

Dairy Directions – Analysing Farm Systems for the Future

Providing robust analysis of the impact of on-farm changes and innovation on the profitability of dairy farm systems

Introduction

The Modelling Dairy Farming Systems project uses a unique combination of case study farms, and bio-physical and economic modelling to provide insights into potential options for dairy farmers to deal with changes in their operating environment. The effects of drought, climate variability, policy and technological changes are analysed using case study farms selected as representative of particular farm systems and relevant to the questions being asked.

Options for changing the farm system are analysed over a 10 year period to inform the dairy industry of how different strategies are likely to perform in the medium to long-term. The project began in the Murray Region (northern Victorian and the Riverina) in 2001 and is now being implemented in Gippsland and western Victoria.

A key strength of the project is the Regional Stakeholder Steering Committees. Each committee comprises farmers, policy makers, consultants, rural counsellors, extension staff and scientists who oversee and provide direction for the team's work. The Project Team acknowledges the excellent support and direction provided by these Steering Committees and the case study farmers.



Current Project Activities

Phase 4 (July 2008–June 2011)

The objectives of Phase 4 are to:

- ◆ Analyse options for dairy farms to maintain and increase profit, net worth and manage risk under:
 - ➔ Fluctuating milk price and real increases in input costs.
 - ➔ Climate change projections and related policy changes
 - ➔ Increasing land values, which impact on the expansion of dairy businesses.
- ◆ Disseminate information generated from the project to inform influential farmers, service providers and policy groups of options to optimise profit and manage risk.

Project Team



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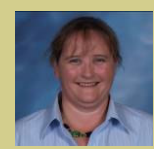
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Project highlights and achievements

Phase 1 (March 2001–September 2002)

- ◆ Analysis of the performance of four different farm types: traditional family farm, modified family farm, high input farm and feedlot.
- ◆ Analysis of potential development options for each farm type under a range of economic conditions and using different technical response functions. This assisted business managers in evaluating changes to their systems, the risks involved and in reaching informed decisions on investments.
- ◆ Provided the industry with a rigorous and robust approach to analyse farm performance in a continually changing operating environment.

Phase 2 (October 2002–June 2006)

- ◆ Analysis of the impact of the 2002/03 drought on farm performance and time for recovery under different management options (Fig 1).

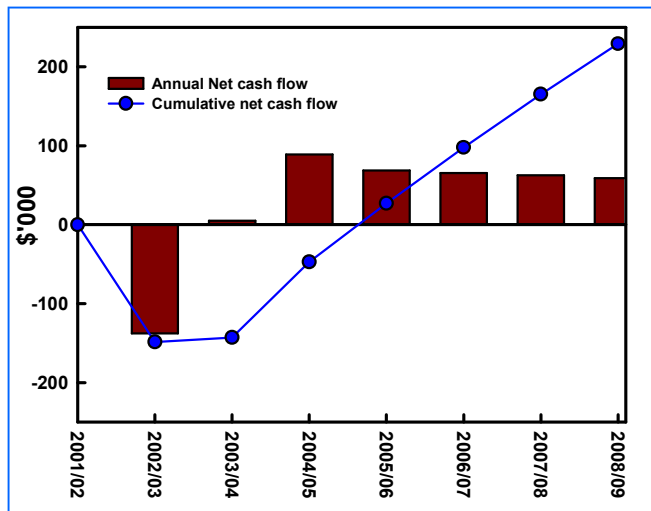


Fig 1. Drought impact and recovery scenario for Goulburn irrigation system farm assuming a 'cull 15%' option (2002/03).

- ◆ Input into Exceptional Circumstances submissions. The drought analysis created significant interest amongst the dairy industry and was used to obtain Exceptional Circumstances funding for dairy farmers in northern Victoria.
- ◆ Input into policy development. The impact of changes in water price and availability were investigated for two case study farms. The analysis was used by the dairy industry, and DPI and DSE policy groups during the development and discussion of the Green and White papers on water policy.
- ◆ Increased understanding by farmers and service providers of the difference between cash flow, operating profit and wealth, and how to measure these, through the "Lets Talk Profit" workshops.
- ◆ Examined the needs of other dairy regions or industries for farming systems analysis. This has led to the development and implementation of activities in Gippsland and western Victoria.

Phase 3 (July 2006–June 2008)

- ◆ Analysis of the potential consequences of climate variability on feed supply for different dairy farm systems.
- ◆ Assessment of the profitability of labour saving options, such as once-a-day milking, automatic irrigation, robotic milking and alternative irrigation technologies, on farm business performance.
- ◆ Analysis of on-farm connections in the northern irrigation region.
- ◆ Strong links to relevant research and extension projects created.



Further Information

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