Agri-Gate

Latest news about MPI's Investment Programmes

Ministry for Primary Industries
Manatū Ahu Matua

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Justine's column

This is the first edition of Agri-gate that features activity from our broader investment programmes portfolio. There have been several events and announcements in May, which has meant a busy and action-packed month.

Primary Growth Partnership

On a chilly day in the Wairarapa, the Clearview Innovations PGP programme demonstrated three new tools it has developed to help farmers farm more profitably and sustainably. The tools were demonstrated to the Minister for Primary Industries, Hon Nathan Guy, media and others. This included SpreadSmart – precision technology developed by the programme which combines GPS guidance and tracking systems with computerised farm mapping to automate the opening and closing of an aircraft's fertiliser hopper at the right time, in the right place.

This month Hon Nathan Guy and Ravensdown CEO Greg Campbell officially opened Australasia's first ever High Intensity Mixer and Precision Blending Tower at an event in Christchurch. This innovative technology will enable Ravensdown to dispatch tailored fertiliser orders three times faster at 250 tonnes an hour compared to 90 tonnes, and it'll enable the company to fill a truck every 6 minutes compared with the current 20 minutes.

While the opening of the High Intensity Mixer and Precision Blending Tower wasn't developed as part of Ravensdown's PGP programme, Pioneering to Precision, it complements the programme's focus on precision fertiliser application. Pioneering to Precision is developing the ability to remotely sense soil fertility on hill country, using hyperspectral technology to scan a whole farm's nutrient needs including nitrogen, phosphorus and potassium status from the air.

Super Air aircraft fitted with SpreadSmart technology developed by the Clearview Innovations programme

SpreadSmart in action

During the month, visiting Australian Agriculture Ministers and officials were given a first-hand look into the PGP and three of our PGP programmes – Precision Seafood Harvesting, SPATnz and Lifestyle Wines – and they were impressed by what they saw and heard. This was part of a study tour and forum hosted by New Zealand as part of the regular Australian and New Zealand Agriculture Ministers' meeting.

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I'd also like to congratulate the Precision Seafood Harvesting PGP programme for winning the inaugural Māori Innovation Award at this year's Hi-Tech Awards. The awards celebrate the successes of New Zealand high-tech companies, and PSH's recent win adds to the programme's previous innovation accolades.

New Zealand's avocado industry is vibrant and growing with a vision and strategy in place to quadruple sales to $280 million and triple productivity by 2023 under its PGP programme, New Zealand Avocados Go Global. I'd like to thank Ashby Whitehead, Chair of the New Zealand Avocado Growers' Association and the Avocado Industry Council, and Jen Scoular, CEO of New Zealand Avocado, who hosted MPI staff and others at a presentation in Wellington about the rising value of avocados. I'd also like to thank Steve Trickett, Marketing Director of Just Avocados Ltd, for his presentation about New Zealand's avocado exports.

As we approach June, development of our PGP site at Fieldays is gathering momentum. The site will be attached to the main Ministry for Primary Industries site. Its centre piece is a mixed media display featuring a mixture of video, audio and other material. Come and see us at site number PD31 if you're visiting Fieldays 2016, and we look forward to featuring some photos of our site in our June Agri-gate.

Hon Nathan Guy and Ravensdown CEO Greg Campbell officially open Australasia's first Precision Blending Tower

Irrigation

In mid-May we announced investments totalling $7.85 million into irrigation projects in Canterbury through our Irrigation Acceleration Fund. In many cases with irrigation schemes, stored water or dams provide environmental improvements due to the more continuous supply of water throughout the year. This is because in times of high rain and water flows, water can be stored or dammed, to be used when the drier months roll around. Having consistent water flows results in healthier rivers, offers a wider range of recreation uses, and maintains the cultural value of rivers.

Sustainable Farming Fund

In April, we announced funding of $6.9 million towards 25 Sustainable Farming Fund projects across the country. Those project teams are now gearing up to kick off their projects from 1 July. The Fund supports grass-roots projects that help farmers, growers and foresters to tackle problems and develop new opportunities. This year's funding includes six projects in the horticulture and dairy industries, three in arable sector, two each in meat and fibre, and one in forestry. In this edition of Agri-gate we've featured one of the successful current Sustainable Farming Fund projects that comes to an end next month – the biological control of field horsetail projects.

I hope you enjoy this edition of Agri-gate and the broader information on more of MPI's activities to support growth and sustainability of the primary industries. We welcome your feedback.

From the Investment Advisory Panel Chair

This is my first column for Agri-gate as Chair of the PGP's independent Investment Advisory Panel (IAP). I'd like to take the opportunity to talk about my background and my initial observations of the PGP.

I have spent much of my working life with the New Zealand Dairy Board in roles ranging from farm advisory to Marketing Manager and deputy CEO, and chair of a number of the Dairy Board's onshore and offshore companies. In governance roles I've been a director of Richmond Meats Ltd, the NewZealand Game Industry Board, the Foundation for Science and Technology, ENZA and the Primary Industry Training Organisation, and I am currently a director of two dairy farming companies, BEL Group and Dairy Holdings Ltd.

I have a strong interest in innovation and adding value in the primary industries and the types of opportunities where PGP investment can deliver positive outcomes for New Zealand

It has certainly been a busy first month as Chair of the IAP. It has included a comprehensive induction, including meetings with the PGP team at the Ministry for Primary Industries, with PGP stakeholders and other IAP members. Throughout all of this, I have been impressed by the breadth and depth of PGP programmes and the dedication from those wanting to see these programmes succeed.

As chair of the IAP my objective is largely business as usual with a strong focus on sensible and efficient use of government funds while recognising that being truly innovative involves risk which will mean some failures but many successes. Given the very competent Panel membership and MPI staffing I'm sure the failures will be few and the successes many.

I look forward to working with PGP programmes and others to ensure the PGP continues to deliver outcomes for partners and for New Zealand as a whole.

John Parker
Chair, Investment Advisory Panel

PGP Programme Spotlight: Farm[IQ]

New tool for farm environment planning

Good environmental management on farms can help achieve several things

For the farmer it maximises their farm's production efficiency and enables them to meet compliance requirements, while it enables processors and marketers to provide assurances about the practices used.

The Farm[IQ] PGP programme, now in its sixth year, is helping farmers to drive farm performance by connecting them with customers. In addition, the performance of animals, down to individual animals, can now be measured and related to a range of variables on farm through to the point of processing. The programme also aimed to support good environmental management in the red meat industry by providing new insights and if possible new tools.

Recently Farm[IQ] has released a set of software features that cover all the recording and reporting a farm needs to do, based on industry good-practice guidelines for environmental management. These are available to farmers on a commercial basis as part of subscriptions to the Farm[IQ] System, or they can get it as a standalone environment pack called AgFirst Landbase, which is being marketed by the nationwide farm consultancy AgFirst.

With this online environment planning a farmer can:

- use simple online forms to complete a risk assessment, do a stocktake of work already done and set some objectives;
- mark up a digital map with land management units and features;
- keep up-to-date records.

These were developed by Erica van Reenen of AgFirst, who has specialised in supporting drystock farmers' environment work. "It was designed with farmers in mind, to help them do a bunch of things that are good for the farm business," says Erica.

"It can also help them meet regional council requirements. But there are aspects of it that are useful for the farm that a council wouldn't need to see.

"It takes you through answering questions to do a stocktake and a risk assessment – and you get a plan that's going to work for your farm. It gives you the chance to record progress over time – if you update it, you get a record of what you've done historically… so if there is value to be extracted from that in future, you have it all ready to go.

"Talking with farmers, I often find that the reason things are done is for a farming reason, but it's also good for the environment. For example, they may have fenced off a waterway because they lost stock there or it's much easier to do subdivision fencing from a fence off that waterway. You can capture that in your plan. It doesn't matter what the motivation was – it's the outcome that is the important thing."

Farm manager Hamish Chamberlain, who runs a finishing block near Cheviot associated with Esk Head Station in the high country, was looking for software to simplify things. The mapping function helped him to easily prepare a map of the property to go with the Farm Environment Plan they have submitted to Environment Canterbury.

"It's a fairly complex farm, and it would have been complicated to do the map mark-up by hand. With the software I've created a map that shows the farm blocks, and with the layering I've been able to fairly easily show all the sorts of things that are required." Because it's a digital map, he can easily change it in future years if needed.

The team who led the development of new online environment planning for farmers – Erica van Reenen of AgFirst (middle) with John Dyckhoff (left) and Troy Keily of Farm[IQ].

Sustainable Farming Fund

The Sustainable Farming Fund invests in applied research and projects led by farmers, growers or foresters to tackle a shared problem or develop an opportunity. Applicants can apply for up to $200 000 a year for a maximum of three years.

Spotlight on: Landcare Trust's 'biological control of field horsetail' project

One project that has made great progress over the last three years is New Zealand Landcare Trust's 'biological control of field horsetail' project.

Part funded by the Sustainable Farming Fund, Landcare Trust supported by the Rangitikei Horsetail Group set out to find a suitable bio-control option for the invasive weed – field horsetail (Equisetum arvense). The weed competes with pasture and crops and reduces the production potential of land in many parts of the country.

Through the research and testing phase, a British weevil (Grypus equiseti) came out as the best candidate. They found the weevil to be one of the most effective biocontrol agents causing significant damage to field horsetail. The weed is attacked by both larvae and adult weevils, with the larvae burrowing down the weed's stems and into its root system.

The weevil was tested extensively in a biocontainment facility at Lincoln to confirm it was 'host specific' to horsetail and so it wouldn't pose a threat to other flora in New Zealand.

The Environmental Protection Authority (EPA) has now approved the release of the horsetail weevil to control the weed. The weevil is well established in Europe and only been recorded to affect field horsetail.

Projects such as this are great examples of how the Sustainable Farming Fund can financially assist to achieve great outcomes.

For more information on the fund, visit **http://www.mpi.govt.nz/sff**

Irrigation Acceleration Fund

MPI's Irrigation Acceleration Fund supports sustainable primary sector growth in regions, helping to achieve the government's goal of doubling the value of primary industry exports by 2025.

The IAF helps support the development of irrigation infrastructure proposals to the stage where they are investment ready, which means they must be commercially robust and demonstrate a high level of community support.

Water projects receive Irrigation Acceleration Fund support

Earlier in May, $7.85 million in funding towards Canterbury irrigation projects was announced. Minister Nathan Guy welcomed the announcement while he was on-farm in Canterbury with those set to benefit from the projects. The projects receiving funding:

Central Plains Water: $6.64 million

This scheme will allow existing ground water wells to be replaced as well as providing water for aquifer recharge, stock water and community supply if needed. These measures will help restore flows in lowland streams, Te Waihora, Lake Ellesmere and overall groundwater levels.

Sheffield Water Scheme: $898 000

This scheme will integrate with the Selwyn district stock water system to provide both irrigation and stock water to a 4000 hectare area of prime cropping land.

Hinds Managed Aquifer Recharge (MAR) Pilot Study: $312 000

The pilot study, a first for Canterbury, will use clean Rangitata River water to soak into the aquifer in an area of high nitrate concentrations, diluting the nitrate, providing better reliability for groundwater takes, as well as allowing natural ecosystems to regenerate. The pilot will test whether MAR has a future role in the management of increasing the irrigated area, alongside efficient water distribution, efficient water use and efficient nutrient use.

Hon Nathan Guy at Pemberley Farm in Canterbury where we welcomed MPI's funding announcements. This farm currently gets water from the ground and wells but will be participating in stage 2 of the Central Plains Water Scheme.

The Irrigation Acceleration Fund supports a wide range of water projects across New Zealand. More information on the Fund can be found at **http://mpi.govt.nz/funding-and-programmes/natural-resources/irrigation-acceleration-fund/**

MPI's Afforestation Grant Scheme

The Afforestation Grant Scheme (AGS) is designed to increase the planting of new forests to improve land-use productivity and regional economic development, and reduce soil erosion.

Estimates suggest that 1.1 million hectares of land is at serious risk of erosion, and forest cover is the best form of erosion control. Over the past two decades, new forest planting has declined from an average of 55 000 hectares per year to just 3 000 in 2014. Through the AGS, we aim to plant 15 000 hectares of new forest between 2015 and 2020, and we are on track to meet this goal.

By reaching this goal, the new forests will help:

- improve land-use productivity and boost regional economic development;
- reduce soil erosion – forest cover is the best form of erosion control;
- store carbon and improve water quality.

Last year's funding round was a successful one, resulting in 81 applications planting a total of 2 900 hectares of forest.

If you're looking to apply for the 2016 AGS funding round, applications close 8 June at 5pm and further information can be found at **http://mpi.govt.nz/ags**

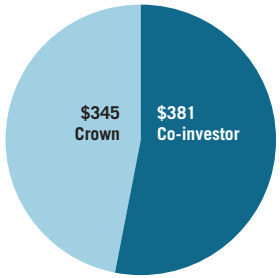
Overview of Primary Growth Partnership Investment

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		885
	Wool Unleashed (W^3)	22	56	
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	58		200
	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
	Omega Lamb (formerly Targeting New Wealth with High Health)	25		TBA
	NZ Deer Industry Passion2Profit	15	338	TBA
Pastoral	Seeds and Nutritional Technology Development PGG Wrightson Seeds	15		200
	Clear View Innovations Ballance AgriNutrients	20		348
	Pioneering to Precision – 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	Steepland 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			$727	

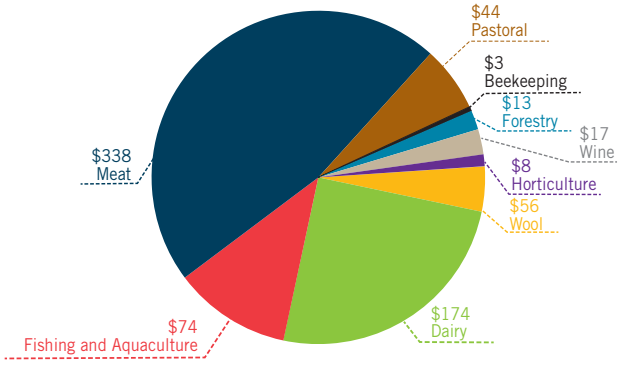
Please note that the figures in this table have been rounded.Therefore the total Crown and co-investor investment for each sector may differ to the sum of the individual programmes. The estimated benefits are aspirational economic outcomes programmes are aiming to achieve and results over time may differ.

As at 30 April 2016, there were 19 programmes underway and two completed.

Crown/co-investor committed investment (in millions) over time



Crown/co-investor committed investment by sector (in millions) over time
Total $727 million



Total government funding paid to programmes as at 30 April 2016 was $185 million.