

Executive Summary

Agronomic and Economic Aspects of Water Use Efficiency in the Australian Cotton Industry

Introduction

In 1995 the Cotton Research and Development Corporation (CRDC) commissioned a study entitled *The Australian Cotton Industry: An Economic Assessment* (CIE 1995). The report identified supply of irrigation water as a major limit to production, and as one of the major issues for the industry. The project described in this report extended the CIE assessment to include a specific agronomic and economic assessment of the efficiency with which the cotton industry uses irrigation water in Australia.

Terms of reference agreed between the CRDC and the authors were to achieve the following objectives:

1. Document current knowledge on the water use efficiency of Australian cotton and comment on potential for improvement.
2. Compare Australian cotton with other irrigated crops in Australia and cotton in other countries and determine the comparative economic efficiency.
3. Determine overall water use of cotton in Australia and relate it to its economic efficiency.
4. Calculate the efficiency of use of other assets in the Australian cotton industry.
5. if possible, estimate the spin-off effects of water research and development in the Australian cotton industry on other irrigation industries in Australia.
6. Prepare an economic analysis which shows the actual cost of water to cotton producers.

Because of the skill requirements needed for the preparation of this report it has been prepared by two separate groups of authors. Brian Hearn prepared Section 2, the agronomic section, and John Cameron and Bridget Jackson prepared Section 3, the economic assessment. Section 1, this section, provides an overall summary of Sections 2 and 3. Because each section was prepared by two different authors there are slight style differences between the sections. No attempt has been made to eliminate these differences as it was felt that to do so may jeopardise the impact of each section.