Project Profile - Dairy

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.

Driver for the Research

A long-term downward trend in the terms of trade for Victorian farmers reflects the phenomenon that in general, the price of inputs used to produce commodities has risen faster than the price received for those goods. Farmers have had to, and in the future will need to continue to, improve productivity to stay viable. In addition, farm operators have needed to manage changes in resource availability, climatic conditions and policy, and have adjusted their businesses or made use of technology to stay profitable.

A good understanding of the economic impact and risk of changes to the farm system, and of the potential farm level impacts generated by policy options is important for farmers, service providers and policy makers. This is especially with respect to whether a change is profitable, achieves what is intended, and whether a change made to one part of the farm affects other parts of the business.

Project Objective and Research Focus

The overall objective of the project is to enable the dairy industry's leading farmers, service providers and policy makers to be better informed about the net benefits and risks of making strategic changes to farm businesses, and the options dairy farmers have to adapt to changing economic and natural circumstances.

To achieve this objective, the project will focus on increasing the knowledge about the economics, financial implications and risks of technological and farming systems changes, such as introducing partial mixed ration feeding systems or high yielding forage systems, expansion versus replication of farm businesses and the barriers to increased milk production on farms.

The impact and opportunities presented by carbon policy will be investigated, as well as the net benefits and risks of potential mitigation or adaptation options. Although the agricultural sector may not be directly taxed for generating carbon emissions, it will be affected by price increases for fertiliser, fuel and other inputs. There are significant issues to be resolved, and analysis of the implications of different options on profitability at a farm level would inform how the policy is best implemented.

Approach

The Dairy Directions project uses a unique combination of case study farms, and bio-physical, economic and risk modelling to provide insights into options for dairy farmers to deal with changes in their operating environment. The impact of changes are analysed using case study farms selected as representative of particular farm systems and relevant to the questions being asked.

Future alternatives for changing the farm system are analysed over an 8 to 10 year period to inform the dairy industry of how different strategies are likely to perform in the medium to long-term (e.g. Fig. 1). The project began in the Murray Region (northern Victorian and the Riverina) in 2001 and was expanded southern Victoria in 2007.

A key strength of the project is the Regional Stakeholder Steering Committees. Each committee comprises farmers, policy makers, consultants, 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.

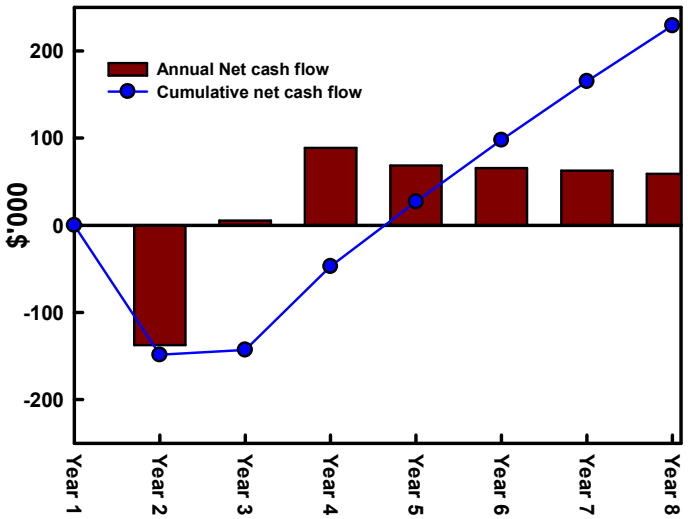

Fig 1. Drought impact and recovery scenario for Goulburn irrigation system farm assuming a 'cull 15%' option (Year 2).

Project Duration

July 2011—June 2014

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