

Agri-Gate

Ministry for Primary Industries
Manatū Ahu Matua



News from the Primary Growth Partnership

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Michael's Desk



This month saw the start of the Targeting New Wealth with High Health PGP programme between MPI and the High Health Alliance – a joint venture between Alliance Group and Headwaters New Zealand.

This programme will, among other things, look to produce lamb that is lower in saturated fat and higher in polyunsaturated fat, along with essential healthy omega-3 oils.

This \$25 million, seven-year programme has the potential to deliver \$400 million in additional revenue to the primary sector over 25 years (in Net Present Value terms), and is expected to benefit the wider New Zealand meat, pastoral and food sectors. We very much enjoyed spending time in Southland, with the High Health Alliance team, including visiting a Headwaters farm. We'd like to welcome Targeting New Wealth with High Health, which we profile in this month's Agri-gate.

I'd like to congratulate three of our PGP programmes which have received much deserved recognition. Firstly, Precision Seafood Harvesting was named as a finalist in **Seaweb's Seafood Champion Awards** at the Seafood Expo Asia in Hong Kong earlier this month. And, FarmIQ has been named as a finalist in three categories in the 2015 New Zealand Innovators Awards: Emerging Innovator; Innovation in Agribusiness & Environment; and Innovation in Information, Communications Technology & Cloud Solutions.

Also, Fonterra has been named as a finalist in the New Zealand Innovators Awards in the 'Innovation in Food and Beverage' and 'Innovation Excellence in Research' categories for the 'Milk fingerprinting' technology enabled through the Transforming the Dairy Value Chain PGP programme.

This is well-deserved recognition for three programmes delivering exciting innovations.

The Fonterra Research & Development Centre has also been named as a finalist in the "Sustained Innovation Excellence" category. Although this isn't related to the PGP, it is where a lot of the work is done and where the post-farm gate part of the Transforming the Dairy Value Chain PGP programme is managed.

On 17 September, the Steepland Harvesting programme demonstrated New Zealand's first ever remote controlled forest harvesting machine to the Minister for Primary Industries, Hon Nathan Guy, MPI staff and a small group of media near Nelson. This ground breaking technology, developed by the Steepland Harvesting programme, is the first of its kind in New Zealand, and we believe a world first for a tracked excavator-based felling machine. Steepland Harvesting has been a catalyst for a new generation of mechanised tree felling. Since the programme started in 2010 the level of mechanisation of tree felling has increased from 23 percent of all harvesting operations in 2010, to 38 percent of operations in 2014, according to industry information.

We have completed the progress review for the Transforming the Dairy Value Chain programme led by Fonterra and DairyNZ. This programme aims to deliver significant benefits across the



Minister for Primary Industries Hon Nathan Guy and harvester operator Tony Irvine



Remote controlled harvester in operation

dairy industry value chain, and therefore significant benefits for New Zealand's economy to the tune of \$2.7 billion per year by 2025.

The aim of the progress review, undertaken by Deloitte, was to receive an external view on how the programme is tracking towards its goals. The reviewer's found "there is a strong likelihood of the Programme achieving significant economic impacts and important industry change." They also found that the five themes of the programme are "well placed to deliver significant outcomes", that they're "well managed to strategic outcomes", and that "momentum around spillover activities is beginning to flow", which will bring benefits to New Zealand's wider economy.

The progress review noted the positive progress that the programme has made overall. This is testament to the enormous amount of work, time and investment across the programme. The reviewers have provided recommendations to assist the programme with meeting its goals, and delivering economic and other benefits for New Zealand. A copy of the progress review summary report is available on our [website](#).

We have also started our review to improve and simplify the operation of the PGP as a whole – special thanks to the Programme Steering Group Chairs for each programme for their input into this work.

On 15 October we'll be holding our 2015 PGP Annual Meeting and Expo at the Westpac Stadium. As well as showcasing achievements by all of our current PGP programmes, the Annual Meeting programme includes seminars focusing on:

- Internationalisation and consumer insights – how are people engaging with companies, and how are companies responding?
- Primary industries and big data – how will primary producers make best use of the digital revolution?
- People and capability – what opportunities the primary sector offers, and how we are working to attract, train and retain talented people?

Finally, I wanted to mention the **Food Protection Forum** on Monday 12 October 2015. MPI is proud to be hosting this one day Forum in partnership with AsureQuality. The Forum will focus on the importance of a food safety culture and food defence in protecting New Zealand's economy, reputation and consumers globally. A strong food safety culture and defence system require input from government, industry leaders and consumers. With a line-up of international speakers and attendance by industry leaders, this Forum presents an opportunity to progress the future of Food Protection in New Zealand. You can find more information about the Forum and register to attend on our [MPI website](#).

Michael Jamieson
Acting Director PGP

From the Chair



Last month I talked about the PGP being an investment in terms of time, effort, resources and funding. I also noted that the PGP partnership approach can generate far greater value than if each partner embarked on a programme

in isolation.

This was again emphasised in presentations from some of our PGP programmes at our Panel meeting earlier this month.

I'd like to touch on some of the points from those presentations that really resonated with me.

The first is that the PGP enables companies to explore new business horizons. It's becoming really clear that the PGP is a catalyst for innovation – it broadens enormously the scope of what a company would be prepared to undertake in the course of normal business as usual activities. And it drives innovations across the industry.

Another point that came out loud and clear was that the collaborative aspect of the PGP really ensures that rigour is built into programme processes – and a level of rigour that is acknowledged by our partners to be fundamental to the success of the programme. With both significant government and industry investment in PGP programmes, all parties are accountable to each other to ensure the success of PGP programmes.

I've often talked about what we mean by 'innovation'. One thing that really resonated with me from our last Panel meeting, from the comments of our PGP partners, is how they have come to realise that innovation is a combination of entrepreneurship and science, not simply one or

the other. I believe this is at the heart of the PGP.

It's gratifying for New Zealand that, after six years, we are still adding new innovative programmes to the PGP stable. I too would welcome our newest PGP programme, Targeting New Wealth with High Health. This programme is expected to provide benefits across the entire lamb sector, and the Panel looks forward to working with the programme partners.

Finally, I'm very much looking forward to the PGP Annual Meeting, Conference and Expo next month. See you there.

Joanna Perry
Chair, Investment Advisory Panel

Programme Spotlight

Targeting new wealth with high health

Consumers want healthy foods and will pay more for them. A new red meat sector PGP programme, Targeting New Wealth with High Health, looks beyond current industry issues to a healthier future for red meat and New Zealand's pastoral farmers.

The seven year PGP programme reconceives red meat as a health product investigating systems from farm to fork through the lens of consumer health. The aim is to create new premium products for health-focused consumers, which will increase the wealth generated from New Zealand's red meat sector and boost returns to the country's sheep farmers.

"Many consumers associate red meat with undesirable saturated fat but, in fact, grass-fed red meat has a strong health story, equivalent to a shelf of health supplements: iron, zinc, vitamin B12, vitamin D and healthy fats such as omega-3 (often associated only with fish), to name a few," says Murray Brown, Alliance Group General Manager Marketing. "For the young and the elderly, the density and ready availability of nutrients in red meat and offal is of particular value."

Consumer insights

Consumer insight is the beginning of any food journey leading away from commodity production. The first stage of this PGP programme is a better understanding of consumers at the intersection of red meat, nutrition and health.

"Our consumer work focuses first on New Zealand, then builds to also include 'new wealth' in markets such as China, India and Brazil. The programme builds on existing research to identify and understand target consumer groups and routes to market," says Murray.

"We'll then test product concepts and prototype health-focused products with target consumer groups. Our starting point is lamb as a fresh meat product, but the scope expands over the four-year Insight Project to include manufactured meat products and health formulations."

A New Class of Lamb

The sheep industry has focused for some years on selecting animals for lower fat levels, leanness and meat yield. A level of fat, however, is needed by ewes to survive the winter and raise lambs. Fat is also needed for red meat to process well, cook well and be tender and succulent. Targeting New Wealth with High Health builds on a four-year science programme that has explored the upsides of putting fat back into the mix in a positive way producing animals with higher polyunsaturated fatty acids and omega-3.



"This breakthrough research has found that the right combination of genetics, management and feeding can alter the fat profile of lamb and produce animals that are healthier for consumers, containing higher levels of good fats such as omega-3," says Murray. "An unexpected bonus is that this high-health product tastes great, scoring well on succulence and tenderness."

Targeting New Wealth with High Health, directed by consumer insights, aims to develop specified genetics, forages and pilot scale farm systems to cost-effectively produce high health lamb. The goal is to demonstrate that this new class of lamb can be produced on scale and at low cost while maintaining high standards of animal welfare and environmental sustainability all achieved by the 'extra fat' in the system.

"It's a win-win situation for New Zealand farmers with the potential to increase productivity and generate better market returns," says Murray.

Made in New Zealand

To differentiate and capture value from innovation, New Zealand companies need to control products all the way to the consumer. Supply of raw material to third parties for re-processing, packaging and retailing gives few opportunities to grow value. A key part of the strategy is a focus on high value products, manufactured and packed to final consumer specification in New Zealand, and with the assurance systems to prove its origin. The programme will develop a

series of health-focused products using rapid product development principles. The outcome is a series of 'first-in-class' products with cross-over between the meat and health food market sectors.

Maximising value

Maximising value to New Zealand means producing product on a large scale. The programme aims to underpin the production of one million lambs contributing to health-focused products by 2025. This scale requires building the support base for an expanding pool of lamb breeders and finishers, in close co-ordination with other industry providers and PGP programmes. The programme also looks to co-ordinate with other health-focused New Zealand businesses and investigate opportunities to leverage the PGP programme's learnings in the wider New Zealand meat, pastoral and food sectors.

Overall, the successful implementation of Targeting New Wealth with High Health has the potential to add more than \$400 million (Net Present Value) to New Zealand's regional economy.

"The core programme partners are Alliance Group and Headwaters New Zealand but, as the programme progresses, a large range of lamb breeders, finishers and research organisations will play a major role," says Murray.

The total programme investment is \$25 million over seven years.



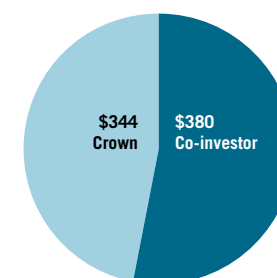
Overview of Primary Growth Partnership Investment

Sector	Programme Name and Co-investor	Total Crown and co-investor investment \$ million	Sector total \$ million	Estimated benefits \$ million (per annum)
Wool	NZ Sheep Industry Transformation (NZSTX) NZ Merino	30	\$30	250
Dairy	Transforming the Dairy Value Chain Dairy NZ/Fonterra	170		2700
	New Dairy Products and Value Chains Whai Hua Limited Partnership	3	\$174	9
Fishing & Aquaculture	Shellfish – The Next Generation Shellfish Production and Technology NZ (SPATnz)	26		81
	Precision Seafood Harvesting Precision Seafood Harvesting (PSH)	48	\$74	44
Meat	FoodPlus – Redefining Meat Horizons ANZCO	77		630
	Marbled Grass-fed Beef Grass-fed Wagyu Ltd	23		80
	Red Meat Profit Partnership Red Meat Profit Partnership (RMPP)	64		194
	Integrated Value Chain for Red Meat FarmIQ	151		1100
	Targeting New Wealth with High Health	25		TBA
Pastoral	NZ Deer Industry Passion2Profit	15	\$356	TBA
	A New Vision for Pastoral Agriculture PGG Wrightson Seeds	15		200
	ClearView Innovations Ballance AgriNutrients	20		348
	Precision Application of Fertiliser in Hill Country Ravensdown Fertiliser Co-op Ltd	10	\$44	120
Bee Keeping	High Performance Manuka Plantations Manuka Research Partnership (NZ) Ltd (MRPL)	3	\$3	1200
Forestry	Innovative Steep-land Tree Harvesting Future Forests Research (FFR)	7		100
	Use of Fumigants for Log and Wood Product Exports Stakeholders in Methyl Bromide Reduction (STIMBR)	2.6 (actual cost)		TBA
	From Stump to Pump Phase 1 (feasibility study) Norske Skog Tasman Ltd (NSTL)/Z Energy	3.6 (actual cost)	\$13	TBA
Viticulture	Lifestyle Wines New Zealand Winegrowers	17	\$17	285
Horticulture	NZ Avocados Go Global Avocado Industry Council	9	\$9	210
Total			\$720	

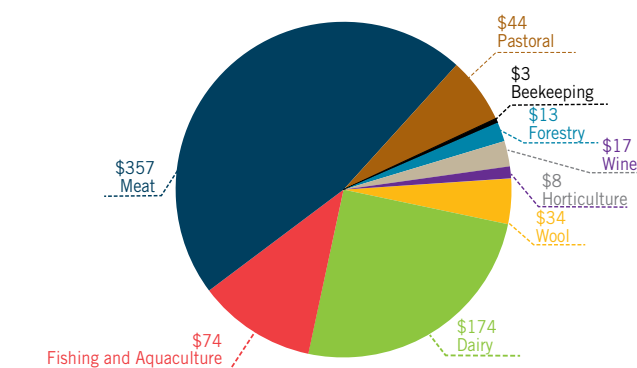
Please note that the figures in this table have been rounded. Therefore the total Crown and co-investor investment for each sector may differ to the sum of the individual programmes.

As at 31 August 2015, there were 18 programmes underway and two completed.

Crown/co-investor committed investment (in millions)



Crown/co-investor committed investment by sector (in millions)
Total \$724 million



Total government funding paid to programmes as at 31 August 2015 was \$160.3 million.