

Agri-Gate

Ministry for Primary Industries
Manatū Ahu Matua



News from the Primary Growth Partnership

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Michael's Desk



July has been another busy month across the PGP. This month saw the FarmIQ PGP programme winning the “Discovering Gold” category at the Wellington business awards on 9 July. The Awards celebrate excellence and enterprise of businesses in the Wellington Region, with the “Discovering Gold” category focussing on R&D projects. I'd like to congratulate FarmIQ for

its achievement, and it's great that they've received this well-deserved recognition.

There was further success in the form of the 100th person meeting all of the requirements to graduate as a Certified Nutrient Management Adviser under the Nutrient Management Adviser Certification Programme (NMACP). The NMACP was established as part of The Transforming the Dairy Value Chain PGP programme. Certified Nutrient Management Advisers provide farmers with effective nutrient management advice so they can use nutrients more efficiently for on-farm production, while minimising potentially harmful losses to the environment.

Also, Precision Seafood Harvesting (PSH) has been named as a finalist at this year's South Canterbury Chamber of Commerce Business Excellence Awards in the Small Business Excellence and Technology & Innovation categories.

As a finalist PSH is in the running for the Peoples' Choice Award, and we'd like to encourage people to support the programme by

casting their votes on Awards website [here](#).

A key part of the monitoring required for PGP programmes are progress reviews. These provide an external view on a programme's progress towards its goals, and give an opinion on future performance. This is part of ensuring they have the best possible chance of success and, therefore, delivering benefits.

The most recent review was for the Seeds and Nutritional Technology Development programme, led by PGG Wrightson Seeds Limited and Grasslanz Technology Limited.

The programme aims to deliver the next generation of forage seeds and nutritional technologies that will help meet consumer and environmental demands, while also lifting on-farm productivity – it aims to add \$200 million per annum in GDP by 2025.

The progress review, conducted by agri-business consultants Nimmo-Bell, concluded that all five projects under the Seed and Nutritional Technology Development PGP programme have made “significant positive progress.” It also concluded that the programme is “on time and to budget” and that management of the programme is “performing well”. The reviewers have made some recommendations which will help the programme achieve its goals. The summary review report is available on our [website](#).

While I'm on the topic of monitoring, we're in the early stages of looking at where we can simplify the reporting and administration tasks involved in PGP programmes where feasible, while still meeting requirements and disciplines for managing public funds. This recognises that PGP programmes range in size and the requirements for a smaller programme may not need to be the

same as the ones for a larger one. Our desire is to simplify this part of the monitoring of our programmes and ensure that – as a partnership – we focus our time on the substantive issues and opportunities. We would like to engage current PGP programme partners to get their input into this simplification process.

Another key element of the PGP is ensuring we engage on PGP across MPI. To facilitate this we now meet monthly with all MPI branches so that they're aware of new PGP innovations. In this meeting different MPI branches can give the PGP programmes the “wind tunnel test” to ensure potential obstacles to commercialisation, for example existing regulations or market access requirements, are identified and appropriate actions developed. This includes engagement across other government agencies where necessary.

Building on the success of our PGP Expo in 2014, we're in the process of planning our 2015 Expo that will showcase all of our PGP programmes and their achievements. This year, our Expo will be in October 2015, and I'll provide further information in my column as our planning progresses.

In the first edition of Agri-gate back in November 2013, we profiled the New Zealand Sheep Industry Transformation programme. In this month's Agri-gate, we hear about its exciting progress and some of its achievements to date.

Finally, the New Zealand Herald invited us to submit a column about the PGP for their annual Agri-business feature. You can read it [here](#) if you missed it.

Michael Jamieson
Acting Director PGP

From the Chair



In my March column I commented on the Office of the Auditor-General's performance audit of the PGP. You might recall that the OAG made three recommendations, one of which was that we "use a consistent and easily understood format to publicly report the progress and achievements of Primary Growth Partnership programmes and the

Primary Growth Partnership Portfolio."

I'm pleased to say that all programmes are moving to a simpler, more readily understood quarterly report summary, using a new consistent template developed by MPI with input from PGP programme partners. These reports, in my view, are far more informative to members of the public about the performance of PGP programmes.

In saying that I still encourage all programmes to think about the level of transparency on reporting achievements from their programme. At the last Investment Advisory Panel meeting the Panel noted when meeting with two of the programmes, that there were many instances of intermediate achievements that could be publicly reported. I'd like to encourage all programmes to stand back occasionally, clearly identify the achievements to date, and to talk about these publicly. There are so many great things being achieved by PGP programmes that are worthy of sharing.

With many PGP programmes having moved to, or are currently moving towards, the commercialisation stage of their programmes, the Investment Advisory Panel and MPI are giving thought towards how best the Panel can support the PGP into the future. The role of the Panel is to provide independent, expert advice to MPI on the allocation of PGP co-investments and the progress of each programme – we need to be clear how we can best support MPI and PGP programmes, including Programme Steering Groups, to drive positive transformational change for our primary industries. I will update you as we progress.

Joanna Perry
Chair, Investment Advisory Panel

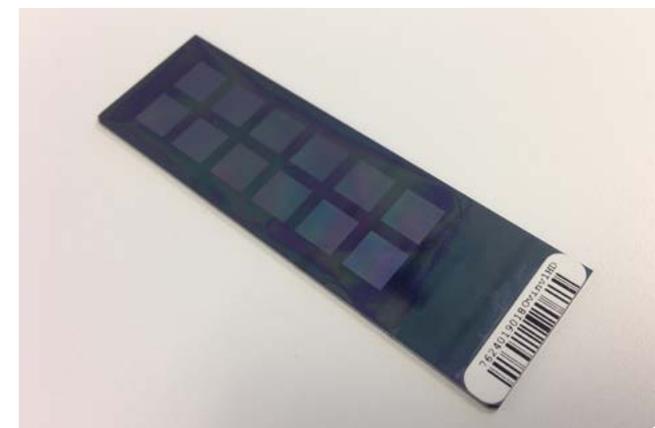
Programme Spotlight

NZSTX – Transforming the New Zealand sheep industry

The New Zealand Sheep Industry Transformation Project (NZSTX) – originally a five year Primary Growth Partnership programme between The New Zealand Merino Company (NZM) and MPI, focused on shifting the balance between New Zealand strong and fine wool production – is proceeding with a two year extension to realise the full potential of the investment made by both partners in the Production Science component of the programme.

During the first five years of NZSTX, the Production Science work (on-farm research and extension activities) was complemented by in-market product differentiation of fibre, meat and other products from fine-wool sheep to generate better returns across the value chain. While the market-focused activities will continue, they have now achieved a momentum where they no longer require PGP investment; whereas the Production Science work has reached a critical point where further investment by both partners is required to realise its full potential.

NZSTX and Production Science: As new markets are developed for New Zealand Merino fibre and meat, the challenge is to meet this increased demand through enhanced production. To that end, the Production Science sub-project is critical to the entire NZSTX programme. It provides growers with the tools to identify the strengths and weaknesses of their current production system and the barriers to increased production. It then provides the confidence to transform that system to take advantage of market opportunities with products that are tailored to the end consumer's needs and desires.



Ovine 50K SNP chip – used to genotype DNA samples from fine-wool sheep for the development of a genomic breeding value (gBV) for footrot resistance

The two year extension, with additional PGP investment of \$2.5 million over the two years is being matched by industry and will enable completion of the on-farm research and development work initiated under NZSTX in the critical areas of genetics, forage and animal health. In addition, significant extension activity will be

undertaken to ensure successful uptake by growers, resulting in a more significant long-term impact on New Zealand's sheep industry.

Why is a two-year extension required?

Significant progress has already been made in the key Production Science areas of genetics, forage and animal health. The two year extension will enable this work to be brought to a point where it can be taken forward by the industry without further PGP investment.

Animal health: The purpose of the animal health activities is to enhance the resilience and well-being of New Zealand's fine-wool sheep flock, with a particular focus on the disease known as "footrot" (a bacterial infection of the hoof material). This work overlaps considerably with the genetics work outlined below, with the development of a new genetic test for footrot resistance in fine-wool sheep being a key output of the project. Through the power of genomics technology, Estimated Breeding Values (EBVs), which rely on performance recording large numbers of a ram's progeny, can be augmented with genomic information to create a genomic breeding value (gBV) for a particular trait. Through NZSTX, New Zealand's fine-wool industry is developing a gBV for footrot resistance. The gBV will allow rams to be tested for their genetic resistance to footrot through a single drop of blood. Using this test, growers will be able to choose a ram based on the probability of the ram's progeny having superior resistance to footrot, improving their flock's overall resistance to the disease. It is expected that the development of a gBV for footrot resistance will enable industry-wide transformation and extension of fine-wool sheep into non-traditional growing regions.

Genetics: The focus of the genetics work is on increasing the rate of genetic gain in New Zealand's fine-wool sheep flock through the greater use of EBVs. EBV technology uses data generated by recording the performance of a ram's progeny, combined with quantitative genetics, to enable farmers to identify the ram with the best genes to meet the needs of their production system. It transforms ram selection from the subjective to the objective.

To enable EBVs to be reliably generated for the New Zealand industry, a central progeny test (CPT) for fine-wool sheep has been

established through the NZSTX. The CPT enables rams from across the fine-wool industry to be objectively compared, strengthening the accuracy of the EBVs produced. Since 2013, a new group of fine-wool rams has been mated each year across a group of approximately 2,000 fine-wool ewes. The progeny of the rams have been raised together, enabling the progeny to be measured and compared for a range of production and animal health traits.



Ewes and lambs at the central progeny test (CPT) site established for the New Zealand fine-wool industry as part of NZSTX

In addition, a nucleus flock to develop a new fine-wool sheep genotype (including improved carcass, reproduction and animal health attributes) has been established, with a group of seven breeders committing to continue the nucleus flock as a commercial entity.

Forage: The aim of the NZSTX forage trial and extension work is to improve the feed base on New Zealand fine-wool sheep properties (particularly in the high country). In the past, oversown and topdressed pasture provided the foundation for high and hill country production; however, there has been a gradual decline in the productivity of these pastures, with a loss of traditional legumes (e.g. clovers), and invasion by weeds such as hieracium. The focus of the NZSTX forage activities is on alternative legumes (such as lucerne), as they provide high-quality, high-protein grazing, and also fix vital nitrogen in the soil, improving the productivity of other pasture species.

There is significant momentum building in this area, with increasing numbers of fine-wool sheep growers commencing legume-based forage development as a result of NZSTX.

Extension/adoption: In addition to completing the current research and development work in genetics, forage and animal health outlined above, an innovative extension programme to drive adoption by New Zealand sheep growers of NZSTX outcomes will be a significant focus for the two-year extension.

Other key NZSTX achievements

The NZSTX in-market work around fine-wool fibre has already delivered a range of benefits to New Zealand's sheep industry, including new business prospects, as well as branded contracts at both the fine and stronger edges of the New Zealand fine-wool clip, and continued support from established fibre brand partners. As a result of NZSTX, the Alpine Origin Merino joint venture with Silver Fern Farms has established the "SILERE alpine origin merino" brand, with volumes of branded sales of Merino meat, both domestically and internationally, continuing to grow.



Growers at a joint NZM/FarmIQ field day at Glenean Station

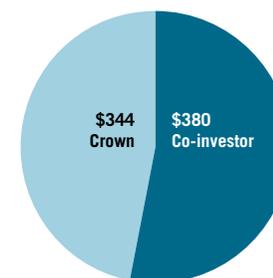
Overview of Primary Growth Partnership Investment

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	34	34	250
Dairy	Transforming the Dairy Value Chain Dairy NZ/Fonterra	170		2700
	New Dairy Products and Value Chains Whai Hua Limited Partnership	4	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	56
	A New Vision for Pastoral Agriculture PGG Wrightson Seeds	15		200
	ClearView Innovations Ballance AgriNutrients	20		348
Bee Keeping	Precision Application of Fertiliser in Hill Country Ravensdown Fertiliser Co-op Ltd	10	44	120
	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
Viticulture	From Stump to Pump Phase 1 (feasibility study) Norske Skog Tasman Ltd (NSTL)/Z Energy	3.6 (actual cost)	13	TBA
	Lifestyle Wines New Zealand Winegrowers	17	17	285
Horticulture	NZ Avocados Go Global Avocado Industry Council	9	9	280
Total			724	

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.

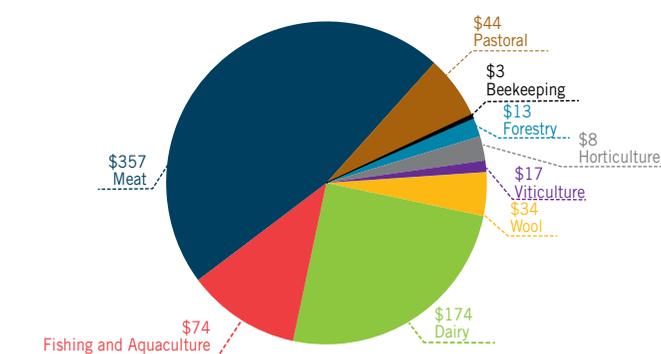
As at 30 June 2015, there were 17 programmes underway, one pending and two completed.

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 30 June 2015 was \$151 million.