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CAN THE COMMERCIAL VALUE OF WILDLIFE ENABLE MORE SUSTAINABLE PRODUCTION PROCESSES?

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ABSTRACT

Sustainable Wildlife Enterprises (SWE) trials are an initiative by the Rural Industries Research and Development Corporation (RIRDC). They seek to integrate Australia's native wildlife into existing agricultural enterprises. A strategic plan has been prepared and implementation requires the testing of alternative production systems. Nature-based tourism and commercial utilisation of native plants and animals, assessed at trial sites in western NSW and Queensland, are being used to determine whether assigning a value to these resources can provide an incentive for landholders to protect and restore wildlife habitat, landscapes and biodiversity, and therefore bring about positive changes in landscape health and agricultural sustainability.

ORIGINS

The Sustainable Wildlife Enterprises (SWE) trials give effect to the recommendations of the 1998 Report of the Senate Rural and Regional Affairs and Transport References Committee into the Commercial Utilisation of Native Australian Wildlife. The recommendations were based on overseas experience with native animals similar to kangaroos including the red deer, elk, bison, springbok, impala and eland which indicate that alternative management regimes can enable landholders to integrate wildlife and pastoral enterprises leading to win/win outcomes. Landholders value their wildlife and so have an incentive to integrate conservation and sustainability. The trials also draw on the concepts discussed by the Future of Australia's Threatened Ecosystems program, which is now within the University of NSW, School of Biological Sciences. They are an initiative by RIRDC as part of its new Rangelands and Wildlife Program. The trials have support from the Australian Government's National Landcare Program and are in their second year of operation.

AIMS

The aim is to test mechanisms for regional coordination that integrate commercial use of wildlife with more conventional pastoral land use. Income is derived from tourism and ecosystems services and consumptive use of wildlife.

METHODS

A strategic plan has been prepared and implementation requires testing of administrative mechanisms and alternative production systems that (a) enable wildlife resources to operate as an incentive to protect and maintain habitat and enhance biodiversity on private lands; (b) increase the resilience and long term sustainability of the agricultural sector on the rangelands; and (c) increase the economic viability of land rehabilitation and the long term viability of rural communities.

Implementation Cycle

The implementation cycle reflects an adaptive management process. This process is organized in four steps:

Creation of Wildlife Management Conservancies (WMC)

The development of wildlife management plans and habitat protection to support the development of sustainable wildlife industries is based on groups of landholders within a defined catchment or sub-catchment who wish to participate. WMCs have been formed at Mitchell in Qld, Wentworth in NSW, and north of Broken Hill in NSW. Preliminary investigations on Kangaroo Island are also proceeding. Some Conservancies are Landcare Groups; others are structures specifically created for the purpose. They are landholder driven and define their objectives and priorities. The project near Lake Victoria and the perspectives of Annabel Walsh the landholder from Moorna are described in greater detail below as an example.

Production Income

The WMCs are receiving support in identifying and establishing enterprises to diversify farm income. They do not forego existing farming or grazing enterprises, but instead are provided with incentives to create new enterprises and integrate them with existing production. Landholders themselves drive the process and make wildlife management decisions within broad guidelines and quotas set by regulatory authorities. The WMC's gain income from sustainable industries based on both consumptive and non-consumptive use of wildlife (tourism) and ecosystem services.

The SWE strategic plan emphasises the importance of product differentiation and market access through attaining certification for the environmental performance of products, services and production techniques. It may also be possible to highlight regional differentiation where this forms a unique characteristic of both wildlife produce and other farm production. To this end and to assist planning, software packages are being trialled that enable adoption of Environment Management Systems and certification. The AEMS package is described in another paper in this conference. There are others including myEMS and the Australian Landcare Management System.

Marketing

Produce from the Conservancies achieving positive outcomes will be marketed as having conservation benefits. Effective marketing is essential in ensuring market demand and premium prices are achieved for produce derived from WMC's. The trial will test if accreditation as a sustainable production system will enable the WMC to obtain premium prices for their kangaroo products, tourism experiences and/or other bush food products. Accreditation will be informed through assessment of the WMC's wildlife management plans, which will include provisions for animal welfare to applicable activities.

RIRDC is currently reviewing farm management software systems that assist landholders comply with the requirements of an EMS and define the attributes of a Wildlife Stewardship Scheme using the Marine and Forestry Stewardship Schemes as a model.

Adaptive management

Monitoring and evaluation of enterprises is being undertaken to assess the performance of enterprises based on a triple bottom line approach incorporating environmental, social and economic indicators. At the end of the adaptive management cycle, scientific and advisory support will be fed back to the Conservancies to provide updated information to inform management and enhance environmental, economic and social performance.

DISCUSSION

Conservation through Commercial Wildlife Use

Under current arrangements, native wildlife is a liability over which landholders have little control. Yet some wildlife, for example kangaroos and emus, produce high quality food and fibre products, and appear to incur less damage to the environment than equivalent numbers of conventional livestock. Wildlife is also an asset to the tourism industry being a core component of the national heritage. Some native plant species have potential in the culinary industry, in addition to demonstrated value as alternative medicine and health products. Giving landholders the opportunity to capture and benefit from these values could provide an incentive to increase their presence in the landscape.

Successful agricultural products are those that have become price setters rather than price takers. Previously commodities such as cheese, olive oil, and to a certain extent wine, were initially produced in large quantities with little emphasis on product differentiation. Today at the higher value end of the market, there is attention to detail, quality and regional differentiation, and landholders have greater control over the price they receive for their product.

The establishment of mutually beneficial relationships with existing native food, wildlife and tourism industries is seen as vital to the development of the SWE model. The WMCs will not seek to compete with existing processors, but rather to add value to enterprises by emphasising the conservation benefits of their produce. SWE aims to attract existing wildlife resource processors as clients and purchasers of its products. For example one or more of the existing kangaroo processors may be attracted to enter into a contract with a Conservancy in return for the marketing and credibility benefits which flow to it from the arrangement.

Responsibility and Ownership of Wildlife with Landholders

A core principle in the Sustainable Wildlife Enterprise trials will be to test the outcomes of transferring 'ownership' and management of wildlife from the state to Wildlife Management Conservancies, or landholders. Precedents in South Africa, Scotland, Canada and USA will guide options in Australia. The Sustainable Wildlife Enterprises trials will continue to consult with State and Territory regulatory regimes governing ownership and harvesting of wildlife, and with Australian Government statutory arrangements governing wildlife trade. They will address issues such as the potential to free range harvest emus. Emu farming is currently not profitable; however birds are kept behind wire and intensively fed. There appears to be no logical opposition as to why they should not be harvested on a more extensive basis if the landholders are conserving their habitat and managing them.

Adaptive Management Cycle

Monitoring and investigation are being undertaken in an Adaptive Management Trial as a collaborative activity with research organisations. Research results will be fed back to the Conservancies over a period of six years and will assist landholders implement best practice in the management of conventional farming enterprises, commercial use of wildlife and biodiversity conservation. Research results will also assist in enhancing the design of the project for potential future extension.

CONCLUSION

Currently 65% of the Australian landscape is used for grazing and broad-acre farming of monoculture crops. Such farming systems are struggling to maintain the natural ecosystems

on which the sustainability and future production relies. They are highly susceptible to changes in climatic extremes due to the reduced genetic scope monocultures have to adapt to changing conditions.

Diversification of farming enterprises to include the sustainable commercial use of wildlife has the potential to increase the resilience and economic viability of rural communities through the creation of additional and sustainable income streams. Native plants and animals, being inherently more resilient to the extremes of climatic conditions experienced in the Australian landscape, could provide additional income to landholders during periods of low productivity in mainstream enterprises. In addition, the strategic rehabilitation of degraded habitats has the potential to increase whole farm productivity through restoration of natural systems that function to maintain soil and water quality, provide shelter for conventional stock and maintain predator-pest relationships.

Success Factors

Through the SWE trials the commercial value of wildlife to landholders could be established whilst enabling more sustainable production processes. However successful outcome at the end of the 6 year trial will depend on a number of critical success factors:

- Demand being created for products from the Wildlife Management Conservancies by emphasizing their conservation benefit.
- Markets for bushtucker, in particular kangaroo meat, strengthening.
- Members of the WMC remaining enthusiastic and continue to make their properties available for proposed manipulation and detailed scientific investigation.
- Natural events such as drought and commodity price fluctuations over a 6 year cycle not being so extreme as to affect the capacity and willingness of members to participate.
- Government and philanthropic support being sufficient to establish the Wildlife Management Conservancies, to underpin the research, monitoring and evaluation and to back marketing of products as conservation friendly.

The experience in other countries is sufficient to warrant an investment in the proposal. At the end of the trial the SWE should be self supporting.

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