Transforming the Dairy Value Chain

Farming Processing & Supply Ingredients & Dainy Consumer Products

Chain Solutions

A Primary Growth Partnership Programme

QUARTERLY PROGRESS SUMMARY: January – March 2015

Transforming the Dairy Value Chain

Summary of progress during this quarter

- Completion of the investigative phase of the mid-term review
- External technical reviews for three aspects of the programme: pasture persistence, food structure design, and paediatric cognition
- Initiation of two large scale human clinical trials for paediatric cognition
- Development and piloting of training courses for Rural Professionals
- Completion of second phase work on the short term impact of dairy protein consumption on muscle metabolism

Presentations, Publications & Training Courses

- 7 scientific publications accepted and a further 4 submitted
- 4 conference presentations and posters
- 5 training programmes delivered
- 3 industry guides, codes or other resources

Key highlights and achievements

- Through investigating the bovine genome LIC have successfully identified the genetic basis of a
 recessive mutation that can result in death of the embryonic calf during pregnancy and are validating
 further mutations. Screening tools to reduce the future incidence of these in the national herd are being
 developed and implemented. These genetic screening tools have been made available to CRVAmbreed.
- Research into phenotypic data on the incidence of lameness has determined there is insufficient
 evidence to support development of a lameness breeding value for dairy cattle. The focus is shifting to
 the next target of residual feed intake (or feed conversion efficiency).
- Analytical technology and decision support systems to detect commercial adulteration of milk have been rolled out to Fonterra's Sri Lankan operations.
- New statistical approaches developed in the programme that include considerations of analytical
 uncertainty have been applied to set compositional process control targets for Fonterra's NZ operations.
 This will reduce the likelihood of product composition appearing to be out of specification when tested
 by customers or regulatory authorities.
- Farm Data Standards Ltd has been established to administer the Farm Data Code of Practice which aims to enable more effective sharing of farm data.
- Materials from work on Farmer wellness and wellbeing have been incorporated into DairyNZ workshops on Tactics for Tight Times.
- Waikato Regional Council is supporting implementation of the Effluent WOF by adopting differential monitoring programmes for certified systems.
- Results from ganglioside measurement in Asian breast milk are being prepared for publication and have been used by Fonterra to set future product development targets. These results show higher levels than previously reported.

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Comments from external technical reviews

- Pasture persistence: "This project comprises the most comprehensive investigation of pasture persistence that is known to the review panel".
- Food structure design: "The program serves as a model for how academic and industrial perspectives can be consolidated in a program that benefits all parties" and "Simply put, if you want to be trained in food structure design, this is one of the top three and possibly the top program in the world to receive that training."
- Paediatric cognition: "...the research programme has become far more focussed, coherent and rigorous driven by a focus in the last 2-3 years by a central plan that is far more directive resulting in high quality of the research."

Collaboration with other PGP programmes

 Transforming the Dairy Value Chain and the Red Meat Profit Partnership are co-investing in feasibility of a "Data Linker" approach to enable more effective data-sharing between farmers and organisations within the pastoral sector.

Investment

Investment	Industry	MPI	Total
period	contribution	contribution	investment
During this Quarter	\$2.9	\$2.9	\$5.8
Programme To Date	\$47.2	\$48.3	\$95.5