

# Agri-Gate

Ministry for Primary Industries  
Manatū Ahu Matua



Latest news about MPI's Investment Programmes

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## Justine's column



Welcome to our first edition of Agri-gate for 2017. It's been a busy start to the year with a lot of activity across our investment programmes.

### Omega Lamb welcomed by chefs

The Omega Lamb Primary Growth Partnership (PGP) programme hosted an event in Queenstown in late January. This programme is a collaboration between Alliance Group,

Headwaters and the Ministry for Primary Industries (MPI). Its objective is to produce the world's tastiest and healthiest lamb and increase the value and returns for premium New Zealand lamb through a combination of genetics, farm management systems, animal feeding and international marketing.

Chefs from Auckland, Wellington, Christchurch and Central Otago, as well as media, MPI staff and others attended and were hosted to a barbecue of Omega Lamb cooked by chef Graham Hawkes. After a discussion about Omega Lamb at The Lodge at Walter Peak Station, the group visited two farms in Southland – Stag Valley and Waifield.

### Fonterra to build new mozzarella plant

Late last year, Fonterra announced it will be investing \$240 million to build a new mozzarella plant at its Clandeboyne site in South Canterbury, driven in part by the success of the Transforming the Dairy Value Chain PGP programme – a programme between MPI, DairyNZ, Fonterra and others. This will be the single largest foodservice investment in the history of New Zealand's dairy industry. Fonterra's General Manager of External R&D and Portfolio, Andrew Fletcher, has written an opinion piece about this news, which is available on the [Stuff website](#).



Chef Graham Hawkes cooking lamb at Waifield, Southland



Omega Lamb geneticist Aimee Charteris (second from left) talking to chefs and farmers at Stag Valley



Lambs at Stag Valley

## Sheep – Horizon Three releases first product

A core part of many PGP programmes is the development of value-added products. One such product is a new range of sheep milk calcium chews developed by the new Sheep – Horizon 3 PGP programme, and recently launched by programme leader, Spring Sheep Milk Co. This is the first product developed by this PGP programme. As well as selling this product on the domestic market, Sheep – Horizon Three is also targeting the Asian market.



The new Sheep Milk Chews, developed under the Sheep – Horizon Three PGP programme.

## Whai Hua PGP programme wraps up

In December, the Whai Hua – new dairy products and value chains PGP programme, ended. Whai Hua was a PGP programme between MPI and Whai Hua General Partner Ltd – a partnership between Wairarapa Moana Incorporation, Miraka Ltd and Kanematsu New Zealand – that has created immune-enhancing dairy milk products and ingredients.

The programme is undertaking its final reporting and wrap up. MPI will be engaging an independent company to evaluate the programme and develop a report of findings. Once the report is developed, we'll publish it on the Whai Hua programme's webpage on the MPI website.

## New Zealand Avocados Go Global tracking well

Vantage Consulting Group have undertaken an independent progress review of the New Zealand Avocados Go Global PGP programme. Progress reviews provide an external view on how PGP programmes are tracking towards their goals and give an opinion on future performance.

The reviewers confirmed that this programme is on track to achieve its outcomes. In particular, the reviewers said the avocado industry is on target to achieve the programme's target of increasing industry returns to \$280 million in gross revenue by 2023. They also concluded that the programme has "made a major contribution to the New Zealand avocado industry, achieving a step change in the way that the industry operates." No significant changes to the programme were recommended.

The programme aims to transform the New Zealand avocado industry from a reliance on a single market (Australia) to a globally competitive industry generating higher and more consistent returns across the value chain from growers to exporters.

We have published a report outlining the progress review findings on the New Zealand Avocados Go Global webpage on the MPI website.

## Programme offers students a taste of red meat

The Red Meat Profit Partnership (RMPP) has developed a school resources programme to help students learn more about the red meat sector and promote awareness of the wide range of career opportunities available. The programme's resources, trialled last year with 10 primary and 16 secondary schools, have received the New Zealand Qualification Authority (NZQA) Quality Assured Assessment Materials (QAAM) trademark. This means that the resources can now be used to gain National Certificate of Educational Achievement (NCEA) credits in a range of subjects including English, Maths and Science.

To read more about this, and keep up to date with other RMPP news, check out the **RMPP website**.

## Climate Change Research Fund opens

The 2017 Sustainable Land Management and Climate Change (SLMACC) research programme funding round is now open.

SLMACC supports research in to new climate change knowledge generation in the agriculture and forestry sectors for adaption, mitigation, and cross-cutting issues.

It's essential we invest in research to better understand our future operating environment and how we need to adapt.

The 2017 funding round will be open from 21 February until 21 April. Successful applicants can expect to be informed in June 2017.

Information on the fund and the criteria is available on the **MPI website**.

## Tutsan tackling insects released

In this edition of Agri-gate, our Sustainable Farming Fund spotlight story is about the Tutsan Action Group's recent field day where two insects that have been approved for release in New Zealand to fight against the tutsan weed were officially released.

We also provide an update on the Pioneering to Precision PGP programme led by Ravensdown which aims to develop aerial soil testing technology using hyperspectral imagery. This will provide the ability to scan a whole farm's nutrient needs including nitrogen, phosphorus and potassium status from the air.

Enjoy this edition of Agri-gate.

Justine Gilliland  
Director of Investment Programmes

## From the Chair, PGP Investment Advisory Panel



Welcome to our February Agri-gate. I trust you all had a good, decent break over Christmas and New Year.

We recently held our first Investment Advisory Panel (IAP) meeting for the year. At that meeting we talked about the importance of PGP programmes – current, new and proposed –

demonstrating that they are delivering, or will deliver, significant, long-term benefits for New Zealand, over and above what the programme partners will gain during the programme's life.

These could be in the form of building capability, growing a particular primary sector or sectors, creating jobs, contributing to regional growth, and delivering high-value products and services.

Both MPI and the IAP place significant importance on these when monitoring PGP programme progress

and evaluating new programme proposals. Indeed, we shouldn't lose sight that a significant investment is being made on behalf of the public – and, therefore, there must be demonstrable benefits for New Zealand.

Speaking of new programme proposals, the Ministry for Primary Industries (MPI) has recently simplified the application process for new PGP programmes. The application form has been simplified to reduce the amount of detail required at the initial stage of the application process. Applicants will need to explain what their proposed programme aims to do at a conceptual level, rather than go into detail. This will enable MPI and the IAP to judge at an early stage whether or not the proposal will be a good fit for PGP investment. The aim is to save the time and effort that would previously have been required even though a proposal might not have progressed to the next stage in the application process – business case development.

You could liken this to the 'fast-fail' approach adopted by PGP programmes, where effort is directed into programmes or projects that are more likely to succeed, rather than pursuing areas that are not showing promise.

There continues to be interest in new PGP programmes in the PGP 'pipeline'. They cover an increasingly diverse range of innovative primary industry ideas, which is pleasing. As I've said before, MPI and the IAP encourages anyone with good, workable ideas that will progress an opportunity or overcome a challenge in the primary industries to get in contact with the PGP team to discuss these further. Further information, including contact information, is available on [MPI's website](#).

I hope you enjoy this edition of Agri-gate.

John Parker  
Chair of the IAP

## Ticking all the boxes – when culture, science and education align

A unique mix of culture, education and science is taking place on 'Tautane', a hill country station on the east coast of the North Island, involving local Māori, farming educators, and one of New Zealand's leading agricultural science businesses.

Purchased by Ngāti Kahungunu, the 3374 hectare station is leased by Taratahi – the agricultural training centre – and has recently joined Ravensdown's national research farm network for the co-operative's Primary Growth Partnership (PGP) programme, 'Pioneering to Precision'.

A global trader in fisheries, this is Ngāti Kahungunu's first foray into purchasing land. And now, in partnership with Taratahi, the iwi has signed on to Ravensdown's PGP programme which

is developing aerial soil testing technology and building on Ravensdown's own work to increase aerial spreading precision with GPS-driven automated variable rate spreading.

Ngāti Kahungunu leader Ngāhiwi Toamona cites important cultural values that align with Ravensdown's innovative science.

"Our ancestor Kahungunu was an innovator and forward thinker, and so that's where we want to be - to be sustainable and trade with sustainable practices. We're for progress and Ravensdown's PGP programme is putting Māori back into the forefront of farming and innovation."

Iwi liaison Hayden Hape works with Taratahi Farm Managers Matt and Claire Smith.

"Matt and Claire are doing a fantastic job teaching the students life skills as well as farming skills. Marrying the science, education and culture together is what we want for our future generations," Hayden says.

"It's a great partnership where we share the same vision about training future New Zealand farmers. It's quite a privilege to think that one day someone we've trained could be managing the farm for Ngāti Kahungunu," says Claire.

"We try and keep the students up to date with the latest technologies because when they get to manager level or become farm owners, this technology (developed by Ravensdown's PGP programme) could be the new norm."



## Getting results

A recent field trial of the programme produced a very promising variable-rate, and has all those involved excited about the possibilities.

The resulting spreading map is sent wirelessly to the plane, specifying areas and blocks where no fertiliser should be applied. The computer-controlled hopper doors automatically cut the fertiliser flow when over those areas, and the map produced verifies this.

While the variable rate spreading technology and placement verification is being developed by Ravensdown outside of the PGP programme, it complements the programme's work on remote sensing. Together they'll provide a valuable tool.

"I think it's going to have huge benefits for hill country farming," says Matt. "Our first application allowed us to take out about 347 hectares of sensitive areas and waterways and reallocate that fertiliser to other parts of the farm. It was a super nitrogen mix, and you could see it definitely was going where it was supposed to go.

"We showed the students both the map of how we used to do it with the blanket spread, and the new variable-rate proof of release map – they were pretty excited and can see the benefits of it. It's pretty powerful stuff."

Hayden adds, "We say a good environment is good business. If we can find current situations where western science supports our science and vice-versa then that's where we want to be, and we feel that Ravensdown's research aligns with that. We're not afraid of it and know how we're going to move forward.

"We've been on the back foot for the past 40 to 60 years trying to defend our land and language and love of our culture but now we have to get out of that mode and get into development mode and back to being leaders. So PGP, yeah we're right in!"

## So what lies ahead?



Ravensdown's PGP Programme Manager Michael White says the aim is to couple their remote sensing technology, that assesses soil fertility from the air, with the computer-controlled variable rate spreading and placement verification technology.

"This is absolutely transformational, a world-first so far as we know, and represents the biggest advancement since topdressing began in the 1950s," says Michael.

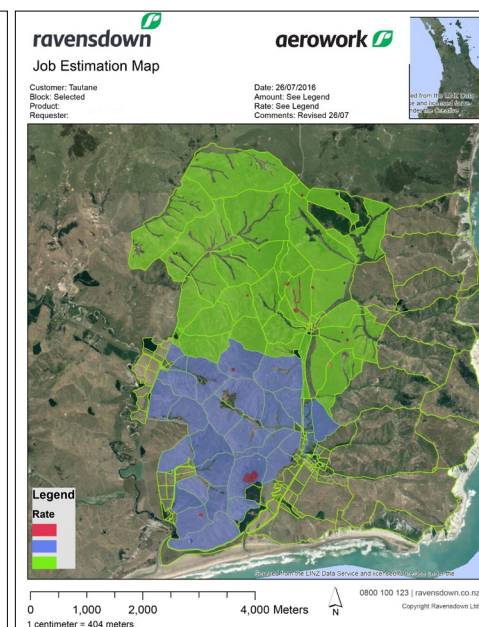
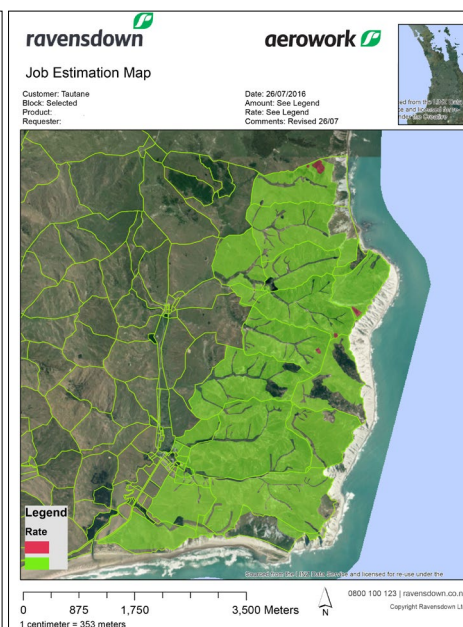
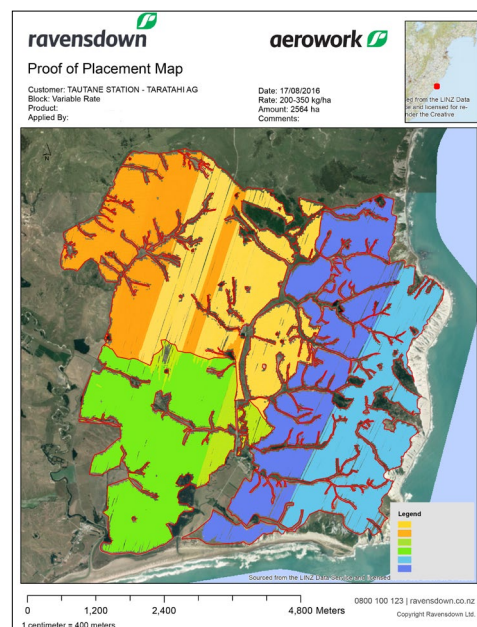
Matt says hill country farming will be transformed.

"It would have a massive impact in productivity and sustainability. It may cost a little bit more but I think the savings made and ability to provide proof of release is huge – especially being able to provide consumers with a guarantee that we, as

farmers, are moving forward protecting the environment as well as being economically more efficient."

The iwi wants this technology to become commonplace across all their whenua.

"Ravensdown's PGP programme is part of our ambition to take over all our land and show we can farm profitably and sustainably for future generations, whilst putting our cultural spin on modern-day farming," says Ngāhiwi Toamona.



Examples of Ravensdown's proof of release maps

## Sustainable Farming Fund spotlight: Tutsan weed tackled

Two insects that will tackle the invasive tutsan weed were released for the first time in Taumarunui earlier this month.

The tutsan weed is a threat to farmers as the invasive weed competes with productive pasture. The Tutsan Action Group (TAG) was formed to address the problem by looking at biocontrol options available to control the weed. TAG is Taumarunui-based and is a small group of dedicated people who have raised a significant amount of money to address the tutsan problem.

TAG commissioned Landcare Research in Lincoln to lead the hunt for biocontrol options and trialled a moth (*Lathronympha strigana*) and a beetle (*Chrysolina abchasica*) from Georgia, Eurasia to intensively test whether they would exclusively attack the Tutsan.

Biocontrol offers a cost-effective, environmentally friendly and permanent solution to weed control. Carefully selected biocontrol agents will target only weeds, don't harm desirable plants and don't pollute the environment. Once established, they travel wherever the weed is present and wherever it spreads, and can return again and again to kill off new weed growth – all without human input.

The moth and beetle were approved for release by the Environmental Protection Authority (EPA) in May 2016 after an application was made by the TAG.

The TAG project has been supported by many groups and individuals including MPI's Sustainable Farming Fund, nearly 150 individual farmers, numerous Maori-owned Incorporations and Trusts, Beef + Lamb NZ, Regional and Local Councils, National Biocontrol Collective, Treescape, Forestry and local groups.



The *Chrysolina abchasica* beetle



The invasive tutsan weed in Taumarunui



The *Lathronympha strigana* moth



# Managing erosion through the Hill Country Erosion Fund

MPI's Hill Country Erosion Fund supports regional councils to provide landowners with information and solutions for protecting erosion-prone hill country from the effects of erosion.

The fund is designed to speed up the rate of treatment of erosion-prone land across rural New Zealand and reduce the impact on communities, rural business and local infrastructure.

The fund has seen many successes since its inception such as the Sustainable Land Use Initiative (SLUI) programme run by Horizons District Council. SLUI contributed to improving the water quality of the Makuri River. The river recently won a Morgan Foundation River Award for Most Improved River.

SLUI is New Zealand's largest hill country erosion management initiative. At a regional level over 640 Whole Farm Plans have been created, almost 13 million trees have been planted and over 570 000 metres of waterways fenced off. These activities are contributing to reducing annual sediment loads in our rivers.

SLUI is run by Horizons Regional Council and MPI has contributed to the programme since 2008. More recently, MPI granted \$4 760 000 towards SLUI from 2015-2019.

The Most Improved River Award celebrates waterways showing long term trend improvements in water quality. A panel of scientists judge approximately 600 sites using long term data stored on the Land Air Water Aotearoa (LAWA) website

[www.lawa.org.nz](http://www.lawa.org.nz).

Visit **Horizons District Council's website** for more information on SLUI.

Visit **MPI's website** for information on the Hill Country Erosion Fund.



Horizons Regional Council land management staff and a farmer discuss pole planting, a popular tactic for mitigating hill country erosion under Horizons Sustainable Land Use Initiative (SLUI)