



Water policy debate in Australia: Understanding the tenets of stakeholders' social trust[☆]



Sarah Ann Wheeler^a, Darla Hatton MacDonald^{b,*}, Peter Boxall^c

^a Centre for Global Food and Resources, University of Adelaide and Adjunct School of Commerce, University of South Australia, Australia

^b Tasmanian School of Business and Economics, University of Tasmania and Adjunct Institute of Land, Water in Society, Charles Sturt University, Australia

^c Department of Resource and Economics and Environmental Sociology, University of Alberta, Canada

ARTICLE INFO

Article history:

Received 29 April 2016

Received in revised form 22 January 2017

Accepted 26 January 2017

Available online 7 February 2017

Keywords:

Best-worst scaling

Applied economics

Social trust

Murray-Darling basin

Water policy reform

ABSTRACT

The increasing physical and economic scarcity of water due to increasing societal demands and climate change will require worldwide water policy reform. Water reform is an area of public policy fraught with polarised positions regarding community and environmental welfare. As opposition to water policy reform becomes entrenched, transaction costs increase. Nowhere is this more evident than the controversy surrounding, and irrigators' opposition to, the Murray-Darling Basin Plan in Australia. This study sought to understand irrigators' trust issues and why they feel the way they do towards water reform, though a best-worst survey methodology and regression analysis. The results suggest that irrigators believe they are shouldering a fair share of the water reform burden. Lack of trust in the national water agency and the federal government is associated with irrigator location, age and climate change disbelief. Findings support the recent push for more localised water decision-making to promote social trust.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

Water scarcity across the major river basins of the world, whether due to physical conditions, extended drought or the economic demands of cities, industries or irrigated agriculture, requires governments and water users to evaluate the allocation of water resources in the face of climate change (Baldwin and Ross, 2012; WEF, 2015; Grafton et al., 2016). Risks presented by shifts in rainfall variability, along with climate change, common pool issues, institutional boundaries and societal preferences for halting the degradation of landscapes leaves governments in the difficult position of addressing past over-allocation decisions. In particular, Australia represents one of the driest inhabited continents on earth, with water allocation always a contentious issue (Baldwin and Ross, 2012). Hence, Australia has had to continually engage with water reform, and as such has often been presented as a leading worldwide example of water policy innovation (WEF, 2015).

[☆] The authors would like to acknowledge the funding of the Australian Research Council (LP0990429, DP140103946, FT140100773) and the support of CSIRO Land and Water.

* Corresponding author.

E-mail address: Darla.HattonMacDonald@utas.edu.au (D. Hatton MacDonald).

Although there is an emerging literature on water governance, water policy reform and transboundary water management issues (e.g. Daniell and Barrateau, 2014; Daniell, 2012); there has been less study on the best way to implement these policies. Basin-based water institutions and jurisdictions do not necessarily generate “good” water governance, and socio-economic characteristics of basin communities often dictate outcomes (Daniell and Barrateau, 2014). Trust surrounding water reallocation is essential in determining whether socially beneficial outcomes can arise.

Australian water policy reform provides a prime example of the importance of trust issues. Successive Australian governments have engaged in extensive water reforms to address economic efficiency and environmental degradation issues (Grafton et al., 2016). In particular, after experiencing one of the worst droughts since European settlement, the Millennium drought, the Federal Government began large-scale programs to buy-back water from willing irrigators in the mid-to-late 2000s. The Murray-Darling Basin Authority (MDBA) was established as an independent body to develop a high-level integrated and sustainable plan for the Basin's water resources (Cruse et al., 2013; Horne, 2013). The MDBA was required to establish sustainable diversion limits on the basis of the best available science, and in a draft report released in 2010 recommended a reduction in the quantity of surface-water available for consumptive use by 3000–4000GL per year across the Basin (MDBA, 2010).

The polarised nature of the debate over the Plan and water reallocation in the MDB was captured by media images of irrigators

burning copies of the Guide to the proposed MDB plan in Deniliquin and Griffith (NSW) in 2010 (ABC News, 2010). The Guide aggravated long-term distrust within irrigation communities about the redistribution of water entitlements, hardening the attitude of irrigators (Grafton et al., 2016; Cummins and Watson, 2011). This image of angry irrigators resonated with politicians in Australia who called for a parliamentary inquiry into the human consequences of the proposed re-allocations. As a result policy significantly changed to accommodate community concerns, allocating less water to the environment and changing the way that environmental water was obtained; resulting in less cost-effective programs with higher transaction and opportunity costs (Loch et al., 2014; Horne, 2013).

The Murray–Darling Basin (MDB) Plan was signed into law in November 2012, with a severe reduction of the water to be allocated to the environment from the Guide's original aims (Horne, 2013). The amount now agreed to be reallocated was 2750GL by 2019, with an extra 450GL/pa recovered through infrastructure investment expenditure (to offset perceived socio-economic issues) (Settle and Wheeler, 2017). To date there has been increased emphasis back towards irrigation efficiency and away from buying water entitlements.

The success of agri-environmental programs depends upon stakeholders' acceptance. Arnstein's (1969) seminal work created a ladder of citizen participation (from a scenario where government decides all decisions to one where power is shared equally between public and government). Ross et al. (2002) suggested that public engagement should consider which processes are best suited to particular situations. As such, this raises questions about how to ensure community social trust when implementing reform, to allow effective and efficient implementation. But, there are considerable costs attached to community consultation (e.g., see Crase et al., 2013) which must be minimised. This paper provides a reference point for evaluating social trust in water reform processes using a best-worst methodology. As Horne (2013) argued, the political success of the MDB Plan will only succeed if, and when, it is fully and faithfully implemented, and as such, that partly depends on its stakeholders and their trust in the process. However, it is also important to note that there has to be trust on the part of government as well. In designing policies to reallocate water to the environment, government has to trust that (i) there will be enough willing sellers to engage in the process at reasonable water market prices and (ii) that such policies do not have unintended perverse behavioural consequences. For example, in heavily subsidising irrigation infrastructure, governments are trusting that irrigators will not simply substitute groundwater use for surface water use or bring on more land for irrigation in permanent crops, which in turn reduces return flows, increases the percentage of surface water use and decreases adaptation capacity in times of drought. Hence, government has to trust that the unknown consequences of their policies will not be unfavourable in general (Luhmann, 2000).

2. Social trust literature review

2.1. Trust

Trust has been defined as the expectation that arises within a community from common behaviour based on shared norms and values (Svendsen and Svendsen, 2000). Bakker and Dekker (2012) define social trust as the belief that other members of society can be trusted. Trust is integral to social life because it is the foundation of a vibrant community, social participation, effective governance, economic productivity and managing risk (Lee, 2012; You, 2012; Tranter and Skrbis, 2009; Palmer et al., 2009; Sligo and Massey, 2007; Job, 2005). Trust is particularly important in managing risk in contexts as diverse as personal relationships to business man-

agement. As uncertainty about the future increases – a particularly salient issue for farmers – perceived risk is likely to rise and this makes trust foundational to seeking out knowledge. It is important that people, including farmers, have access to knowledge they regard as trustworthy (Palmer et al., 2009; Sligo and Massey, 2007; Knight and Marland, 2005).

There are two main perspectives on the formation of trust. The first sees it as a rational evaluation of others based on experience or information. This pivots on the assessment of risk and has scant regard for notions of generalized trust. Others see trust, especially generalized trust, as emanating from the moral disposition of individual people. There is a moral imperative to treat people as if they were trustworthy. Trust can be based on both experience and moral disposition (Job, 2005; Torpe and Lolle, 2011; Donoghue and Tranter, 2012). As such, there is an ongoing debate about whether trust is an outcome of individual attributes or whether it is a socially produced phenomenon (Bakker and Dekker, 2012; Delhey and Newton, 2003; Poortinga, 2006). Political and other institutions are also fundamental to the creation of social trust (Jensen and Svendsen, 2011).

2.2. Literature findings

There is a huge literature on social trust and its drivers. Analysts have addressed these issues within country and at individual levels. Some of the broader country insights that help drive greater trust include: universal systems; higher skill levels; fair income distribution; democratic procedural rules and low corruption (You, 2012). Others question the causal link between inequality and social trust. Fairbrother and Martin (2013) argue that the association between trust and inequality only holds in cross-sectional studies. When longitudinal data are considered, no relationship is found between trust and inequality.

Table 1 summarises the literature's key social trust findings, with evidence for and against a number of influences.

2.3. Farmer trust

The institutional arrangements which define the rules for resource sharing have been under considerable change with the introduction of water trading under State legislation, shifts towards full-cost water pricing and the evolving role of a central agency such as the MDBA with the Commonwealth *Water Act* [2007]. Changing rules means changing roles (Padgett, 2001) and a different expectation of how and when to exert power in relationships between governments and the local organisations representing irrigators.¹ Trust becomes an implicit element for government in that it must rely of the willingness of irrigators to participate in programs designed to re-allocate water out of agricultural uses for potentially uncertain outcomes for the environment and for rural communities.

Farmers' risks have increased in the past few decades. Globalization, neo-liberalism, rural community de-population, environmental problems and climate change all pose risks for farmers, making trust a more difficult but also more necessary attribute for implementing effective policy. Overall, rural communities are rated as having higher trust (Bakker and Dekker, 2012; Sligo and Massey, 2007; Delhey and Newton, 2003), but there is evidence otherwise (Bean, 2005; Tranter and Skrbis, 2009). The evidence for trust in rural communities may be reflecting more frequent interaction among members in a smaller community. Rural communities

¹ We would like to acknowledge an anonymous referee for pointing us towards this explanation.

Download English Version:

<https://daneshyari.com/en/article/6461003>

Download Persian Version:

<https://daneshyari.com/article/6461003>

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