0.2% (two tenths of one percent) of GDP in that year. Also, the total variable and fixed costs associated with generating this revenue was greater than the revenue – meaning that pastoralism in the rangelands costs the Australian community more than it benefits them (NLWRA, 2002). Note that these are financial figures, measuring market costs and benefits and are only for the year of 1996/97. The analysis excludes economic costs and benefits for indigenous, biodiversity and other existence values.

As the data presented in Chart 1 shows for 1996/97, rangeland pastoral enterprises lose money (ie have negative profit at full equity) in all rangeland regions except for the Northern Territory, Western Queensland, Western Division of NSW and South Australia. Further, when the cost of institutional and program assistance to pastoral enterprises is accounted for, only the pastoral enterprises in the Northern Territory, Western Division of NSW and South Australia contribute in a positive way to the Australian economy, and the Western NSW data are skewed by the contribution made by cropping activities in the wetter margins. All other regions cost the economy more than they contribute.

Rangeland pastoral enterprises cost the national economy A\$215 million in 1996/97 – an unacceptable return on a direct public investment of more than A\$42 million in the same year (NLWRA, 2002). In comparison, at the other extreme of the agricultural spectrum, horticultural enterprises in the same rangeland regions of Australia contributed A\$59 million to the Australian economy in 1996/97 – a significant return on direct public investment of less than A\$9 million in the same year (NLWRA, 2002).

Clearly something is wrong with our economic paradigm that predominantly views and uses Australian rangelands as a pastoral resource. The obvious question is why do we persist with investment and effort in rangeland pastoral enterprises that generally cost us money, cause damage to some other values of significance to the Australian and global communities, and largely damage the wellbeing of those engaged in them?

Chart 1 : Net economic return to rangeland pastoralism in Australia by region in 1996/97 (NLWRA, 2002)

Total Sheep and Beef	NT	WA (Pilb, Gas, Gold)	WA (Kimberley)	SA	QLD (Central Qld)	QLD (North)	QLD (West. Qld)	QLD (Far North)	NSW	Total (A\$'000)
Total Revenue (\$000's)	158,103	58,364	30,508	36,480	134,757	134,862	251,864	41,404	150,144	996,486
Total Var Costs (\$000's)	59,060	37,371	18,800	7,553	14,582	34,935	41,233	16,830	17,284	247,645
Total Fixed Costs (\$000's)	54,921	47,704	17,680	23,372	129,772	221,004	250,199	50,210	126,765	921,626
Tot. Assist (\$000's)	7,115	2,353	1,373	1,431	5,636	5,971	10,808	1,863	5,863	42,413
PFE (\$000's)	44,123	(26,712)	(5,972)	5,555	(9,596)	(121,076)	(39,567)	(25,636)	6,096	(172,786)
NER (\$000's)	37,008	(29,065)	(7,345)	4,124	(15,232)	(127,048)	(50,375)	(27,499)	233	(215,199)
Area (ha)	71,073,784	72,148,222	22,880,156	13,026,844	14,235,926	28,260,654	52,329,506	17,672,360	27,408,733	319,036,185
Weighted PFE (\$/ha)	0.62	(0.37)	(0.26)	0.43	(0.67)	(4.28)	(0.76)	(1.45)	0.22	(0.54)
Weighted NSR (\$/ha)	0.52	(0.40)	(0.32)	0.32	(1.07)	(4.50)	(0.96)	(1.56)	0.01	(0.67)

PFE = Profit at Full Equity (ie Total Revenue less Total Costs (variable + fixed) with no costs of finance included)

NER = Net Economic Return (ie PFE less Total Assistance [the cost of institutional and program services])

NSR = Net Social Return (ie PFE less Total Assistance)

HOW INDIVIDUAL PASTORALISTS PERCEIVE THE RANGELAND ECONOMY

At the outset, we acknowledge the diversity in what is erroneously lumped as a 'pastoral industry'. There are in fact many pastoral industry 'sectors', including:

- large, well resourced, professionally managed corporate entities;
- land owned and operated by mining and Indigenous interests often for non-pastoral purposes;
- well resourced private companies usually located in more favourable operating environments, sometimes with access to significant off-farm assets;
- small pastoral enterprises that act primarily as a base for non-grazing economic activity – employment in mining companies, local contracting and receipt of transfer payments, and
- family-based grazing operations with limited access to on-farm resources and a traditional high reliance on external assistance in times of market or seasonal difficulties.

Our focus in this discussion is on the last sector – being the 'pastoral industry' that is demonstrably most in difficulty.

Many pastoralists in this sector are acutely aware of these very low and negative returns and the need for change in pastoral enterprises and the economic paradigm for Australian rangelands, as this typical comment from one pastoralist in western NSW illustrates (URS Australia, 2001):

"Pastoralism is not a valid term any more. We need to change our terminology so that we change our self image and way of thinking. Diversification is essential."

Despite this awareness, many of these pastoralists are mostly unable to sell their properties or diversify their enterprises, and generally feel bad about who they are and what they do. Many are depressed, stressed and lost. Work conducted by URS Australia in the Western Division of NSW and the Gascoyne/Pilbara regions of WA confirms a pattern of perception and psychological trauma that is an additional hidden cost of the current economic paradigm in Australian rangelands (URS Australia, 2001).

Government programs still mainly focus on structural reform of these pastoral enterprises rather than initiating a radical rethink of the values and opportunities to be managed in the rangelands. Much of current attempts at structural reform are likely to result in passing the same problem to the next blind optimist. "A lot would like to sell but can't", this type of comment suggests a dogged determination to maintain an asset value and means that the next owners will pay too much with prices not reflecting their productive earnings (URS Australia, 2001).

Many pastoralists want to change – either by selling their property and leaving the rangelands or by diversifying their enterprise. However, they lack the financial resources to do this, and often lack the energy and skills required to successfully diversify. Low profitability has resulted in little interest from the next generation to enter the industry. Consequently, there is an aging population in the industry with these people having limited interest in adopting new approaches to management and diversification. Many people are "just battling" or "hanging in there", this tends to describe their financial position and their general level of energy and enthusiasm. Of the sample of graziers consulted only some 10% of the group could be described as enthused and optimistic about the future (URS Australia, 2001).

The family-based grazing industry sector has had a tough decade or so, during which people have been cutting back in order to survive, this has resulted in a running down of infrastructure and capital assets. The decline in commodity prices has often resulted in the contraction of the available labour force to the family unit. This has resulted in a stressed and overworked workforce, this is especially the case where people are forced to work off-property to make ends meet. Time and time management is a major issue, people have to spend more time working and there is less time for skill development, the family and the

community. People are getting burnt out. Rangeland communities are generally declining and aging, with succession planning an issue and dependence of government support an increasing trend. (URS Australia, 2001).

HOW MINING COMPANIES PERCEIVE THE RANGELAND ECONOMY

Mining companies are directly connected to the global economy since this is what determines their access to capital and markets. Many mining companies own pastoral properties to reduce risks associated with tenure over minerals and exploration areas. Leading mining companies are managing biodiversity and indigenous relations to meet investor and shareholder needs (eg Rio Tinto in the Pilbara, WMC in WA and northern SA, and BHP Billiton in WA and NSW). Because of the requirements of state pastoral laws, some mining companies still operate pastoral enterprises on the leases they own (eg WMC, Rio Tinto and BHP Billiton in WA) but others have destocked where local legislation allows them to, and now manage the land for other values. The mining companies have learned that access to mineral and water resources requires infrastructure, strong community relations, and local activities to manage biodiversity and indigenous values. They are investing significant funds to achieve this because of increasing accountability from the broader, largely urban, community that determines their right to operate and access to key resources, particularly capital. For example WMC invests more than \$1million per year in rangeland biodiversity monitoring, resource management and research associated with its use of water from the Great Artesian Basin. In another domain, Rio Tinto and BHP Billiton are investing in Aboriginal educational and employment outcomes in the Pilbara – with clear objectives for increasing the level of indigenous employment in their businesses.

A NEW ECONOMIC PARADIGM FOR AUSTRALIAN RANGELANDS

A new economic paradigm for rangelands would focus on managing values recognised as important by the Australian community by adopting the following principles:

- **Positive net economic return from resource use** – no subsidies and no public sector services that are not paid for by users. Activities that did not give a positive net economic return would be discouraged or wound down.
- **User pays** – tourists, miners, pastoralists and others using rangelands should pay a resource management levy or similar to share “rents” extracted from rangeland use with those paying for the management of rangeland resources, including monitoring and research efforts.
- **Multiple-use** – recognising the many uses of rangelands and that they are complementary rather than exclusive uses of the resource. This is especially relevant to Indigenous, tourism, biodiversity conservation and mining uses.
- **Beneficiary compensates for stewardship services** – where rangeland residents provide measurable stewardship services that meet national or regional policy and program needs, beneficiaries of those services would compensate the service providers with fees or similar.
- **Social sensitivity** – the transition to this new economic paradigm requires sensitive support to families and towns that will leave the rangelands or change from a pastoral to an environmental stewardship livelihood. Such reform is not new to Australia – most recently this has been achieved in the forestry and fishing industries but it has also been implemented in the clothing and footwear industries, amongst others. There is no reason to treat rangeland pastoralism differently, but it is critically important to treat the affected communities justly and respectfully to support them in a dignified exit from their current way of life.

These principles are consistent with international norms governing use of natural resources (OECD, 2001a; OECD, 1992; WTO, 1999). Developing a new paradigm for the rangelands based on these principles ensures flexibility and adaptability to the new world. It is competitive, allows for multiple uses and does not focus on stocking rangelands for pastoral enterprises. Most importantly, it explicitly recognises mining, petroleum, tourism, pastoralism, Aboriginal, biodiversity and other existence values.

To achieve this new paradigm requires significant reform of pastoral legislation, or abandonment of pastoral acts and replacing them with integrated natural resource management legislation covering all resources (water, land, biodiversity etc.) and all values that Australians want to manage rangelands for. This enables a shift towards values-based management (with an emphasis on ecological and economic outcomes) rather than input and output-based management (with an emphasis on financial outcomes).

Most importantly, a new paradigm would direct integrated and strategic investment to deliver and maintain rangeland values of importance to Australians. This is likely to include:

- helping people off the rangelands where it makes no sense to have economic activity there;
- financial restructuring of pastoral enterprises where it does make economic sense to use rangelands for livestock production by enabling separate ownership of land and livestock assets, and management resources (as in forestry and horticultural industries, and as in large-scale pastoral enterprises such as AA and Heytesbury);
- paid stewardship for management of priority community values where this gives positive net economic return (described as multifunctionality in EU (OECD, 2001b));
- leaving some areas empty as wilderness; and
- treating pastoralism like any other industry in Australia.

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