Thank you from the project team

This is the final bulletin update for the Dairy Directions project; in this last edition, we look back on the activities and achievements over the past 13 years. The project team would also like to thank those involved in the steering committees for their invaluable input, insight and direction; the funders for their continual support; and all those who have contributed to making the project a success.

Project summary

Initially known as the Future Dairy Farming Systems project, and more recently Dairy Directions, the original brief was to answer questions about the future of different dairy farming systems in northern Victoria and southern New South Wales, and investigate options that would enable them to remain profitable.

To this end, an approach was developed to analyse farm systems that avoided the limitations of the static, partial, backward-looking, accounting-focussed approaches sometimes used in farm systems research. The approach that was adopted harnessed the strengths of the whole farm approach; using case studies and emphasised farm management economics. It focussed on strategic management choices over a medium-term and considered the impact on wealth, cash, profit and risk.

A key part of the approach was use of a steering committee, comprised of farmers, private consultants, Department extension and policy staff, funders, milk factory field staff, other industry experts and stakeholders, and the project team. The role of the committee was to define the research questions, identify potential innovations (future systems), test the common sense of assumptions used in the modelling and results generated, provide information about the project as input to related work in extension and policy, and provide advocacy for the work. Over the course of the project, over 65 people across the state were involved in the project as members of steering committees.

As the natural, economic, risk and policy environments became increasingly complex, the project evolved to cover broader questions, identify research gaps, and provide input to drought and water policy discussions. It was also replicated in other dairying regions of Victoria. The following is a brief timeline summarising the key activities and outcomes over the last 13 years.
April 2001 to September 2002
♦ Approach and expert steering committee established in northern Victoria
♦ Four farm system types, ranging from the traditional family farm to the feedlot, analysed with options developed to help maintain, or increase profitability in the medium-term future.

Oct 2002 to June 2006
♦ Drought impacts and recovery options analysed for the 2002/03 drought with results used as input into the successful Exceptional Circumstances submission for dairy farmers.
♦ Impacts of changes to water price, availability and policy for dairy farms in northern Victoria assessed.
♦ Changes in the productivity and profitability of a dairy farm over a 40-year period analysed.

July 2006 to June 2008
♦ Formal link with the Department Policy Group established and input provided into the water policy discussion through analysing the farm level impact of water availability changes.
♦ Project team and activities expanded into Gippsland.
♦ Benefit-cost analysis undertaken of irrigation modernisation connection options and labour saving technologies for dairy farms in Northern Victoria, including once-a-day milking, automatic flood irrigation, automatic cup removers and subsurface drip irrigation.

July 2008 to June 2011
♦ Project team and activities further expanded into south-west Victoria and the Macalister Irrigation District.
♦ Profitability of irrigation re-use systems and heat stress mitigations options evaluated.
♦ Farm level impacts of the Murray Darling Basin sustainable diversion limits and a potential carbon tax analysed.

July 2011 to June 2014
♦ Options for dairy businesses in northern Victoria under increased water availability and the economics of purchasing an outblock for growing and conserving fodder investigated.
♦ Economic evaluation of partial mixed ration feeding systems, changing calving pattern, carryover water and net benefits of the Farm Water program.
♦ Approach to assessing the contribution of financial risk developed and applied.
♦ Equilibrium Displacement Model developed for the dairy industry to assess the distribution of economics benefits from productivity gains made on-farm to different sectors of the industry.

Summary of communication activities and publications/events
Over the last 13 years, the project produced, or were involved with:
♦ Refereed journal papers (18)
♦ Conference papers (19)
♦ Bulletins – technical, updates and project profiles (24)
♦ Technical reports (12)
♦ Milestone reports (26)
♦ Other – Financial recovery booklet, Theses and radio interviews (8)
♦ Popular Press/Media articles (74)
♦ Presentations/events (236) (Audience at presentations -7,294)

A compilation of Dairy Directions publications (key journal papers, conference papers and technical bulletins) has been produced and provides more detail about the research findings.

Please contact Marg Jenkin on (03) 5833 5381 or at Marg.Jenkin@ecodev.vic.gov.au, if you would like a copy.

Project review and evaluation
A review and a formal independent evaluation of the project were carried out and key impacts of the project were identified as:
♦ Influencing the thinking of service providers as well as providing dairy farmers with increased confidence in their decision making.
♦ The project team becoming a trusted source of information and advice for policy.
♦ Contributing to the successful with Exceptional Circumstances submission, which was significant for the dairy industry in northern Victoria.

Strengths of the project that contributed it’s success were considered as:
♦ The composition and direction of the steering committee.
♦ Real farm data being used in analyses.
♦ The project being proactive and able to quickly adapt to changed circumstances and demands as well as being cost effective, transparent and independent of commercial interest.
♦ Dissemination of results to end users.
The Future

While the Dairy Directions project has finished, there are a number of other projects currently underway that involve the project team and farm management economics, so the capability developed will be maintained and the momentum in dairy farm economics research will continue.

These projects include:

- **Supplementary feeding response functions** – helping farmers make better and more profitable decisions about supplementary feeding (Contact: Janna Heard).
- **Forage value index** – developing an index that will help dairy farmers and advisors select the most suitable perennial ryegrass cultivars (Contact: Clare Leddin).
- **Managing the economics of feed supply on dairy farms** – providing knowledge to dairy farmers and service providers about the costs and risks of making changes to feed supply (Contact: Christie Ho).
- **Dairy herd reproduction and profit** – assisting the dairy industry in understanding the implications and costs of interventions to improve reproduction performance on dairy farms (Contact: Bill Malcolm).
- **Enhanced nitrogen use in dairy systems** – improving nitrogen management decisions to profitability increase production while reducing losses to the broader environment (Contact: Bill Malcolm).

Acknowledgements

The project team would like to gratefully acknowledge all those who have contributed to the project over the last 13 years.