



Dairy Pre-Farm Gate PGP Quarter 3, 2012/13

(January - March 2013)

Executive Summary

Significant progress is occurring across the programme.

1. Theme 1 - On Farm Innovation and Research

Theme 1 is making good progress against the Business Plan

Increased Genetic Gain – Gene Sequencing programme is producing new opportunities: To date 32 novel gene makers have been discovered that are known to affect commercially important traits of which 10 were discovered through this PGP programme. These markers are at GeneSeek for inclusion in the next commercially available genotyping panel. They provide opportunities for improving the overall genetics of the national dairy herd through both the genotyping panel, improved genomic breeding value calculations and increased speed of sire proving. The discovery of these markers has been achieved through a significant investment in increased capability and capacity as well as application of progressive gene sequencing and discovery technologies.

Increased Genetic Gain – Phenotypic Data is also providing options: The objective of this sub-project is to use phenotypic data to enhance or develop breeding values. The first set of work is looking at fertility, lameness and facial eczema. Through breeding for these traits, the breeding values will deliver improved animal genetics to the dairy industry, resulting in decreased animal health costs and increased productivity in the national herd. A highlight of the project this quarter was presentation of the analyses evaluating fertility traits to key industry stakeholders on 20 March 2013. This resulted in support from stakeholders for the validation of potential fertility traits using industry data and taking this area to the next stage of research.

2. Theme 2 – Building Capability for a Sustainable Future

Nutrient management implementation well underway: The nutrient management programme's Audited Nutrient Management System and Nutrient Management Adviser Certification Programme have both been incorporated into the 2013 Sustainable Dairying: Water Accord. This ensures uptake of these systems across the whole dairy industry and formalises targets for delivery. The Sustainable Dairying: Water Accord is a commitment from the dairy industry to the people of New Zealand that establishes a set of standards for industry activity and farmer performance. The Accord applies to all New Zealand dairy farmers and will be enacted through compulsory milk supply agreements between dairy companies and their suppliers (note that the previous Clean Streams Accord was voluntary). Having the nutrient management systems developed in this programme explicitly recognised in the Accord demonstrates industry acceptance and adoption of these important tools. Over 170 fertiliser representatives are working towards Nutrient Management Adviser certification.

Effluent Management includes Warrant of Fitness. Effluent management equipment needs to be maintained to ensure that when operated it can continue to perform at the expected levels of efficiency and delivery. In the first pilot, Effluent System Warrant of



Fitness training has been provided to four assessors from in two companies so they are able to warrant farm effluent systems. As a result of this pilot, 40 farms now have improvement plans. Building on the success of the first pilot, a second pilot using the revised material will train assessors in three more companies. This is expected to yield assessment and improvement plans to 140 farms in Waikato, Southland, Canterbury and Horizons Regional Council territories. This is a collaborative initiative between the effluent industry, regional councils and dairy companies. It will bring about continuous improvement in effluent management on dairy farms.

Farmer Wellness and Well-being research identifies workplace contradictions in the Canterbury region. Change Laboratories are being used to analyse the dairy activity system, develop a model of how things have been done historically and how they work currently. The project identifies workplace system contradictions (that cause stress and fatigue) and then explores how a future system might be modelled to resolve contradictions. The first initiative undertaken in Canterbury, where participants (from different parts of the dairy industry and including farm owner-operators, sharemilkers, farm managers, operations managers and employees) have provided detailed accounts of their direct and indirect experiences of fatigue and stress, is now complete. The initiative, 'Decent Dairying', is being developed in consultation with participants of the Change Laboratories. Decent Dairying is a concept to resolve the contradiction that has arisen between the goals of farm owners and their employees. Historically there was a common goal towards farm ownership; the employer-employee relationship needs to account for their divergence of employee goals.