Primary Growth Partnership: Dairy Post - Farm Gate Programme Executive Summary (April - June 2012)

Overall the programme is making strides forward. A number of major contracts and appointments are now in place and work in each of the theme areas continues to build momentum.

A new Master Research Agreement has been signed with Auckland University, who along with Massey University are currently the largest of the Riddet Institute partners that provide Research Services to the programme. All the back to back contractual arrangements are now in place that will allow the programme to increase in pace by bringing these two major universities together.

As at 30th June 2012, 12 Post-doctoral positions, 11 PhD scholarships, and 1 Masters studentship have been established under the PGP post-farm gate sub programme. However, there are still vacancies for a number of Post Doctoral Fellowships and PhD Scholarships

It is likely that the United Nations Food and Agriculture Organisation (FAO) and the World Health Organisation (WHO) will recommend a change from the current methodology for measuring protein quality to a new method. This is in part through an initiative led by Riddet Institute, and supported by the PGP programme through the Protein Quality Study. Preliminary work suggests that this new method will significantly support the position of dairy and other animal origin proteins. It is likely that the FAO/WHO will call for this methodology to be exemplified by way of an international study led and coordinated by the Riddet Institute.

The new Chair in Nutrition, Professor Sally Poppitt commenced in April and is playing a pivotal role in developing a capability and science plan for the Robust Health and Wellness Theme. All the projects already contracted under this theme remain. In addition, a raft of new project options have been identified, and two that are pivotal for the future of dairy ingredients in key nutrition targets have been immediately initiated and contracted with the University of Auckland

Within the transforming manufacturing and supply chains theme a range of technology options for the creation of more transport efficient dairy products have been developed and validated at pilot-scale, and, where practicable, patent protection sought for these options.

In the "Kiwifruit" stream, temperature and humidity loggers were established in 15,000 monitored pallets in three supply chains during 2011. A high proportion of loggers generated useful data, analysis of which has enabled supply chains to be classified by a number of 'problem' types: e.g. breaks in the middle of the cool chain, excessive temperatures late in the supply chain. Knowledge of these conditions was used to shape the PhD programme that began in March 2012.

The programme intends to publish research findings, wherever possible, to facilitate international acceptance on new technologies.

- The conformity assessment activity underway at Massey University has produced a report entitled "*Developing a framework that underpins an alternative approach to determining food quality compliance for international trade*"
- A paper entitled "*On the efficacy of normalising transformation on variables acceptance sampling*" has been submitted to the journal of computational statistics and data analysis. This paper lays out a rational statistical framework for sampling of foods made in large scale processes.