

Measuring the Impact of RMPP's Action Network

BakerAg; May 2020

Purpose

Our purpose was to make a quantitative assessment of the impact that RMPP's Action Network has had on the profitability of the sheep and beef farming sector in New Zealand. This has involved conducting a financial and qualitative analysis to evaluate the productivity and profitability changes within farm businesses as a result of Farm Leaders becoming involved in RMPP Action Groups.

We report on the outcomes of analysing 14 case studies for evaluation of the RMPP Action Network, as well as key observations, problems encountered, learnings, and a template for final review of RMPP Action Network effectiveness.

Executive Summary

The RMPP Action Network is an initiative to support farmers to develop the confidence to turn ideas into improvements on-farm through participation in Action Groups. These are farmer-led collaborations of 7-9 farm businesses supported by trained facilitators who can guide the group by providing technical support and identifying experts to share new knowledge and ideas needed to achieve the members' goals.

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We report on the outcomes of analysing 14 case studies for evaluation of the RMPP Action Network. A summary of our key findings are:

1. Where possible, for each of the Case Studies we have reported on the annual net gain in EBITRm (total \$), the gain per hectare in EBITRm (\$/ha), and the percentage of the net gain that the individual has attributed to RMPP Action Group participation.
2. Across the 14 case studies, on average, individuals have attributed 55% of their net gain in EBITRm to RMPP Action Group participation. This value has ranged from 20% to 100%. This is a subjective measure but one that we went to some lengths to quantify and the methodology to establish this has been detailed within the individual case study reports.
3. Taking into consideration the percentage attributed to RMPP Action Group participation, the average net gain in EBITRm across the 14 case studies was \$116/ha/pa. This value ranged from \$7.50/ha/pa up to \$550/ha/pa.
4. The enthusiasm which with the Action Network concept has been embraced by the farming community.
5. Reiterating that this survey took place in the first 12 to 18 months of what should be a three-year programme.
6. The positive impact on the motivation and aspirations of the group members, although palpable, was not always easy to quantify. In our professional opinion however business folk who are in a positive frame of mind, inevitably produce positive results.
7. Farmers do not often realise the cumulative effect of small adoptions of technology. In fact, some do not realise the quantum of change in their performance until this is pointed out to them through careful benchmarking. So, it behoves those that are charged with surveying these changes to ask the right questions and use precise analytical tools to quantify results.

8. The rate of engagement in Action Groups has been nothing short of impressive. This is particularly so amongst those farmers who have never been involved in a group learning model like this before.

One indicator of the success of the RMPP Action Network will be the level to which Action Groups continue on, once the RMPP support terminates. Accepting that this will depend to some extent on how successful B+LNZ is in providing non-financial support for the network. In our opinion, if a survey of farmers showed that X percentage were still involved in some form of group learning model after five years, especially among those who have never engaged in one before RMPP, this would constitute a significant achievement

Further Detail

1. Background

The Red Meat Profit Partnership (RMPP) is a Primary Growth Partnership (PGP) programme tasked with empowering the New Zealand red meat sector increase productivity and profitability.

One of the RMPP projects is the RMPP Action Network. This is an initiative to support farmers to develop the confidence to turn ideas into improvements on-farm through participation in Action Groups. These are farmer-led collaborations of 7-9 farm businesses supported by trained facilitators who can guide the group by providing technical support and identifying experts to share new knowledge and ideas needed to achieve the members' goals.

RMPP developed the Action Network approach through an initial two-year pilot phase, before rolling it out in full to farmers around the country. By the end of 2019, there were 193 approved Action Groups, 90 trained facilitators and more than 1,500 participating farm businesses.

BakerAg's¹ **project objectives** were to conduct financial and qualitative analyses to evaluate the productivity and profitability changes within farm businesses as a result of those businesses participating in the RMPP Action Network. This involved:

- Selecting a sample of individual farm businesses that are active participants in Action Groups within the RMPP Action Network and reviewing how effective they have been at improving on-farm productivity and profitability (X%/ha and Y\$/ha improvements) as a result of this involvement.
- Constructing a template for the final review of effectiveness of the RMPP extension approach in 2025 i.e., capture the progress made by Action Groups using information from the sample above.
- Using that template on the sample selected to provide case studies on the effectiveness of the RMPP Action Network after 12 to 18 months of operation, and to demonstrate the effectiveness of that template for use in the final evaluation in 2025.

We were asked to assess a minimum of 15 individual case studies. However, because the majority of Action Groups had only been running for a relatively short period at the time of this assessment, obtaining meaningful case studies was problematic. We agreed with RMPP to reduce the number, and we can confirm that we have reported on 14 case studies.

These case studies focused on the subject matter covered by RMPP Action Groups. This comprised seven main topic/interest areas of: Animal Performance, Business Planning, Financial Management, Feed Management, Pasture Management, Environment, and Managing our Soils. The case study locations were spread throughout New Zealand, including Northland, King Country, Hawkes Bay, Rangitikei, Manawatu – Whanganui, Tararua, Canterbury, Otago, and Southland.

The analysis was carried out over a nine-month duration (September 2019 to May 2020) and focussed on case study outcomes for the evaluation of the RMPP Action Network.

This work follows a series of case study analysis that BakerAg completed for RMPP's Pilot Programme in 2019. The Pilot Programme involved over 70 farm businesses located across New Zealand participating in a three-year trial. The purpose of this Pilot Programme was to work out the best way farmers learn and help give them the confidence to make better decisions in their farming business.

¹ BakerAg is an agri-business consultancy, specialising in advice to the sheep and beef and dairy sectors throughout New Zealand, as well as in rural valuation. In the sheep and beef sector BakerAg has been providing services for over 30 years based on rigorous production and financial benchmarking to improve farm performance

2. Methodology

1. Set up contract and selection of case studies (September 2019)

- With assistance from RMPP we identified farm businesses that are part of an RMPP Action Group so that approximately 10% of the Action Network was represented in our survey (based on 193 approved Action Groups). This gave an initial target of 20 case studies but based on Pilot Programme experience, we predicted this number to end up being about 15 case studies. In fact, 14 case studies were completed for reasons already outlined in this report.
- The basis of individual farm businesses for selection as a case study analysis was:
 - a) Being an active participant of an Action Group that had been going for at least one year.
 - b) Good clarity and documentation of the objectives of the Action Group the individual was a member of.
 - c) Subject matter (taken from the top areas of interest, i.e., Animal Performance, Business Planning, Financial Management, Feed Management, Pasture Management, Environment, and Managing Our Soils).
 - d) Geographic area.
 - e) Support structure (e.g., connector, facilitator etc).
 - f) Likely availability of good records.

2. Collected case study data (February 2020)

Selected individual farm businesses were questioned for changes that had occurred as a result of being a member of the RMPP Action Group, as well as the rate of adoption of the changes made because of Action Group participation. This was largely conducted via face-to-face meetings.

3. Case study analysis and reporting (March 2020)

A case study report for each of the farm businesses investigated was compiled following a similar approach to the case studies investigated in the RMPP Farm Pilot Programme. Case study reports have quantified the impact on the farmers' businesses through having been a member of an Action Group, as expressed in productivity and profitability (X%/ha and Y\$/ha improvements).

4. Delivery of final report (May 2020)

A final report summarising the overall outcomes of the case studies and providing recommendations as to developments that are making some of the greatest impacts for Action Group participants. This also includes a template for the final review of Action Network effectiveness for 2025, as well as quantification of the metrics of adoption.

3. Results

Across the RMPP Action Network, there were 14 individual farming businesses selected to represent a range of Action Groups covering various subject areas and located throughout New Zealand. See **Appendix 1.1** which summarises the key points of the 14 case studies investigated.

Of the 14 case studies analysed, we have taken a snapshot of specific KPIs that were available for that business's 2018/19 financial year and benchmarked those KPIs against the relevant BakerAg Financial Analysis Benchmark ("FAB") Class Average and Top 25%. The purpose for doing this was to give us an idea of how these individual farming businesses were performing in these KPI areas relative to other similar businesses located around New Zealand. See **Table 1** which summarises this benchmark comparison for each of the 14 case studies using a traffic light system, where red is below the Baker Class Average, yellow is above the BakerAg Class Average, and green is above the BakerAg Top 25%. Across the case studies, nearly all businesses have a KPI that is underperforming (red). But, also nearly all the businesses have an area where they are above the BakerAg Top 25% for some KPIs. This is a pattern that we commonly see in our top performing sheep and beef businesses, where for example, there is high expenditure (FOE) but also high profitability (GFR); so, money is being spent in the right areas.

Table 1. Benchmarking of specific KPIs for finalised case studies, based on their 2018/19 financial data, and in comparison, to BakerAg Class Average and Top 25% (specific to individuals Class 2 or 3).

Case Study	Class	KPI	Value*
1.	Class 3	No financials available to benchmark	
2.	Class 3	Lamb S to S, %	134
		Cattle revenue, \$/CSU	133
		FOE, \$/ha	568
		GFR, \$/ha	1129
3.	Class 3	Cattle revenue, \$/CSU	103
		FOE, \$/ha	688
		GFR, \$/ha	974
4.	Class 2	Lamb S to S, %	144
		FOE, \$/ha	511
		GFR, \$/ha	1,194
5.	Class 3	Currently no BakerAg environment benchmarks	
6.	Class 3	Lamb S to S, %	113
7.	Class 3	Lamb S to S, %	132
		Sheep revenue, \$/SSU	158
8.	Class 3	Lamb S to S, %	117
		Animal Health Spend, \$/SU	5.2
9.	Class 3	Lamb S to S, %	157
10.	Class 3	Lamb S to S, %	127
		FOE, \$/ha	355
		GFR, \$/ha	961
11.	Class 3	Lamb S to S, %	130
		FOE, \$/ha	868
		GFR, \$/ha	1,251
12.	Class 3	Lamb S to S, %	135
		Calving %	89
		FOE as a % of GFR	58

		FOE, \$/ha	591
		GFR, \$/ha	1,018
13.	Class 3	Lamb S to S, %	122
		FOE as a % of GFR	61
		FOE, \$/ha	1,076
		GFR, \$/ha	1,770
		14.	Class 3

*Where Red cells = below BakerAg class average, Yellow cells = above BakerAg class average, and Green = above BakerAg top 25%

Each of the case studies were categorised under at least one of the seven main subject areas (also known as ‘Primary Performance Platforms’). Secondary performance levels within these primary platforms have also been identified, as well as associated measurements. Assessing the case studies this way allows us to determine the performance gains, and therefore the net benefits, that could be made through being a member of an RMPP Action Group. It is anticipated that net results from these production improvements could be extrapolated to the 13,000-farm business in the Red Meat sector. This extrapolation is part of a report developed by Scarlatti with BakerAg input from this report.

Because some of the survey businesses had only been in an RMPP Action Group for one year (in what is intended to be a three-year programme), many of the impact results were only just being identified. This required us to extrapolate these results as they might develop over the full-term of the programme and beyond.

In addition to the data we have been able to obtain, we have taken care to detail our methodology for assessment to provide a template for further assessment in five years (detailed later in this report).

3.1. Indicators that make the greatest impact on Action Group participants

Table 2 provides a summary of the top indicators that are making the greatest impact for each of the case studies assessed. A KPI we have attempted to report on for all the case studies is the gains made in Earnings Before Interest, Taxation, Rates and Management Salaries (“EBITRm”) within the business (expressed as total \$ per year and \$ per ha per year), and the percentage of this gain that is attributed to participation in an RMPP Action Group (**Table 2**). Further to this, the positive effects of being a member of an RMPP Action Group can be quantified over several influences. These include:

- The moral and technical support offered by the Group dynamic. This is where people of similar minds and objectives share ideas, seek out new information, translate that information into positive outcomes and encourage each other to adopt.
- Benchmarking analysis, which adds to the accountability and quantifies progress.
- Through the resources of the RMPP Action Network, specialist skills and technical knowledge are captured, assimilated, and applied to the members’ businesses.
- The intimate and safe environment of the RMPP Action Group fosters engagement and encouragement that would not otherwise be possible.
- The objectives and workplan constructed by the RMPP Action Group provide a vision for positive outcomes, while the milestones and cross-referencing between members of the group provided a level of accountability to the business that was not otherwise there.

A further indicator of the success of the Action Network will be the level to which Action Groups continue, once RMPP support terminates. Accepting that this will depend to some extent on how successful B+LNZ is in providing non-financial support. In our opinion, if a survey of farmers showed that X percentage were still involved in some form of group learning after five years, especially among those who have never engaged in one before RMPP, this would constitute a significant achievement.

3.2. Quantification of metrics of adoption

The key metric of adoption across all case studies to have a consistent measure of net gains made in EBITRm. But, the way in which we reach that finite number varies with each case study because of the subject matter of the Action Group. See **Table 2** which gives quantification to these range in metrics of adoption for each case study. So, for example, 'Business Planning' might have a focus on several metrics of adoption – return on investment, increasing net equity, success of a succession plan, etc – but we have assessed all of this and condensed it down to an assessment of improvement in EBITRm.

4. Major Observations

- Where possible, for each of the Case Studies we have reported on the annual net gain in EBITRm (total \$), the gain per hectare in EBITRm (\$/ha), and the percentage of the net gain that the individual has attributed to RMPP Action Group participation (**Table 2**).
- Across the 14 case studies, on average, individuals have attributed 55% of their net gain in EBITRm to RMPP Action Group participation. This value has ranged from 20 to 100%. This is a subjective measure but one that we went to some lengths to quantify and this has been detailed within the individual case study reports.
- Taking into consideration the percentage attributed to RMPP Action Group participation, the average net gain in EBITRm across the 14 case studies was \$116/ha/pa. This value ranged from \$7.50/ha/pa up to \$550/ha/pa.
- Please note that these assessments were made based on data and progress made over a short period of time and often involved making projections based on that data. Please refer to the individual case studies to see how the assessment has been made.
- With each RMPP Action Group having a Facilitator, there is a structured approach to study areas and methodology. Goals within the Action Groups have been clearly identified, with many individuals having a clear Action Plan.
- The Action Network programme has been VERY well received. It has been a revelation for some who have never been part of a group. The common focus and mutual support were seen to be a big part of this, as has been the intimate and trusting environment that these small groups have fostered. So, although some outcomes have been difficult to quantify, the collective result will be positive because participants are more positive. An example is a Regenerative Agriculture group, the members of which are challenging the established doctrines of the industry and who would not have found kindred spirits nearly as easily without the Action Network, and where moral support is particularly important.
- The average duration of participation in RMPP Action Groups is around 12-18 months, so not a lot of time for results to appear.
- It has been too early to get total production gains. Many of the technologies and business systems being adopted by these Action Group members would typically take 3 to 5 years to be implemented and yield results. However, modelling was employed to show the potential impact of small changes that individuals are making, and what these changes can mean to their business.
- Benchmarking, both financial and anecdotal, has been a major part of the success. Disclosure has been at a high level, along with trust. The smaller sized group means farmers are comfortable sharing financials, asking questions and taking advantage of the expertise in the room.
- One farmer said "*The Action Network (sic) has been valuable to help gain better insights into different farm systems and tweaks that I can make. I did want more local farmers with the same system, but it has been helpful looking at other farm types. I haven't changed a lot, but because of a farm visit and some of the technical specialists, I have joined the dots between using herbs and achieving higher lactational lamb growth rates and so I have expanded my red clover area.*"
- Another farmer found the smaller groups were great as it meant they felt more comfortable asking questions. This has helped them share and set goals and understand what is driving their business. It has also helped them manage their breeding ewes better and feeding management, so ewe reproduction has improved. A major outcome has been the realisation of allocating good quality feed to breeding ewes.

- The workshops give farmers the opportunities to step away from their business for the day and focus on strategic plans/goals. The interaction off-farm is good for mental well-being and cross-referencing against other farmers in the group.
- The spread of locations of the participants in some groups has made it hard for some farmers to see the benefits when the climates and locations are so variable and different.
- At the time of our surveying, participants (and facilitators) were all asking what was going to happen when RMPP finished. There seemed to be a void of information. This was subsequently clarified in early March, but it was significant to see the amount of anxiety caused by this uncertainty. We took this as an indication of the value that participants and facilitators put on the Action Network.
- The case studies were not equal in the sense that many required differing approaches in order to be able to get a measure of the change effect (e.g. Farmax forecast modelling in order to see an effect of change in the longer-term, rather than actual trends over the period of the programme).
- Key impacts on-farm were often due to several interacting factors, rather than one specific change.

Table 2. Primary performance areas and associated key measured/modelled changes made on-farm as a result of RMPP Action Group (AG) participation

Case study name and location	Primary performance areas	Key measured/modelled changes
1. Northland	<ul style="list-style-type: none"> Managing Our Soils Pasture Management 	<ul style="list-style-type: none"> 15% increase in stocking rate (from 39 to 45 cattle) 125% increase in developed land through grazing management (+10 ha) Too early and too small a farm business to quantify any net gains in EBITRm.
2. King Country	<ul style="list-style-type: none"> Animal Performance Business Planning Environment 	<ul style="list-style-type: none"> 12% increase in lamb S to S (from 120 to 134%) 14% increase in cattle income (+\$16.50/CSU) 20% of EBITRm net gain attributed to RMPP AG (+\$14,125 pa or +\$32.80/ha/pa)
3. King Country	<ul style="list-style-type: none"> Animal Performance Environment Business Planning 	<ul style="list-style-type: none"> 6% increase in cattle income (+\$5.54/CSU) 32% increase in GFR (+\$238/ha/pa) 70% of EBITRm net gain attributed to RMPP AG (+\$73,962 pa or +\$32/ha/pa)
4. Hawkes Bay	<ul style="list-style-type: none"> Managing Our Soils Animal Performance Pasture Management 	<ul style="list-style-type: none"> 38% less land farmed for bulls (260 to 160 ha) 50% increase in bull productivity (+294 kg CW/ha) 36% increase in bull profitability (+\$1,152/ha) 100% of EBITRm net gain attributed to RMPP AG (+\$180,730 pa or +\$341/ha/pa)
5. Rangitikei	<ul style="list-style-type: none"> Environment 	<ul style="list-style-type: none"> Tree planting cost (-\$1,380/ha) Carbon income over 35 years (+\$520/ha/pa) 50% of EBITRm net gain attributed to RMPP AG (+\$2,405 pa or +\$7.50/ha/pa)
6. Manawatu-Whanganui	<ul style="list-style-type: none"> Environment Animal Performance Managing Our Soils 	<ul style="list-style-type: none"> 9% reduction in methane emissions with targeted lamb S to S of 140% 10% increase in number of hoggets mated (+\$7,500 pa) 50% decrease in fertiliser usage (saving of \$121/ha/pa) 100% of EBITRm net gain attributed to RMPP AG (+\$93,681 pa or +\$160/ha/pa)
7. Taranaki	<ul style="list-style-type: none"> Business Planning Animal Performance 	<ul style="list-style-type: none"> 16% increase in lamb S to S (from 114 to 132%) 55% increase in sheep revenue (+\$56/SSU) 60% of EBITRm net gain attributed to RMPP AG (+\$21,436 pa or +\$28/ha/pa)

8. Canterbury	<ul style="list-style-type: none"> • Animal Performance 	<ul style="list-style-type: none"> • 21% increase in animal health spend gave modelled benefit of \$12,100 pa • Regular ewe BCS and monitoring gave modelled benefit of \$10-32 k pa • 80% of EBITRm net gain attributed to RMPP AG (+\$35,280 pa or +\$79/ha/pa)
9. Canterbury	<ul style="list-style-type: none"> • Feed Management • Pasture Management • Animal Performance 	<ul style="list-style-type: none"> • 11% increase in lamb weaning weight (10 to 26% increase in lambs killed POM) • 11% increase in lamb weaning weight (heavier lambs + 1.1 kg CW) • 11% increase in lamb weaning weight (improved GFR of +\$42,000 pa) • 50% of EBITRm net gain attributed to RMPP AG (+\$21,000 pa or +\$45/ha/pa)
10. Central Otago	<ul style="list-style-type: none"> • Business Planning • Financial Management • Feed Management 	<ul style="list-style-type: none"> • 77% increase in net equity growth (from \$1.4 M to \$2.5 M) • 14% decrease in Interest and Rent to GFR ratio (from 0.29 to 0.25) • 39% increase in stock carrying capacity (3,100 to 4,300 SU) • 30% of EBITRm net gain attributed to RMPP AG (+\$12,815 pa or +\$23/ha/pa)
11. South Otago	<ul style="list-style-type: none"> • Managing Our Soils • Animal Performance • Pasture Management 	<ul style="list-style-type: none"> • 92% increase in SU carried (from 1,825 to 3,500 SU) • 67% decrease in cropping costs (forecast saving of \$25,000 pa) • 19% decrease in expenditure (forecast saving of \$80,000 pa) • 50% of EBITRm net gain attributed to RMPP AG (+\$40,500 pa or +\$144/ha/pa)
12. North Southland	<ul style="list-style-type: none"> • Pasture Management • Managing Our Soils 	<ul style="list-style-type: none"> • 48% increase in cattle ratio (from 27 to 40%) • 35% decrease in fertiliser/lime spend (saving of \$140,000 pa) • 19% decrease in expenditure (saving of \$80,000) • 30% of EBITRm net gain attributed to RMPP AG (+\$26,712 pa or +\$13/ha/pa)
13. Southland	<ul style="list-style-type: none"> • Business Planning • Financial Management 	<ul style="list-style-type: none"> • 23% decrease in Interest and Rent to GFR ratio (0.25 to 0.20) • 9% increase in lamb S to S (128 to target 140%) • 33% increase in Return on Capital (3.3. to 4.4%) • 30% of EBITRm net gain attributed to RMPP AG (+\$31,357 pa or +\$48/ha/pa)
14. Western Southland	<ul style="list-style-type: none"> • Feed Management • Pasture Management • Environment 	<ul style="list-style-type: none"> • Increased lamb finishing capacity of +30 lambs/ha (+\$900/ha) • Seed banking for regeneration (+\$600/ha spread over 5 years) • Better quality feed (+\$1,050/ha) • 50% of EBITRm net gain attributed to RMPP AG (+\$220,000 pa or +\$550/ha/pa)

BCS, body condition scoring; CSU, cattle stock unit; CW, carcass weight; EBITRm, Earnings Before Interest, Tax, Rent and Managerial Salaries; GFR, Gross Farm Revenue; pa, per annum; POM, prime off mum; AG, Action Group; S to S, lamb survival to sale; SSU, sheep stock units; SU, stock units

5. Problems Encountered

The problems we encountered can be summarised as being either in identifying suitable case studies and organising visits, or in convincing farmers that they would make a plausible case study. Many of the RMPP Action Groups were established in late 2018 and through 2019. This study therefore only captured the first year of what was designed to be at least a three-year programme. The first year of an Action Group is often spent in information gathering and identifying opportunities. The second and third years would be focused on implementation and measurement, and we would expect to see genuine results transpire by years three and four. So, while we had to use various modelling and extrapolation tools to project the production and financial outcomes of these programmes, there was absolutely no doubt in our minds that these businesses, that were members of Action Groups, were more motivated, engaged and focused on positive outcomes than they otherwise would have been. This has to translate into positive financial outcomes.

Other more specific problems encountered included:

- We had significant difficulty in engaging farmers and identifying those suitable for a case study analysis, as well as obtaining a good spread of subject matter and location. (This was done via RMPP Facilitators who we were put in contact with). This was largely because many of the Facilitators/Farmers approached felt that they had not been in the programme for long enough to allow for evaluation of RMPP Action Group impact.
- Many of the Action Groups have been running for 18 months or less, making the sample pool for case study selection smaller than initially anticipated. This also made it difficult to analyse quantitative data for Action Group impact.
- We had difficulty confirming farm visits (planning coincided with Christmas and New Year period, and at the time we were experiencing a severe drought across many parts of New Zealand and a collapse in product prices – so farmers had other things on their minds).
- Sourcing the necessary data has taken longer than we anticipated. The main cause of this is that some of the farmers do not have the data readily to hand. It has been interesting to see how even asking for the data has resulted, in some cases, in a greater focus from the farmer on the economic drivers of their farm. In other cases, we have had to spend a considerable amount of time validating the data, asking a lot of questions both before a face-to-face meeting, and subsequently, in some cases, the consultant has assisted the farmer get or correct data (e.g. stock reconciliations) during the face-to-face session.
- Getting on-farm sessions organised has also been more difficult, again because of the need to convince people of the benefit and because many farmers have not had this type of engagement before. Once the face-to-face meeting had taken place, the farmer seemed much more engaged and relaxed. They could see not only the benefit of the Action Network engagement but also the opportunity to sit down with the consultant on their own farm and discuss farm systems, what the data was showing and where the opportunities were for improvement.
- Covid-19 meant that two farms organised to visit and obtain data from were cancelled.

6. Learnings

Although it has been challenging to obtain hard data to measure the programme's impact, many of the individuals we have interacted with have great endorsements of how the RMPP Action Group has impacted on their business (soft data). Some key learnings include:

- Having a clear focus and set of objectives for each Action Group is important, as is having an enthusiastic, well organised, and trained facilitator.
- Getting participants to share data as well as ideas is critical.
- Farmers listen to, and learn from, other farmers.
- There is a high percentage of kinaesthetic learners in farmer groups.
- Some of the learnings may not be immediately obvious, but they are there and are both quantitative and qualitative.
- There needs to be mechanisms in place to identify the opportunities created and to relate benefits back to the individual member's farms and having KPI's and an accountability model for doing this.
- Many farmers who have never participated in a group learning forum before may be more inclined to do so now that they have had this experience with the RMPP Action Network concept.
- The topic for any particular Action Group may need to evolve over time to allow for the Group to explore new areas of interest and ensure the longevity of the group that has been created. We would have concerns that some groups could otherwise start repeating experiences to the point where the gain in knowledge and new ideas is marginal and the Group loses motivation to keep going.

7. Template for final review of Action Network Effectiveness

To capture the progress made by these Action Groups for final assessment of the Action Network, we have documented our methodology of case study data capture and analysis. Our overall approach for all 14 case studies is generic and outlined in the steps below. Note, the degree of detail in each analysis does vary between case studies, and this has been explained within the individual case study reports. Nonetheless, the template for each case study is designed to assess a quantifiable measure in EBITRm.

1. Selection criteria applied to identifying subject businesses from the top farmer/facilitator database. The criteria were based on:
 - a. Being an active participant of an Action Group that had been going for at least one year.
 - b. Good clarity and documentation of the objectives of the Action Group the individual was a member of.
 - c. Subject matter.
 - d. Geographic area.
 - e. Support structure (e.g., connector, facilitator etc).
 - f. Likely availability of good records.

Note, the assistance of facilitators and coordinators in this selection process is crucial.

2. Potential individuals were contacted for initial assessment of case study eligibility (further reiteration of criteria given above).
3. Case study participants were confirmed and provided with a formal letter of engagement and confidentiality of data assessment (on behalf of RMPP (or B+LNZ for future assessments)).
4. Pre-farm checklist applied for initial data gathering (*see Appendix 2*).
5. On-farm visit arranged. On-farm checklist applied (*see Appendix 3*), one-on-one interview conducted, and farm tour taken.
6. Data collected and analysed. This typically consisted of:
 - a. Tracking and analysing the last 2-4 years of farming performance leading up to the most recent year-ending - 2020 for the 14 case studies we have completed (typically done using BakerAg financial analysis and benchmarking software and database).
 - b. Extrapolating this profile out a further three years (i.e. year ending 2023 for the 14 case studies we have completed) to model what the farm business management profile might look like along with the Profit and Loss (P & L) profile.
 - c. Identifying the incremental change between the “work in progress” profile and the targeted business profile.
 - d. Identifying the proportion of this difference that could be attributed to the RMPP Action Group involvement.
 - e. For those case studies where historical data was unavailable, modelling was applied (typically using Farmax) and scenarios were created to provide an insight to where gains, as a result of change within the business, were occurring and the size of the impact.
7. Case Study report compiled, as per the case study reporting template used for all 14 case studies we have reported on.
8. For each case study, the primary and secondary performance platforms were identified, with associated key measured/modelled changes. These were essentially the indicators that make the greatest impact on Action Group participant.
9. The case study reports were made available to the subject farmers to critique before finalising.
10. It was important that they were happy with the credibility and level of disclosure captured by the reports.

Appendices

Appendix 1

Number	Location	Objective	1° Performance	2° Performance
1	Kawakawa, Northland	Develop a sustainable and resilient regenerative farming system in Northland.	<ul style="list-style-type: none"> Managing Our Soils Pasture Management 	<ul style="list-style-type: none"> Implemented rotational grazing plans. Reduced soil damage (limited time mobs spend on soils). Introduced plant species diversity. Incorporation of dung beetles into the system for improved biodiversity. Introduced rotational grazing. Improved feed quality and quantity. Improved pasture utilisation. Improved feed allocation. Use of feed budgeting.
2	Piopio, King Country	Build a sustainable farm business by lifting revenue, improving livestock performance, and enhancing the environment.	<ul style="list-style-type: none"> Animal Performance Business Planning Environment 	<ul style="list-style-type: none"> Change in ram breed. Retaining of own replacement stock. Lifted lambing performance through genetics. Body condition scored ewes. Improved animal health and lamb survival. Increased awareness around parasites. Change in stock policy. Improved subdivision in intensive cattle finishing areas. Implemented goal setting. Began using Cash Manager. Increased level of recording and reporting. Succession plan established. Completed a Farm Environment Plan. Fencing off waterways. Installation of artificial drainage.

3	8 Mile Junction, King Country	Create a farm business that we were in control of. Lift red meat production, profit and enhance the environment we farm in.	<ul style="list-style-type: none"> • Animal Performance • Environment • Business Planning 	<ul style="list-style-type: none"> • Moved from steers to bulls. • Moved from spring-purchased to autumn-purchased cattle. • Targeted a smaller animal to buy in. • Subdivided to ~0.5 ha cells in cattle areas. • Wintered 1,000 kg LW/ha, compared to 750 kg LW/ha. • Planted 30 ha turnip crop to achieve hogget mating weights of 45 kg LW. • Planted 30 ha of production forestry. • Fenced off 20,000 m of streams. • Planned pole planting programmes for hillside stabilisation. • Changed wintering policy of cattle on erosion-prone soils. • Implemented Farmax. • Quarterly meetings with the farm team and consultant.
4	Waipukurau, Hawkes Bay	Identify land capabilities to better support various enterprises, driving profit and minimising environmental impact.	<ul style="list-style-type: none"> • Managing Our Soils • Animal Performance • Pasture Management 	<ul style="list-style-type: none"> • Limited soil damage with stock type. • Better stock management. • Reduced sediment and nutrient loss. • Preferential feeding of animal classes. • Reduced time animals are on farm. • Optimised stock carrying capacity. • System flexibility to meet market premiums. • Improved pasture yield. • Optimised seasonal pasture growth patterns. • Improved grazing management techniques.
5	Taihape, Rangitikei	To learn how other environmentally sustainable forms of income can be integrated within the farming system and co-exist	<ul style="list-style-type: none"> • Environment 	<ul style="list-style-type: none"> • Control of soil erosion. • Enhanced biodiversity. • 'Right tree, right place'. • Identified areas suitable for trees. • Increased income on poorer performing land classes (ETS, carbon credits). • Greater use of land and soil resources. • Minimised track maintenance costs.

6	Kai Iwi, Manawatu- Whanganui	To continue to farm sustainably and improve the environment we farm in.	<ul style="list-style-type: none"> • Environment • Animal Performance • Managing Our Soils 	<ul style="list-style-type: none"> • Decreased emissions per unit of product produced. • Reduced animal lifetime GHG emissions. • Reduced ammonia volatilisation. • Improved ewe efficiency • Mated hoggets. • Increased animal lifetime performance. • Direct drilling for fertiliser precision. • Reduced rate of fertiliser applied. • Prevention of soil erosion. • Improvement in seedling emergence and crop performance. • Reduced nutrient loss. • Limited soil compaction.
7	Pahiatua, Taranaki	To identify where the business is heading, what development is necessary, and be accountable for the decisions made.	<ul style="list-style-type: none"> • Business Planning • Animal Performance 	<ul style="list-style-type: none"> • Development of a business plan. • Accountability for decision-making. • Goal setting. • Identification of opportunities. • Change in shearing policy. • Better ewe body condition. • Increased lamb S to S. • Improvement in sheep deaths and missing. • More lambs docked. • Improved lamb birth weights.
8	Canterbury	Improve ewe performance through implementing a reinvigorated animal health plan, and measuring and monitoring so feed resources are utilised better.	<ul style="list-style-type: none"> • Animal Performance 	<ul style="list-style-type: none"> • Implemented a Animal Health plan. • Animal health treatments administered on-time. • Less trade lambs carried through Autumn. • Better protection of capital stock. • Better management of tail-end ewes. • Regular ewe BCS. • Weighing of younger stock. • Better allocation of feed to meet feed requirements.

9	Windwhistle, Canterbury	To produce a greater yield of lamb weaned per hectare through regular ewe body condition scoring and use of red clover.	<ul style="list-style-type: none"> • Feed Management • Pasture Management • Animal Performance 	<ul style="list-style-type: none"> • Improved feed conversion efficiency • Matching of feed type to animal feed requirements. • Utilisation of better-quality forages. • Improved pasture management. • Ewe body condition scoring. • Increased lamb weaning weight. • More lambs killed prime off mum. • More lambs killed at a higher schedule. • Fewer lambs on-farm post-weaning. • Improvement in hogget and 2th mating weights. • Better lifetime animal performance.
10	Alexandra, Central Otago	To undertake a substantial development programme to improve farm productivity, profitability, and equity growth.	<ul style="list-style-type: none"> • Business Planning • Financial Management • Feed Management 	<ul style="list-style-type: none"> • Development of a business plan. • Goal setting to increase equity growth. • Succession planning. • Benchmarking of KPIs. • Measuring and reporting KPIs. • Increase in area irrigated. • Conversion of native pasture to lucerne. • Increase in stock carrying capacity.
11	Clinton, South Otago	Developing viable regenerative agriculture systems in a south Otago farming environment.	<ul style="list-style-type: none"> • Managing Our Soils • Animal Performance • Pasture Management 	<ul style="list-style-type: none"> • Change to cropping policy. • Diversification in pasture and winter crops. • Flexible stock policy. • Better management of stock classes. • Reduced sediment and nutrient loss. • Improved feed quality and quantity. • Improved feed utilisation. • Improved animal health. • Variable sward grazing height and frequency. • Improved feed budgeting. • Improved feed allocation. • Enhanced pasture persistence. • Change to grazing management techniques.

12	Longridge, North Southland	Develop a farming system around the management of pasture, finances, the environment, and healthier soils.	<ul style="list-style-type: none"> • Pasture Management • Managing Our Soils 	<ul style="list-style-type: none"> • Complimenting paddock size to mob size. • Improved pasture quality. • Change in stock policy. • Better stock performance. • Diversification using multi-species swards. • Long-grass farming. • Applying regenerative agriculture principals. • Reduced sediment and nutrient loss. • Change from conventional to organic fertiliser.
13	Waikaia, Southland	To improve the viability of the business through targeting business KPIs and identifying opportunities to make productivity gains.	<ul style="list-style-type: none"> • Business Planning • Financial Management 	<ul style="list-style-type: none"> • Development of a business plan • Focus on business structure and governance. • Benchmarking of KPIs. • Tighter control of expenditure. • Reviewing of historical performance data. • Identifying opportunities of productivity improvement.
14	Ohai, Western Southland	Making greater use of legumes in our finishing programme as well as in the development of our high country.	<ul style="list-style-type: none"> • Feed Management • Pasture Management 	<ul style="list-style-type: none"> • Reconfigured cropping programme. • Substitution of forage species. • 'Right plant, right place'. • Improved feed quality. • Increased finishing capacity. • Shift away from winter grazing. • Reduction in nutrient runoff during winter. • Compliance profile improved. • Hill country farming made more sustainable.

Appendix 2

BAKERAG FARM VISIT QUESTIONNAIRE		
GENERAL DETAILS		
Client Name:		
Farm Name:		
Phone Number:		
Email Address:		
Postal Address:		
Farm Location & Land Class		
PRE VISIT CHECKLIST		
Pre-farm questionnaire completed? Y/N		
Obtained last 3 years of financials? Y/N		
FAB analysis completed? Y/N		
Benchmarking completed? Y/N		
RMPP area of interest confirmed*:		
<small>*Please select from: Animal Performance, Business Planning, Financial Management, Feed/Pasture Management, Environmental Management, Managing our Soils.</small>		
AS A RESULT OF ACTION GROUP PARTICIPATION....		
How does the Client rate the program out of 100, where 100 is a complete success and 0 is a complete failure.		
What changes has the Client observed/measured?		
Can they provide evidence of changes?		
What % of any net gains can the client attribute to their RMPP AG?		
CASE STUDY QUESTIONS ACCORDING TO AREA OF INTEREST (SEE APPENDIX 1)		
<i>Based on the Client's main area of interest explored via their Action Group, please answer questions within one of the following sections . Refer to Appendix 1 for further information regarding each of the sections and how to obtain data to undertake a cost benefit analysis.</i>		
AREA OF INTEREST: 1) ANIMAL PERFORMANCE		
Secondary Performance Levels (select below)	Examples of Measurements (select below)	Examples of Potential Gains (gross \$/ha)
Others (not list defined):		
Other Notes:		

Appendix 3

BAKERAG PRE-FARM VISIT QUESTIONNAIRE			
Please complete and return to xxx@bakerag.co.nz			
Feel free to contact us with any questions at 06 370 6933			
CONTACT DETAILS:			
Your Name:			
Farm Name:			
Phone Number:			
Email Address:			
Postal Address:			
FARM DETAILS:			
Farm Location (Address)			
Land Class*:			
<p>* Class 2 Semi-Finishing/Summer Dry: Properties generally have an annual average rainfall of <1150 mm p.a. They expect to experience summer dry conditions and feed availability can be limited in autumn.</p> <p>Class 3 Semi-Finishing/Summer Wet: Properties have similar physical attributes to Class 2, but are located in areas with rainfall >1150 mm p.a and are less prone to summer dry conditions. Winters are the limiting period due to colder and wetter conditions resulting in lower pasture growth rates. Properties tend to run a higher stocking rate than summer dry properties.</p> <p>Class 4 Finishing: Properties are usually located on soils of high productive capability and with flat to easy rolling contour. Policies on this class range from intensive sheep breeding to cattle and lamb finishing with the capability of cash cropping. Farm size is generally smaller, with excellent infrastructure in terms of fencing, subdivision and fertility.</p> <p>Southland: Located in Southland. Soil of high productive capability with pasture production over 10 t DM/ha, flat to easy rolling contour and typically summer safe. Stock policy is mainly intensive sheep breeding with some dairy grazing and cattle and lamb finishing. Farm size is similar to Class 4, with excellent infrastructure in terms of fencing, subdivision and fertility.</p> <p>IF YOU DO NOT FIT INTO ONE OF THESE LAND CLASSES PLEASE CONTACT US</p>			
RMPP ACTION GROUP DETAILS			
Action Group Number:			
Facilitator Name:			
Action Group Start Date:			
Area of Interest*:			
Objective			
KPIs measured			
*Please select from: Animal Performance, Business Planning, Financial Management, Feed Management, Pasture Management, Environmental, Managing our Soils.			
BAKERAG FINANCIAL ANALYSIS BENCHMARKING (FAB)			
Have you participated in our FAB service previously?		YES/NO	
If YES to above, what financial year(s)?			
If you have provided us with your last 3 years of financial data already (2016/17, 2017/18, 2018/19), please ignore the rest of this questionnaire and we will be in touch.			
FINANCIAL INFORMATION FROM ACCOUNTANT, FINANCIAL STATEMENTS OR CASHBOOK:			
If you're comfortable with it, we can source the financial data that we need from your accountant:			
For this we need your permission			
Name of Accountant and Firm:			
Accountant Phone Number:			
Accountant Email Address:			
Estimate date when 2019 accounts ready:			
Permission to contact Accountant - Sign Here:			
OR			
Do you use Cashmanger (CM) Online? If so, please EITHER send a printout of your reconciled stock rec and cashbook, OR, give permission to email address grace@bakerag.co.nz for our access to your CM.		YES/NO	
Do you use any other farm management accounting software e.g. Figured etc?			
LABOUR			
		2016/17	2017/18
Owner Labour Units (LU's)	LU's		
Manager	LU's		
Permanent	LU's		
Casual (e.g. 3months -0.25 LU)	LU's		
Do you pay a wage to the business owner? If yes, how much (\$)?			
Do you pay a wage to the Manager? If yes, how much (\$)?			
FERTILISER			
We would prefer if you could attach 'Summary statement of fertiliser purchases' from Ravensdown or Balance as an alternative. If you are not able to provide this, as we take the N component out of your fertiliser spend, we therefore require the following:			
		2016/17	2017/18
Total applied fert spend including Lime and N	\$		
Total value of Lime applied	\$		
N products applied e.g. 10 t urea, 30 t DAP	t		
	t		
	t		
STOCK NOT OWNED			
If you run stock on your property that is grazed, sharefarmed or leased, please provide a description of these stock policies, including numbers on at open and close. Please also detail the grazing rate.			
e.g. 320 RI Dairy HFRs May 2017 -> May 2018. May 2018 350 on.			
STOCK ON ANOTHER PROPERTY			
If you run owned stock on another property (sharefarmed, grazing) and the income is included in your financials, please provide a			
SHEARING AND WOOL DETAILS (If not provided in Accounts or Cash Manager)			
		2016/17	2017/18
Total wool sold (GST excl)	Total kg		
	Total \$		
SHEEP DETAILS			
		2016/17	2017/18
Number of Hoggets in lamb on 1st July (open)			
Number of Hogget lambs born spring			
Number of Hoggets in lamb on 30 June (close)			
CATTLE DETAILS			
		2016/17	2017/18
Number of R2 Heifers in calf on 1st July (open)			
Number of R2 Heifers in calf on 30 June (close)			
Cattle Grazing income/ other cattle income	\$		
DEER			
		2016/17	2017/18
Number of R2 Hinds in fawn open			
Number of R2 Hinds in fawn close			
Deer velvet (if not in Accounts)	kg		
	\$		
Other deer income (if not in Accounts)	\$		
FINANCIAL POSITION			
		2016/17	2017/18
Govt. valuation	\$		
Date of GV			
ASSETS			
Land& buildings @ est. market value (incl. lease land)			
Plant and vehicles value est.	\$		
Will take from the fixed assets and depreciation schedule, when accounts are ready.			
LAND			
		2016/17	2017/18
Effective Area	Ha		
Effective Area Leased	Ha		
Total Effective Area	Ha		