

Ravensdown PGP Programme Quarterly Progress Report

Contract reporting period: April - June 2017

PSG Meeting Date: 27/4/17

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Summary of progress during this quarter

The programme's second validation remote sensing survey was carried out on Moana Station in this quarter. The validation surveys are designed to test the robustness of remote sensing calibrations to produce predictions of soil fertility.

The programme has assembled the most comprehensive dataset collected in New Zealand for the purpose of developing remote sensing technology to identify nutrient requirements across NZ hill country farms. This dataset includes 8,052 soil and 7,280 plant tissues samples analysed for nutrient content.

Conclusion of an independent technical review of the programme by international experts. The review concluded there was great potential to increase the profitability of New Zealand hill farms through the development of robust remotely sensing algorithms for the prediction of soil fertility (and ultimately fertiliser recommendations). "The project team have gathered an impressive and relevant dataset and made good progress in modelling and explaining the variation within it". Recommendations for further development and validation of algorithms were also made which have been incorporated into the programme. A parallel review was also completed during the quarter which independently assessed the progress made to date and to understand how the programme is tracking towards the expected outputs and outcomes. This was a positive review, concluding that the programme 'is well managed and effectively governed, and appears on target to deliver its intended outcomes.'

The programme delivered a number of focus farm and adoption events in the last quarter including showcasing Bog Roy Station at a beef + Lamb farming for profit event in Waimate, beef + Lamb farming for profit event in Canterbury at Porters Pass, farmers and consultant meeting in Lumsden, rural professionals' workshops in Waikato and in Invercargill.

Spring 2017 sampling planning is well underway which includes recommendations from the statistical review and the programmes' science advisory group. The spring programme will begin testing remote sensing algorithms on farms which have not been part of the programme to date.

Key highlights and achievements

- Completion of second validation remote sensing survey on Moana Station.
- Conclusion of the technical and independent programme reviews.
- Series of successful field days held North Island and South Island locations.

Upcoming

- Planning for spring 2017 sampling completed and sampling commenced.

Investment

<i>Investment period</i>	<i>Industry contribution</i>	<i>MPI contribution</i>	<i>Total investment</i>
<i>During this Quarter</i>	\$0.345m	\$0.345m	\$0.691m
<i>Programme To Date</i>	\$3.47m	\$3.47m	\$6.94m
