

Dairy Pre-Farm Gate PGP Quarter 2, 2011/ 12 (October - December 2011)

Executive Summary

Overall the pre-farm component of the Dairy PGP programme is progressing well. Key highlights for the quarter are reported here.

1. Theme 1 – On Farm Innovation and Research

Good progress is occurring across the theme, which aims to increase the productive potential, resource use efficiency and product value behind the farm gate.

Increased gain through genetics and phenotypes projects: Animal genetic gain is a significant component of dairy industry productivity increases; results from the Dexcel Holstein-Friesian trial completed in 2004 indicated that about one third of farm profit at that time was attributable to gains in animal genetic merit made over the previous 25 years. Historically animal breeding has focused on animal production traits, but there is also significant potential to make progress on animal health and disease traits.

Two research projects are focused on increasing genetic and phenotypic data available to improved breeding values for desirable traits and thereby future breeding programmes. The first phase of gene sequencing has been a huge success with programme funding allowing increased bioinformatics capability and capacity for research using progressive technologies. LIC has incorporated a low cost just-in-time bioinformatics strategy that is 10-times faster than freely available software and allows costs to be minimised. In the phenotypes project, data quality is being scrutinised for a phenotypically rich group of animals looking at important variations in the key trait areas of lameness and fertility. In addition, a genetic analysis and a trial are progressing to generate data to verify the facial eczema tolerance breeding value.

Precision Agriculture findings from analysis of heat detection systems delivered to farmers: A significant article has been published in the DairyNZ Technical Series that goes out to all farmers. The article investigates the reasons why farmers are turning to technology for help in detecting cows in heat, explored a number of approaches that have been tested and commercialised, describes the performance of these systems in the field where known, and provides a technology checklist for those considering investing in automated oestrus detection systems.

2. Theme 2 – Building Capability for a Sustainable Future

Progress continues to improve on-farm decisions through building industry capability and knowledge, upskilling rural professionals, development of support networks and attracting more people into the industry.

The Increased Capability and Competency programme component is gaining momentum: This portion of the programme is focussed on building a capacity and capability framework that will improve on-farm productivity and sustainability by increasing the

resilience and management capability of dairy industry personnel including farmers, farm workers, consultants and advisers. Establishment of an on-going and sustainable framework will take time but will be achieved through increasing the on-going direct engagement with primary and secondary students, increasing the quality and quantity of trained personnel in the sector, enhancing farm management expertise, providing support networks and improving the health and well-being of farm personnel.

Demand for training and support networks are being created through networks like NZ Young Farmers (NZYF), which is motivating its members to participate in professional development opportunities. NZYF is also creating early networks in schools and for beyond NZYF clubs in a Rural Business Network. A “pipeline” for the growth of capability and competency requires strong partnerships that work across all organisations with a stake in its development. Establishment of these partnerships is underway. The Primary Industry Capability Alliance (PICA – www.pica.org.nz), formed through PGP funding, is lead by NZYF and is providing the infrastructure to stimulate demand starting from primary school and reaching right through to business networks.

Governance identified as a key development area for large farm businesses. It is clear that effective governance is a critical factor for any business. Dairy farm businesses are getting larger, often through the acquisition of multiple farms, and in doing so they are arriving at a scale where formal governance structures need to be considered. A trial-ready governance and management assessment process for large farm businesses is being developed. In addition a partnership with the Waikato branch of Institute of Directors to develop workshops for farmers and their advisors in governance has been established. These will provide farmers the opportunity to increase their understanding of what is required to do this properly.

The **Centre of Excellence in Farm Business Management**, a joint venture between Massey and Lincoln Universities established through the PGP programme, is providing a focus in education (training and professional development) and research for rural professionals and dairy farmers. It supports farm management research and the development of appropriate training programmes. Specific research into the governance and management needs of larger farms is currently being explored.