



Landowners and conservation markets: Social benefits from two Australian government programs

Charlie Zammit*

Biodiversity Conservation Branch, Department of Sustainability, Environment, Water, Population and Communities, GPO Box 787, Canberra ACT 2605, Australia

ARTICLE INFO

Article history:

Received 31 March 2011
Received in revised form 18 January 2012
Accepted 29 January 2012

Keywords:

Conservation markets
Social benefits
Environmental stewardship
Biodiversity conservation
Farmers
Capacity building
Private land

ABSTRACT

Market-based approaches to conservation provide two novel policy outcomes. First, they secure public environmental benefits through incentive payments to private landowners to deliver those conservation outcomes that are unlikely to be achieved through regulation. Second, they provide opportunities to influence perceptions, motivations and values, and shift behaviors among landowners towards biodiversity conservation.

Here we report on our experiences in engaging private landowners through two large market-based conservation programs funded by the Australian government. The Forest Conservation Fund was run in Tasmania from 2006 to 2009 and protected over 28,000 ha of high conservation value forests through contracts with over 125 landowners. The Environmental Stewardship Program was run in temperate south eastern Australia from 2008, targets nationally endangered ecological communities and has so far secured over 45,000 ha through contracts with over 260 landowners to improve habitat condition. In total these two programs have, at various stages in their implementation, engaged with over 1400 landowners.

Participating landowners benefited from their engagement in three major ways. Firstly, landowner appreciation that their land had both production and commercial conservation values grew, as did their interest in better understanding these values and their measurement. Secondly, was the flow of information to build capacity through improved awareness, knowledge transfers and skills development. Effective landholder engagement was strengthened by targeted communications and information support. Landowners received detailed information on the ecology of their properties, and workshops and on-site field surveys provided practical exposure that filled a conservation information and extension void. Some landowners who had been unsuccessful in bidding for funding said they would change aspects of their land management because of what they learned. Thirdly was a group of benefits associated with property planning and management. The competitive and commercial nature of these two programs prompted many landholders to think more about the mix of revenue and cost drivers for their enterprise, and in particular those associated with new conservation market opportunities. Participation encouraged many landholders to redesign their properties into production and conservation zones that supported improved management for both productive and conservation outcomes.

These observations suggest that participation in market-based conservation programs encourage social learning and build social capital in ways that can facilitate additional positive biodiversity outcomes on private land. The effectiveness of biodiversity conservation policies and programs would be strengthened by the inclusion of specific social outcomes.

Crown Copyright © 2012 Published by Elsevier Ltd. All rights reserved.

Introduction

The ongoing global loss of biodiversity has highlighted the need to not only expand and better manage public protected areas, but also to restore and sustainably manage natural habitats on private land. This is reflected in a progressive shift in the approaches of many governments to both broaden the scope of suitable policy

interventions and to develop landscape-scale approaches that align protected areas with conservation on private land (Connor and Dovers, 2004; Natural Resource Management Minister Council, 2010). The application of market-based incentive programs is one way to achieve this alignment (Jack et al., 2008; Dobbs and Pretty, 2008; OECD, 2010). The use of incentives helps overcome market and institutional failures for the management, restoration and protection of public environmental goods and services (Commonwealth of Australia, 2001; Pannell, 2008; Libecap, 2009).

Historically, a common solution to market failure has been for governments to regulate to overcome it. However, while regulation

* Tel.: +61 2 62742501.

E-mail address: Charlie.zammit@environment.gov.au

may deliver the desired outcomes for government in the sense of avoiding or minimising harmful impacts, it does not always provide opportunities for flexibility and innovation to meet the ongoing expectations of society to improve the condition of the environment (Echeverria, 2005). Compliance with environmental regulations can also be costly to governments to monitor and enforce. As a consequence there has been a progressive broadening of environmental policy responses to include complementary use of regulatory frameworks, market approaches and techniques for information sharing and building community and individual capacity for improved management (Pannell, 2008; TEEB, 2009).

Market based instruments (MBIs), such as auctions, provide a mechanism for market exchange between buyers of environmental services (e.g. governments investing in specific public ecosystem services such as clean water, carbon storage, healthy habitats, soil nutrient recycling) and willing sellers of these services (e.g. farmers and other land managers who hold an asset of environmental value). MBIs allow private land managers the flexibility to diversify their return opportunities on their investment from a larger range of land management options through responding to proffered incentives in a manner that is compatible with their business structures or preferences. Accordingly, MBIs can be seen as a cost-efficient mechanism that reveals at least the minimum partial value of an environmental good or service in a way that enables this value to be reflected in exchange between the owners of the value and willing buyers (OECD, 2010). Most MBIs incorporate a central mechanism for cost minimisation, typically through use of an environmental metric to rank bids for the supply of environmental service within a competitive bidding environment. There is also recognition that services provided by landholders have different benefits and opportunity costs, so the design of MBIs can be tailored to ensure the most efficient outcomes (Eigenraam et al., 2007; Binney and Zammit, 2010). While it is not within the scope of this article to address the broader debate about the appropriateness and cost-effectiveness of MBIs (e.g. Conner et al., 2008; Lowell et al., 2007), their widespread development globally (Wunder et al., 2008) provides ample opportunities for researchers to further assess their place in the mix of policy instruments available to governments (Pannell, 2008).

MBIs and other payments for ecosystems services can have benefits beyond delivery of cost-efficient policy for conservation, in particular those associated with poverty alleviation in developing countries (Wunder et al., 2008). However, in developed countries like Australia, additional benefits may accrue to landholders and communities involved in these processes. The creation of new markets for conservation on private land has generated a research focus on participation in MBIs and the motivations for and barriers to adoption (Morrison et al., 2008; Kabii and Horowitz, 2006; Greiner and Gregg, 2011). In the conceptual framework proposed by Greiner and Gregg (2011), farmer adoption of conservation practices is driven by a mix of external price and other incentives, their personal motivations and perceptions and the particular characteristics of conservation practices and farm-based constraints. While the relative importance of different elements varies in response to particular circumstances, other studies have revealed similar motivations and barriers (Ryan et al., 2003; Patrick et al., 2009; Pasquini et al., 2009). In a detailed Australian survey, Morrison et al. (2008) reported that trust, social connectedness, business orientation and information-seeking were the largest and most consistent influences on landowner participation. Pretty and Ward (2001) observe that relations of trust, common rules and norms, reciprocity and connectedness in institutions comprise social capital, and they provide a typology for how such social capital is advanced in natural resource management.

New markets for conservation on private land can also contribute to a broader transitioning of agricultural land uses in

post-industrial economies towards sustainable approaches that better incorporate social and cultural values (Hamblin, 2009). Social capital is likely to be increased through participation in MBIs, as participant involvement inevitably leads to community discussion, capacity building and the enhancement of social networks. Given the recognition that higher levels of social capital result in benefits for individuals, which in turn lead to collective benefits for the community, the importance of these benefits for conservation management is hard to overstate (Pretty and Smith, 2004; Jones et al., 2009). However, despite this importance, enhancing social capital has been only weakly connected to environmental policy implementation and its instruments (Pretty and Ward, 2001). As Jones et al. (2009) observes, the influence of social capital on the implementation of environmental policies depends on the acceptance of the policy by the citizens, and their cooperation and compliance with it. Put another way, the effective implementation of conservation policies can only occur through a willing, capable and informed citizenry.

Here we report on two large scale Australian Government market-based conservation programs and their social benefits. We use the term 'social benefits' to be inclusive of the range of non-environmental benefits that can accrue to individuals participating in these programs and consequential benefits to their local communities, including for example, improvements in access to information, development of new skills and networks of interest and influence. These benefits can be contributions to the building of social capital.

The Forest Conservation Fund (the Fund) operated in Tasmania between 2006 and 2009. The Fund used a mix of market-based approaches as part of the 20 year Tasmanian Regional Forest Agreement to increase the protection of high conservation value forests, including old-growth, on private land through conservation covenants. The Environmental Stewardship Program (ESP) commenced in 2008 and used an auction approach to conserve and manage nationally endangered ecological communities listed under the *Environmental Protection and Biodiversity Conservation Act* (1999). Accordingly, ESP focussed on improving the ecological condition of these communities through long term (up to 15 years) management contracts (Zammit et al., 2010).

To date over 1400 landholders have requested information on these two programs, over 800 properties have been assessed and more than 385 landowners contracted. We briefly summarize the conservation outcomes so far achieved and provide some preliminary observations on how farmers and other private land managers have responded to these initiatives.

Although these two programs had different conservation policy objectives they both used 'inverse auctions' as a primary mechanism for inviting bids from eligible landowners (Binney and Zammit, 2010). In summary, these auctions invited landowners to nominate a price for achieving the particular conservation outcomes identified by the program. Like other MBIs (e.g. Eigenraam et al., 2007), we used an environmental metric to calculate the conservation value of individual proposals and all proposals in an auction round were ranked in order of their value-for-money (Binney and Zammit, 2010). Participation was voluntary but landowners needed to have the nominated conservation assets on their properties to be eligible. Successful bidders entered financial contracts with the Commonwealth Government to deliver specific conservation outcomes.

The Forest Conservation Fund

The long term protection and sustainable use of Australia's native forests is managed under a series of twenty-year Regional Forest Agreements (RFA) between the Commonwealth and State Governments. There are 10 Agreements in place, including one

Download English Version:

<https://daneshyari.com/en/article/93059>

Download Persian Version:

<https://daneshyari.com/article/93059>

[Daneshyari.com](https://daneshyari.com)