



Accelerating adoption of integrated soil management practices in irrigated cotton and grain

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Location: Queensland and NSW

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Cotton Catchment Communities CRC

The need

Most cotton farms are situated on riparian floodplains and best management practice (BMP) of soils is imperative to the sustainability of these landscapes.

One of the best ways to improve water management and to optimise nutrition inputs to reduce the impact of rising fertiliser costs is to improve soil health and management.

A 2005 study of Australia's cotton industry examined farmers' current knowledge and understanding of soil health. It also studied management issues in order to identify the cotton industry's soil health

needs. It found that farmers' understanding of what constituted soil health varied and that they wanted to receive more extension information about soil health issues.

How this project fits with HSSF objectives

This project improves grower accessibility to information about beneficial soil health practices within a sector-specific context. Ongoing application of these new learnings will have positive outcomes on individual farms and sub-catchments, particularly for future water use.

Project objectives

- To increase resources and the information available to growers to help them improve their management of the landscape,
- To improve management of rivers through improved water use efficiency and soil management,
- To establish on-ground integrated soil management practices, including economic and environmental outcomes, at farm and catchment scale.



Methods

Soil health field guides are being developed for use by growers and will include grower-based case studies.

The project is also establishing demonstration sites and a training/workshop program to extend integrated soil management information to farm advisers and agri-business. The information has the potential to be applied to other industry groups such as other irrigation industries or grains production in dryland systems.

Desired outcomes

This project aims to provide information so that growers can evaluate, monitor and manage their soils, and help them identify opportunities for continuous improvement.

Achievements to date

- A survey of the industry asking growers about their soil health issues found that soil biology was most important followed by benchmarking and soil nutrition.
- Development of training modules for farmers and advisers.
- Development of case studies for use in training.

What is left to do?

There's a need to establish valid measurements of soil health indicators and track their links to production.

Future activities include a proposal for three regional events - at Hilston, Narrabri and Goondiwindi, as well as one-day symposiums linked back to Healthy Soils for Sustainable Farms modules.

An upgraded website will include a new knowledge bank and improve information accessibility for farmers.

Healthy Soils for Sustainable Farms Programme is a Natural Heritage Trust programme, which is managed by Land & Water Australia and supported by the Grains Research and Development Corporation.

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