

Plain English summary

Project title:	Carbon Farming in the Australian Cotton Industry
Lead organisation:	Cotton Research and Development Corporation
Partner organisations:	Cotton Seed Distributors Ltd (on behalf of the Cotton Development and Delivery Joint Venture) Cotton Australia The University of New England New South Wales Trade & Investment CSIRO Plant Industry Grains Research and Development Corporation Queensland Alliance for Agriculture and Food Innovation Queensland University of Technology
Communications/media contact	Ruth Redfern CRDC, ruth.redfern@crdc.com.au , +61 2 67924088.
Project narrative	This project aims to integrate the latest information on carbon, climate change and emissions management into the cotton industry's extension efforts. By up-skilling industry information providers, incorporating information into myBMP and developing carbon farming campaigns with the aim of improving resource use efficiency and reduce land sector emissions.
Objectives	The project has the following main objectives: <ol style="list-style-type: none"> 1. Increase cotton industry understanding of emissions reduction possibilities and sequestration from the cropped areas of the farm 2. Increase cotton industry understanding of emissions reduction possibilities and carbon sequestration in non-cropped areas of the farm 3. Clarify to cotton industry participants the opportunities, benefits and trade-offs of participating in the CFI and / or implementing potential mitigation / sequestration options 4. Up-skill cotton and grains industry advisers, extension networks and key influencers 5. Consolidate current, cross-sectoral science and provide clear direction for future research
Implications	Up-skilling extension officers and technical specialists (i.e. key influencers) through e-learning, F2F training, accredited nutrition workshops and CFI conferences. The up skilling has focused on increasing their knowledge and understanding of nutrition management, to enable them to understand the sources and scale of nitrous oxide emissions, and options for their abatement. Also, the up-skilling future advisors and growers on emissions management and soil carbon sequestration methods delivered through the revised UNE Cotton Production Course and workshops.
Locations/industry	This project is working with cotton growers and advisors in the major cotton growing valleys (8); Riverina, Macquarie Valley, Namoi Valley,

	Bourke, Gwydir Valley, Border Rivers catchment, Darling Downs and Central Queensland.
Key activities	<p>The project has increased grower and adviser understanding, particularly in the areas of seasonal forecasting, nitrogen efficiency and energy use. It is also credited with influencing and supporting grower decision making and on-farm practice changes – particularly in the areas of reducing energy use and improving emissions management (e.g. implementing solar irrigation and carbon footprint benchmarking), improving nitrogen management (e.g. soil testing), and seasonal forecasting (e.g. installing weather stations and improved irrigation timing). Key activities include the 2016 CottonInfo Nutrition tour, 2015-2017 Energy Efficiency workshops and the fortnightly CottonInfo e-news - "Moisture Manager". All had tremendous impact.</p> <p>The project engaged heavily with cotton industry constituents; 152 activities, 6,900 attendees and 194,000 hectares of developed irrigation farmland represented in 3 and a half years.</p>
Outcomes	<p>The project contributed to improved industry understanding of carbon emissions and climate issues and demonstrated that both financial and environmental gains can be achieved.</p> <p>Impacts including improved energy efficiency and reduced nitrogen usage highlighted the project's direct influence on grower decision making.</p> <p>"Informed Persons believed the Carbon Farming Project to be timely and important given the wider issues associated with climate change and increasing economic pressures. Its role was seen as ensuring the Cotton industry is <i>responsive, proactive</i>, and a <i>good environmental citizen</i>" Summary of surveys conducted by Coutts J&R (2017)</p>
Publications/ communication material	<p>All project resources can be found at www.cottoninfo.com.au web page in the following categories;</p> <p>http://www.cottoninfo.com.au/carbon-farming</p> <p>http://www.cottoninfo.com.au/climate</p> <p>http://www.cottoninfo.com.au/crop-nutrition</p> <p>http://www.cottoninfo.com.au/energy-use-efficiency</p> <p>http://www.cottoninfo.com.au/natural-resource-management</p> <p>https://www.youtube.com/user/CottonInfoAust</p>