

# EVALUATING THE FINANCIAL COSTS AND BENEFITS OF SOIL STEWARDSHIP

Project 1.1.004

## DIGGING INTO THE NUMBERS

This factsheet reports the highlights from a review of more than 80 published studies which evaluated the profitability of soil stewardship in dryland, broad acre cropping systems.

## THE CHALLENGE

Financial constraints and uncertainty over the financial returns can influence the adoption of soil stewardship practices.

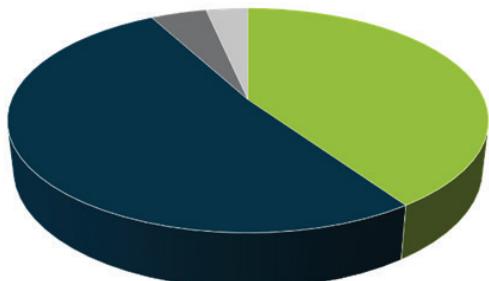
There is a need to provide growers with relevant and reliable financial information which supports their evaluation of alternative soil management strategies.

## RESEARCH FINDINGS

Evidence for a broad range of soil stewardship practices was captured. Most soil stewardship practices rarely deliver a negative financial return but the impact on profitability is typically mixed.

The mixed financial returns are driven by temporal factors, crop type, location, the scope of the benefits considered, choice of performance measure, experimental design aspects, and other factors.

Overall financial return from soil stewardship



■ Positive ■ Mixed ■ Negative ■ No significant difference

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## CONSIDERING THE FINANCIAL COSTS AND BENEFITS OF SOIL STEWARDSHIP?

- A broad range of accrual accounting profit (gross margin, net income) and cash-based (payback period, net present value) indicators can be relevant for grower decisions.
- All relevant costs and benefits should be accounted for in a comparable manner.
- Realistic assumptions are required. Discount rates, for instance, must reflect a grower's real-life cost of capital and anticipated risk from practice change.
- Growers should be supported with information which enables them to understand the impact of practice change on risk.
- The sensitivity of results under different assumptions/scenarios should be clear.
- The potential synergies across alternative soil stewardship practices should be considered.

## Authors

- Nicholas Pawsey, Charles Sturt University
- Catherine Allan, Charles Sturt University
- Sepide Abbasi, Charles Sturt University
- Francisco Ascui, Federation University
- Alfred Wong, Charles Sturt University
- Mark Frost, Charles Sturt University
- Tahmid Nayeem, Charles Sturt University

The CRC for High Performance Soils (Soil CRC) brings together scientists, industry and farmers to find practical solutions for Australia's underperforming soils. Our aim is 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 largest collaborative soil research effort in Australia's history, with funding until 2027. We have attracted more than \$167 million in cash and in-kind resources over 10 years from our 39 participants and the Australian Government.