

ACTIVATING MARKETS TO CREATE INCENTIVES FOR IMPROVED SOIL MANAGEMENT

KEY POINTS

- Existing literature was reviewed to gain insights into how markets might be activated so that farmers can be better rewarded for their improved soil management.
- Three main markets were identified:
 - Consumer markets and the value chain leading to consumer markets
 - Property markets
 - Finance and insurance markets
- A team of 17 researchers from six universities contributed to the project.



THE CHALLENGE

There is often talk about how farmers might be rewarded for improved soil management. Potential opportunities may lie with consumer markets, property markets and finance and insurance markets. However within the three markets identified, there is relatively little information available. There is also some confusion in consumer markets about environmental claims made by producers.

Generally, most Australian agribusinesses do not currently believe that there are benefits in adopting environmental standards. While there is some international literature on how land management practices impact on the price of agricultural land, there is very little in an Australian context.

THE OPPORTUNITY

We can use the current information on how farm management practices, including organics, non-GM, animal welfare and provenance, influence prices. These studies provide some insight into how much consumers might be willing to pay for improved soil management practices. They also provide methodologies that could be used to estimate this cost. Labelling and certification will play a big role in reliably conveying this information to consumers. Some of the literature suggests that soil characteristics and land management practices do impact agricultural land prices. Further work is needed to completely understand how soil management practices affect property prices in Australia. Internationally, some financial institutions are recognising natural capital in their pricing decisions, and although this not yet occurring in Australia, this indicates potential for it to be implemented in the future.

OUR RESEARCH

Consumer Markets and its Value Chain

The importance of the supply chain in bringing products to the markets and the dynamics of the interaction among producers, intermediaries and consumers, to facilitate market transactions was examined.

Property Markets

The relationship between agricultural land prices, soil characteristics and soil management practices using the hedonic pricing method was examined.

Finance Markets

Four aspects were considered:

- The rationale for finance providers to engage with and promote soil management practices
- Literature pertaining to how financial product providers currently consider soil management practices in their decision making processes
- Potential frameworks for financial managers to incorporate soil management practices in their decision making
- Potential future areas of research.



Figure 1. Land Price-Soil Characteristics: Conceptual Framework

OUTCOMES

For all three markets identified, it was apparent that there is a need to investigate soil management certification as an approach for communicating to market stakeholders. It was also evident that collectively, these three markets have the potential to produce a substantive signal to landholders, whereby they may be rewarded for completing good soil management practices. A further body of work remains to be completed by the Soil CRC, before these markets can be fully activated in this way.

Next Steps

The scoping study project (1.1.01) has now been completed, and a second project (1.1.02) commenced with co-funding received from the NSW Government's Research Attraction and Acceleration Program (RAAP), to investigate data availability for a property market study. Opportunities are being

investigated to complete further work over coming years on activating consumer and insurance markets.

Project Team

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Project Reports/Publications

Morrison M., Oczkowski E., Cockfield G., Hatton MacDonald D., Small F., Pawsey N., Nayeem T., Saliba A., Godfrey S., Wills B., Abdu N., Cook S., Tinch D., Agbola F., Wong A., Ascui F. (2018) *Activating markets to create incentives for improved soil management literature scoping study*. Final Project Report, Soil CRC.

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The CRC for High Performance Soils (Soil CRC) is bringing together scientists, industry and farmers to find practical solutions for Australia's underperforming soils. The CRC aims to enable farmers to increase their productivity and profitability by providing them with knowledge and tools to improve the performance of their soils. The Soil CRC is the biggest collaborative soil research effort in Australia's history. The Australian Government and the CRC's 39 participants collectively contribute \$164 million to the Soil CRC through both cash and in-kind contributions. The Soil CRC has funding until 2027.