











Agri-Gate

News from the Primary Growth Partnership

Ministry for Primary Industries

Manatū Ahu Matua



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Justine's Desk



With the new government financial year approaching on 1 July 2014, PGP programmes are now preparing their annual plans for the 2014/15 year. The annual plan requirement for PGP programmes is an important and valuable process for everyone

involved, particularly as most PGP programmes run for around five to seven years and are about innovative and difficult challenges.

Developing an annual plan each year means PGP programmes have the opportunity to assess progress to date, and recalibrate or refocus activities. This means programmes can focus on the things that are working and look to stop the things that further exploration has found are unlikely to succeed. This latter concept of 'fast fail' has been found internationally to be crucial to allow both new ideas to be explored in the first place and to take the ideas that demonstrate success through to market. This is an important feature of the way PGP programmes run, enabling energies to be focused on making progress rather than continuing to pursue an area that is not showing the initially anticipated gains. The design of PGP takes this "fast fail" approach into account – it's part of active risk management and is built into programmes' overall goals.

Our tenth funding round closes on 25 June 2014 and I would like to encourage people to talk to us about ideas you may have for PGP programmes. This provides an opportunity for us to explain the PGP criteria and what a PGP proposal needs to show to potentially meet those criteria. We have had some conversations to date and are available to talk with anyone who may be interested.

When putting together a proposal for a PGP programme. it's important to describe the overall story:

- What's your vision?
- What problem(s) are you trying to solve?
- How do you plan to solve it?
- How would your programme benefit New Zealand?
- What will New Zealand look like once you've solved this problem?

We recently facilitated a workshop for timber industry participants on what the value chain for engineered timber is or might be. With construction activity in New Zealand and growing economies internationally gaining momentum - particularly in medium and higher density housing - the question is whether there is an opportunity for New Zealand to take advantage of this – and whether we're well-placed to do so. There were some great discussions and ideas, and identification of the current issues. We look forward to seeing where industry participants may take the conversation and ideas next.

Over the weeks since our last issue we have continued to progress actions from the first ever PGP Partners' Workshop held in April by setting up workstreams on complex areas such as technology transfer and data. We expect to provide more information about this to PGP programmes, and seek their feedback and input, before the end of May.

Over the coming weeks we also expect to release a report that the New Zealand Institute of Economic Research Inc (NZIER) have been working on, estimating the benefits of the PGP as a whole (for both current and potential future programmes). The NZIER analysis to date is showing that the PGP is a worthwhile investment of government funds with significant benefits.

Justine Gilliland

From the Chair

Short and sweet from me this month.

Although all of our programmes have been progressing it has been a relatively quiet month from the panel perspective.

Most of our programmes have recently submitted their quarterly reports to their own steering groups, and to MPI. The



panel is reviewing these at its May meeting. This consideration of progress against milestones and outcomes is a key feature of the monitoring of programmes to ensure they are on track to deliver the outcomes originally set out in their proposals and business plans. This quarter there were some stop:go decisions made on particular sub-projects within programmes.

I thank all of those who contributed to the PGP feature on Radio New Zealand's Country Life programme that aired on 9 May. If you missed this, you can hear it on Radio New Zealand's website. The programme was a result of the media field trip that MPI and four programmes hosted in Canterbury on 19 March. The Country Life feature was a good opportunity to talk openly about benefits of PGP to a wider audience.

Finally I would just like to reiterate Justine's comments about the current funding round. If you have what you believe is an innovative opportunity in the primary industries to contribute to the Business Growth Agenda and benefit New Zealand and New Zealanders then please talk to the team at MPI.

Joanna Perry

Programme Spotlight Ballance hits half way in its biggest ever research and innovation programme

Ballance Agri-Nutrients has reached the half-way mark in its \$19.5 million programme under the Ministry for Primary Industries' Primary Growth Partnership (PGP).

The seven-year Clearview Innovations PGP programme is aimed at developing products, solutions and education to support sustainable, profitable farming. The programme has \$9.75 million in support from the PGP.

Ballance Research and Development Manager, Warwick Catto says the co-operative has made nitrogen and phosphorus efficiency a high priority in the programme. It is aiming to increase nitrogen uptake efficiency from the usual 10:1 return to 15:1 and to increase phosphate efficiency by 20 percent while minimising losses.

Work to date has covered 24 work streams and has already resulted in two products which are in the pipeline ready for release after

validation. The two products undergoing extensive user validation are MitAgator[™] and N-Guru[™], with both becoming available for use by farmers throughout the country by early 2015.

MitAgator™ is designed to identify areas on farms that are at high risk of losing phosphorous sediment, nitrogen, and microbial contaminants. It takes data from files from the OVERSEER® agricultural management tool and links it with a geo-referenced farm map, a soil map and a digital elevation model. Once



Ballance hits half way in its biggest ever research and innovation programme continued

the base risk maps are developed, mitigation and management strategies can be targeted at an individual paddock, or even part of it.

N-Guru[™] – available in time for dairy soil testing during the coming spring season – is designed to enable Ballance sales consultants to identify areas of a farm that will produce a greater response to nitrogen than others. It is a modelling tool which delivers added certainty around pasture response.

"With N-Guru™ we can now predict the pasture response accurately and impartially and tailor our advice accordingly. So we can now say if fertiliser is applied here, at this rate, this is the expected pasture response and associated increase in production a farmer can expect," says Warwick.

Other research in the programme is focused on more effective forms of nitrogen and phosphate, with field testing underway for some of these commercially sensitive options.

Also being field tested are product concepts for the biological control of grass grubs, which cause millions of dollars worth of pasture damage annually, as well as biological control treatments for the control of porina caterpillars – which compete with stock for foliage and have the potential to reduce the long term quality and production of pasture.

Ballance's PGP programme initially started with 24 work streams, and by the end of the year it is expected this will be narrowed down to about 10 key projects.

"We know that not all avenues in the programme will lead to promising destinations. That's why we've put in the hard yards up front to narrow down the focus to those work streams that will deliver on our programme objectives."

Warwick said that in the last 12 months the focus has been determining which of the co-operative's projects will have the greatest impact and probability of success.

"Eliminating the projects which may be technically successful but not commercially viable means that we can now put our efforts into the ten or so concepts that have the greatest potential to boost the profitability and sustainability of farming in New Zealand, and spend the rest of our time concentrating on delivering these to market."

One example of a product concept which hasn't made it to the next round was the potential of alum to mitigate phosphorus runoff losses from pastures to waterways.

"It is used successfully in water treatment, but for mitigation of phosphorus runoff the effective rates proved to be cost prohibitive." Warwick says he's very encouraged by the PGP programme to date and with progress on the science extension part of the programme.

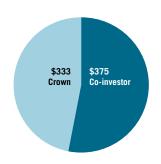
"Research needs to be thorough and that takes time. It's time well spent because for farmers to have confidence in the end result, we have to show the science is rock solid and not based on just one or two favourable field tests. With our research now at the half way mark, we are picking up the pace on the extension side so as the results come out of the lab, we can get them adopted on-farm quickly and productively."



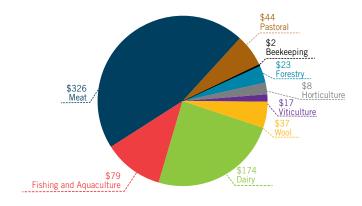
For 18 Announced Programmes as at 1 April 2014

Sector	Programme Name and Co-investor	Total investment \$ million	Sector total \$ million	Estimated benefits \$ million
Wool	NZ Sheep Industry Transformation (NZSTX) NZ Merino	37	37	250
Dairy	Transforming the Dairy Value Chain Dairy NZ/Fonterra	170		2700
	New Dairy Products and Value Chains Whai Hua Limited Partnership	3	173	8.6
Fishing & Aquaculture	Shellfish – The Next Generation Shellfish Production and Technology NZ (SPATnz)	26		81
	Precision Seafood Harvesting Precision Seafood Harvesting (PSH)	53	79	43.6
Meat	FoodPlus – Redefining Meat Horizons ANZCO	87		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	325	1100
Pastoral	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
BeeKeeping	High Performance Manuka Plantations Manuka Research Partnership (NZ) Ltd (MRPL)	2	2	925
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)	3		-
	From Stump to Pump Phase 1 (feasibility study) Norske Skog Tasman Ltd (NSTL)/Z Energy	14	23	-
Viticulture	Lifestyle Wines New Zealand Winegrowers	17	17	285
Horticulture	NZ Avocados Go Global Avocado Industry Council	8	8	110
Total			708	

Crown/co-investor committed investment (in millions)



Crown/co-investor committed investment by sector (in millions)Total \$708 million



Total government funding paid to programmes as at 30 April 2014 is \$99.8 million.