

Prepared for:
Extension 350 partner organisations

Extension 350 programme

Summative evaluation report

August 2022



Scarlatti.co.nz



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About this document

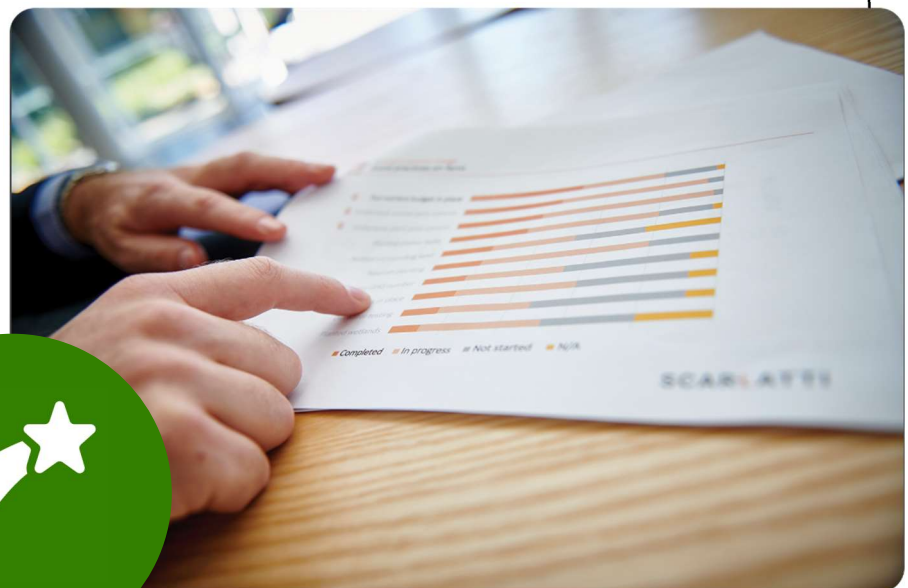
This document is the **summative report** for the Extension 350 evaluation work undertaken by Scarlatti (contracted in 2020). The evaluative data collected has been analysed, triangulated and key themes identified in alignment with the evaluation research questions (refer to page 61). To ensure this report remained succinct, only high-level findings are presented here.

Acknowledgements

Scarlatti would like to thank all those who have contributed time and insights to aspects of this evaluation. Your input and willingness to engage in this work is highly valued.

Part A: Key insights

This section presents the key insights that have emerged from the evaluation of Extension 350.



Introduction

This section outlines the Extension 350 context and evaluation approach.

Context

The pastoral sector in Northland (dairy, sheep, and beef) is a notable contributor towards Northland's GDP and is of strategic importance for delivering economic benefits to the region. However, it is acknowledged by Extension 350 stakeholders that this sector underperforms relative to the resources available and when benchmarked against national performance levels. This is despite having a higher proportion of people employed in the sector, with 2.8% in dairy and 1.7% in beef compared with New Zealand at 1.4% and 0.3% respectively.¹ In response to this opportunity, the Extension 350 programme was born.

The Extension 350 programme concept was designed in 2016 by local farmers and industry stakeholders, for Northland farmers. It aimed to improve profitability, environmental sustainability, and wellbeing (the three planks of the programme) of the sheep, beef and dairy farms involved. To achieve this, Extension 350 utilised a cluster model with small group farmer-to-farmer interaction. Over the course of the programme, almost 400 farmers became involved in clusters spread across the region.

Further details about the programme can be found in Overview of Extension 350 (refer to page 5).

Extension 350 evaluation

Evaluative activities have been embedded into the programme since its inception, however it is noted evaluation was initially constrained by budget. Originally, evaluation resourcing was primarily allocated from partners' in-kind contributions to the programme. On receiving SFFF funding (at the end of 2020), Northland Inc, on behalf of programme funders DairyNZ, Beef + Lamb New Zealand, Ministry for Primary Industries, and Northland Regional Council contracted Scarlatti to conduct the overall monitoring and evaluation of the Extension 350 programme. The objectives of this evaluation work were to:

1. Capture and understand farmers' journeys
2. Ensure learnings from Extension 350 as a whole are able to be shared and implemented appropriately to future programmes.

Seven research questions were developed to deliver and expand on the above objectives (refer to page 61). Over the course of the programme, a range of evaluative activities were undertaken, including:

- Deep dives into key indicators of success
- Document stocktake
- Evaluation group meetings and workshops
- Farmer exit interviews
- Farmer exit discussions
- Farmer surveys
- Governance group survey
- Impact modelling
- Stakeholder interviews
- Stakeholder meetings and discussions
- Stakeholder survey.

Further details about the evaluation approach and these methodologies can be found in Appendix A (refer to page 61).

¹ Source: Infometrics Northland Region Economic Profile.

Overview of Extension 350

This section presents an overview of the Extension 350 programme. Further information can be found on the [Northland Inc website](#).

Inception and start-up

A small group of Northland stakeholders (DairyNZ, farm consultants and farmers) came together with the goal to increase the profitability of farmers within the sector. As discussions progressed, environmental sustainability and farmer wellbeing were also identified as goals. The group sought to leverage past agri-extension successes (for example, the successful use of the cluster delivery model at Far North and Lower North Partner Farms, as well as the Candy Farm in Northland). The group grew to include Beef + Lamb New Zealand, which expanded the group's focus to Northland pastoral farming. With input and resource from Northland Inc and the support of Northland Agricultural Forum, a business case was developed by Nimmo Bell (2016). As a result, the team found funding support from Ministry for Primary Industries, Northland Regional Council, DairyNZ and Beef + Lamb New Zealand to bring the Extension 350 programme to life.

Programme objectives

The Extension 350 programme was designed to include a range of dairy, sheep and beef farms from the region, with an emphasis on middle tier farms. The original objectives for Extension 350 were captured in the business case. Once funding and partnerships were cemented, the funding partners undertook a series of workshops to refine these goals to ensure they met their respective needs and expectations for the programme. These goals, captured in the programme logic model in 2017 (refer to page 64), were:

- Extension 350 design and delivery is relevant, accessible and meets the needs and expectations of key players, including effective approaches for working with different farm types
- Effective working relationships are developed between Target, Associate and Mentor farmers, and consultants
- Increased farmer awareness of Extension 350 opportunities (tools, training etc) and willing to adopt ways to improve their farm systems
- Farmers involved have adapted their farm systems to enhance more resilient farming businesses
- Project team has effective cross agency collaboration / learn as we go approach, leading to increased confidence in the programme's design, operationalisation, uptake, and achievements.

While there has been some evolution of the wording of the goals, funding partners agreed that the spirit of these did not waiver over the course of the programme (Stakeholder interviews, 2022).

Programme structure

Key groups

The Extension 350 programme's structure has evolved over the course of the programme, the most significant change was the division of the governance group, into governance and operations groups. The key groups in place at the end of the programme were:

- **Governance group.** Responsible for the strategic direction of the programme, involved representatives from the funder organisations.
- **Operations group.** Provided guidance for the programme activity, involved representatives from the funder organisations.
- **Project team.** Responsible for delivering the programme, providing updates to the governance, operations and evaluation groups, leading cross agency collaboration, meeting contractual requirements (including reporting), led by Northland Inc.
- **Evaluation working group.** Informed, critiqued and gave context to the evaluation activity and insights collected, involved representatives from the funder organisations and Scarlatti (since 2020).

Cluster model

The cluster delivery model used in Extension 350 recognised that farming relationships are complex and interrelated and that good practice extension includes the development of long-term relationships between agri-extension professionals, farmers, and other rural professionals.

This model involved clusters, typically including a consultant, five Mentor farmers (some clusters had more than five, as some Target farms had multiple Mentor farmers), five Target farms and 25 Associate farmers (refer to Figure 1). These clusters were delivered across three groups between 2016 and 2022, with clusters running for about three and a half years (refer to Figure 2). A total of 50 Target farms, 271 Associate farmers and 63 Mentor farmers were involved with the programme.

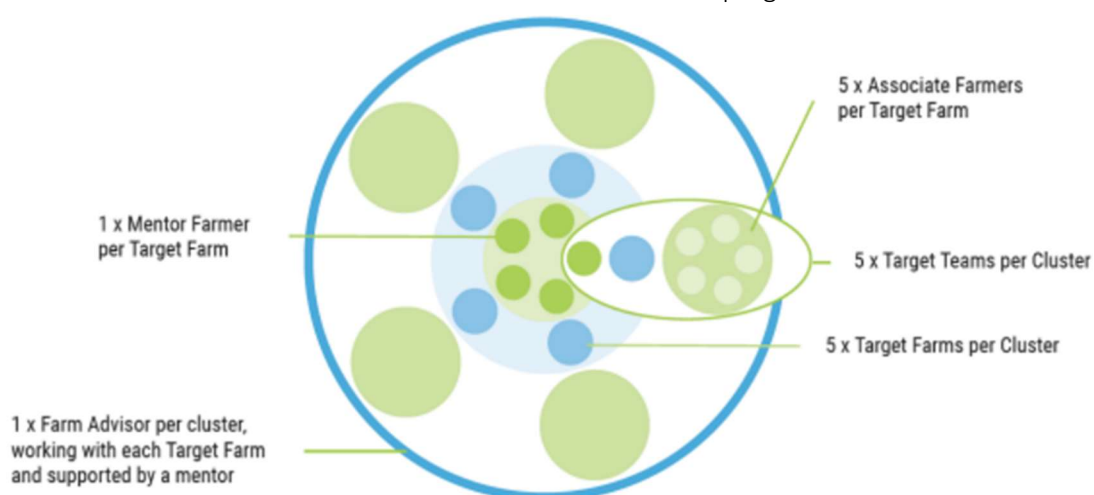


Figure 1: Extension 350 cluster model

The participants were involved as follows:

- The **Target farm** received one-on-one advice and support from a consultant and Mentor farmer, in line with their Whole Farm Assessment, and later their Farm Environment Plan. The Target farm was expected to share their journey with a group of Associate farmers. They contributed \$6,000 in order to participate in the programme.
- The **Mentor farmers** worked with the consultant to provide the Target farm with advice and support. Mentor farmers could also learn from the process aimed at leading to improvements on their own farm.
- The **Associate farmers** learnt from observing the Target farm's progress. It was aimed that they would also use the opportunity to build a strong network, from which they could draw support and learn.
- The **Consultants** provided consultancy advice and support to the Target farm, focused on achieving the farm's goals. The consultants' responsibilities included contribution to recruitment, leading the Whole Farm Assessment, supporting project management, driving communication links within the cluster and with stakeholders, supporting the industry body extension teams with events, and reporting on farm progress. They were paid to provide these services.



Figure 2: Overview of the Extension 350 programme

The work with the Associate farmers was supported by the DairyNZ and Beef + Lamb New Zealand extension teams. It is noted that some of the Target teams also received substantial time and input from these extension teams. The Northland Regional Council Land Management Advisors provided farmers in their territory with Farm Environment Plans and supported farmers to make environmental sustainability decisions, through the provision of advice and funding. Auckland Regional Council funded the development of Farm Environment Plans in their territory and Fonterra developed Tiaki Farm Environment Plans to all Fonterra dairy farms in the region.

Delivery

Participants were involved in various activities and utilised a range of tools / resources over the course of the programme. The events offered varied, depending on the cluster role of participants (Target farm, Mentor farmer or Associate farmer), and on the year - given that programme adaptations were made throughout the programme period. Some of this variance was also due to the delivery being targeted to meet farmer needs / objectives. It is noted that Associate farmer activities (workshops, field days, etc) increased substantially when the programme received SFFF funding. Over the course of the programme, activities included²:

- Business Sense workshop (replaced by Mark and Measure after year one)
- Cluster discussion groups
- Developing HR workshop (replaced by Mark and Measure after year one)
- Events (e.g., Recognition evenings)
- Environmental workshops
- Farm Environment Plan development
- Farm team visits
- Field days and field trips
- Mark and Measure course (from year two onwards)
- Newsletters and videos
- One-on-one discussions
- Public field days
- Upskilling workshops (e.g., for Mentor farmers and Rural Professionals)
- Wellbeing score used with Target farms and consultants (2 weekly)
- Wellbeing workshops (e.g., wellbeing workshops with DairyNZ's wellbeing team, a GP and RST; mentor workshops with a counsellor).
- Whole Farm Assessments.

As an example, Table 1 presents an overview of what delivery looked like for group three farmers.

Table 1: Activity plan used with group three (Nov 18 – Jun 22)

	Year 0	Year 1	Year 2	Year 3
Target farms	Undertook: <ul style="list-style-type: none"> • General relationship building prior to formal programme • ~2 x consultant / mentor farm visit Received: <ul style="list-style-type: none"> • Whole Farm Assessment Attended: <ul style="list-style-type: none"> • Mark and Measure workshop 	Undertook: <ul style="list-style-type: none"> • ~8 x consultant / mentor farm visits • ~2 x cluster discussion group • ~1 x cluster public field day (attend or host) Attended: <ul style="list-style-type: none"> • Recognition evening • Occasional topical workshop Received: <ul style="list-style-type: none"> • Farm Environment Plan 	Undertook: <ul style="list-style-type: none"> • ~6 x consultant / mentor farm visit • ~2 x cluster discussion groups • ~1 x cluster public field day (attend or host) Attended: <ul style="list-style-type: none"> • Recognition evening • Occasional topical workshop 	Undertook: <ul style="list-style-type: none"> • ~4 x consultant / mentor farm visits • ~2 x cluster discussion groups • ~1 x cluster public field day (attend or host) Attended: <ul style="list-style-type: none"> • Farming into your future workshop • Recognition evening • Occasional topical workshop

² At times, aspects of the programme were delivered online rather than in-person.

	Year 0	Year 1	Year 2	Year 3
Associate farmers	Undertook: <ul style="list-style-type: none"> • General relationship building prior to formal programme 	Attended: <ul style="list-style-type: none"> • Group meetings • Facilitated workshops • Cluster field days 	Attended: <ul style="list-style-type: none"> • Group meetings • Facilitated workshops • Cluster field days 	Attended: <ul style="list-style-type: none"> • Additional group meetings • Facilitated workshops • Cluster field days
Mentor farmers	Undertook: <ul style="list-style-type: none"> • General relationship building prior to formal programme 	Provided: <ul style="list-style-type: none"> • Ongoing mentoring and support Undertook: <ul style="list-style-type: none"> • ~8 x consultant / mentor farm visits Attended: <ul style="list-style-type: none"> • Recognition evening • Cluster field days Received: <ul style="list-style-type: none"> • Ongoing mentor development 	Provided: <ul style="list-style-type: none"> • Ongoing mentoring and support Undertook: <ul style="list-style-type: none"> • ~8 x consultant / mentor farm visits Attended: <ul style="list-style-type: none"> • Recognition evening • Cluster field days Received: <ul style="list-style-type: none"> • Ongoing mentor development 	Provided: <ul style="list-style-type: none"> • Ongoing mentoring and support Undertook: <ul style="list-style-type: none"> • ~8 x consultant / mentor farm visits Attended: <ul style="list-style-type: none"> • Recognition evening • Cluster field days • Farming into your future workshop Received: <ul style="list-style-type: none"> • Ongoing mentor development

Evaluation findings

This section presents a summary of the key evaluation insights and lessons learnt that have emerged through this work (full details are included in Part B of this report, refer to page 16).

Key insights

Farmer change and value

Extension 350 has had a substantial impact for a number of farms involved. For some, the benefits to them and their business have already been considerable and will have flow on benefits into the future. Change has been recorded across the three planks of the programme, including:

- **Financial gains have been made by many farmers.** This came about through both operational benefits (such as improved pasture management, enhanced reproductive performance, etc.) as well as strategic changes (such as faster career progression, better succession planning, accelerated equity growth, etc.).
- **Farmers have embarked on an environmental sustainability journey.** Some have increased their knowledge of requirements in the environmental space, created FEPs and started taking action in alignment with these FEPs.
- **Farmers have improved their wellbeing as a result of the programme.** The normalisation of wellbeing discussions was a particular success of the programme.

A focus on strategic planning (which spans the three planks) was a highlight for many, who reported leaving Extension 350 with a clear plan for their future. Many farmers felt they have received value from their involvement, or that value would be gained in the future.

Farmer engagement

Extension 350 saw a range of farmer engagement. Many stories have emerged of farmers who have made the most of their Extension 350 experience and brought others along on their change journey. Based on evidence gathered through surveys, interviews and consultant case studies, as part of the impact model development process, the Scarlatti model uses an assumption that approximately 90% of Target farms, 90% of Mentor farmers and 40% of Associate farmers were *highly* or *moderately* engaged with the programme and benefits received were roughly proportional to this. However, there were also farmers who had *low* engagement. This was estimated to be approximately 10% of Target farms, 10% of Mentor farmers and 35% of Associate farmers. An estimated 25% of Associate farmers had *no* engagement with the programme.

The reasons for the variation in engagement were multi-faceted. There is no one single factor that impacted upon engagement. Instead, a range of factors were evident, spanning personal, farm, external (for example consecutive droughts, COVID-19, etc.), and Extension 350 process factors (for example, the cluster model, where Associate farmers had less involvement than Target farms). While some stakeholders felt that some of these factors – particularly those relating to personal and farm characteristics - could potentially have been mitigated against during recruitment, it is not obvious that a tighter recruiting process would have eliminated the engagement challenges Extension 350 faced. Variation in participant engagement is not unexpected in extension programmes and individuals' participation is difficult to predict in advance. It is also noted that a tighter recruitment approach might

have resulted in missed opportunities for change, particularly amongst those at the beginning of their change journey or those who are unexpected adopters.

Likely as a result of lower levels of engagement, some **associate farmers underwent less change and received less value from the project**. We make an assumption that, *on average*, the impact of Extension 350 will be directly correlated to farmer engagement (you get out, what you put in).

Farmer relationships and networks

Extension 350 farmers have **established or strengthened relationships with other farmers as a result of their involvement**. This was a highlight for many of the farmers involved. Of particular note were the relationships that were formed between the Target and Mentor farmers. Many farmers noted increased confidence to reach out to other farmers when they need support, and some described strengthened relationships with their partners and families as a result of the programme. Some farmers commented that Extension 350 relationships were not always smooth sailing, and unsurprisingly, some were challenging at times, but most had worked through these things over the course of their involvement.

Farmers have also formed or deepened connections with rural professionals. This included relationships with their consultants, along with those with the regional council, bank, accountant, and vet.

Programme stakeholders

The programme was driven by dedicated groups of people. Extension 350 benefited from committed, skilled, ambitious, and passionate people within all facets of the programme, from inception, project management, operations, governance, evaluation through to delivery. Many of these stakeholders have gone 'above and beyond' what they were contracted / committed to deliver.

Some unexpected events occurred during the course of Extension 350, including successive droughts and COVID-19. This put pressure on farmers, but also the project team. **The programme managed to march on through these uncertain times** and adapted their approach accordingly.

The Extension 350 partnership showcased what organisational and cross-sector collaboration could look like. The programme achieved high levels of collaboration, which was described as a highlight by many stakeholders involved. The majority of stakeholders agreed that collaboration led to better farmer outcomes. However, it was acknowledged that this type of **collaboration does bring challenges at times**. This particularly related to meeting the needs of all involved, ensuring the right people were involved in the right aspects of the programme, and navigating turnover amongst representatives within funder and stakeholder organisations.

Most stakeholders felt that their time contribution to Extension 350 was about right. However, some would have liked more involvement. This typically related to those stakeholders who interacted with Extension 350 farmers but were outside of the core Target team relationship (Target Farmer, Mentor farmer and consultant) such as council and industry body representatives. The programme structure didn't always enable them to engage in the way they would have liked, or to build strong relationships with the farmers involved.

The time and resource allocations were regularly reviewed during the programme. As is the case for most extension programmes, finding the right balance of funding and resourcing for each activity needed regular review.

Programme design

The three-plank design helped to ensure a tailored approach for farmers. By using this approach, farmers were introduced to the 'triple bottom line' concept. The tailored nature allowed farmers to focus most heavily on actions that aligned with both their needs / goals and the three planks.

However, **some felt that environmental sustainability could have been a bigger focus for the programme.** It was noted that FEPs were typically completed a year or so into a Target farm's involvement with the programme, by which time core goals had already been established. Some stakeholders felt that this timing made it difficult for environmental goals to be incorporated or prioritised. Other stakeholders agreed that ideally the FEP would be completed in the initial stages of a Target farmer's involvement with the programme. However, they felt this wasn't always possible within Extension 350, as they were mindful of the Target farm's time commitment in the first six to twelve months of the programme.

The cluster model provided a catalyst for the growth of farmer relationships and networks. Farmers increased their relationships with other farmers, consultants, and rural professionals (as mentioned above). **The cluster model also allowed for adaptation for different groups.** This was a strength, however, it also meant that different farmers had different experiences with the cluster approach.

Many Extension 350 stakeholders would recommend the model for future programmes, but with some changes. The changes suggested largely relate to how work is undertaken with Associate farmers, including increased and consistent activities for this group in order to increase engagement and outcomes.

Cost-benefit analysis

A cost-benefit analysis undertaken as part of this work found that **Extension 350 was a good investment, from the financial benefits alone.** While Extension 350 generated a range of benefits beyond the financial impacts, the cost-benefit analysis focused only on the financial impacts for two main reasons:

- While it is possible to attribute economic values to non-market outcomes, such as environmental impacts and wellbeing, these values vary from stakeholder to stakeholder. This creates a risk of reporting results that are not as robust as analysis of financial impacts which, in turn, creates a risk of 'diluting' the confidence in the financial analysis.
- The results show that the financial impacts alone justify the Extension 350 programme. It is not necessary to include non-market impacts to argue that the programme was worthwhile.

The total financial benefit of the Extension 350 programme is modelled to be between \$7 and \$18 for every \$1 invested in the programme, with a midpoint of \$11.4. A 15:1 return would be considered 'worthwhile' if we were considering the financial benefits alone. Given the mixed focus of Extension 350 with environmental and wellbeing benefits, a lower ratio might be appropriate – such as 10:1. It is of note that the **modelled benefit to cost ratio is of a similar magnitude to the business case developed by Nimmo Bell.**

While not an explicit output of the impact model, a key observation during the analysis was that **participating farms were realising financial impact beyond operational / production benefits.** For example, many farms realised accelerated career progression and improvements in their equity position. The financial impacts of these benefits were estimated and included within the cost benefit analysis.

It is important to note that the financial benefits generated by the Extension 350 programme are not realised equally by the participating farms. Rather, **a small share of farmers realised a large share of these benefits**. Approximately 10% of participating farms realise ~50% of the total financial benefits (primarily the Target farmers), while ~50% of participating farms realise ~90% of the total financial benefits. When this distribution was considered as part of the closing discussions of this work, it became apparent that some funders' expectations had been for a more even distribution. However, these expectations were not discussed explicitly at the start of the project, nor considered in the original business case analysis.

Lessons learnt

Project funders and stakeholders actively reflected on lessons learnt and sought to utilise these insights to adapt their approach over the course of the programme. This involved regular lessons learnt sessions being run with the operations, evaluation, governance and consultant groups. As a result, a large number of lessons learnt insights have been identified and documented throughout the programme. The result of these iterative sessions is the list of high-level advice for future programmes, outlined below.

1. **Have clarity on how the different priorities within a programme will be balanced.** Extension 350, like many current extension programmes, had a triple bottom line focus (environment, financial and wellbeing). As there can be differences in perspectives on the weighting of these, it is suggested that future programmes discuss this in the early stages, and reach agreement on how resources, timelines and sequencing should be allocated to ensure all three areas meet stakeholder expectations. Without this process, it is possible that programmes will naturally gravitate towards one of the areas of focus.
2. **Design the programme from both 'top down' and 'bottom up'.** This approach ensures that the programmes remain both farmer centred and focused on their needs and drivers (increasing the likelihood of farmer engagement and change), while also ensuring the needs of funding partners are met (increasing the impact of the programme on wider industry strategies).
3. **Identify how the programme will create change for all those involved.** During the programme design phase, programmes should identify how they will create change for different farmer groups involved in the programme, in order to maximise the ripple effects of change. Within Extension 350 this would have meant starting by identifying how to achieve change with those farmers who received the lightest touch in the programme (the Associate farmers) and designing the programme from there.
4. **Incorporate opportunities for farmers to grow their networks and receive mentorship.** Programmes should incorporate opportunities for farmers to expand their farmer and advisory networks through their involvement. If strong foundations are established during the programme, these relationships are likely to endure and have benefit beyond the life of the programme. Extension 350 was designed to facilitate the development of farmer-to-farmer relationships that would provide them with a base of support for on-farm change both during and after the programme. The Mentor and Target farmer relationships were particularly identified as a highlight of the programme and provided valuable support for the Target farmer and facilitated on farm change.

5. **Plan for agility and allow the project to evolve.** All programmes, but particularly those that are large scale and long term, should plan to be adaptable, by incorporating a structured review cycle, and allowing flexibility within the workplan to make changes as necessary. Extension 350 included regular lessons learnt sessions with the governance, operations, evaluation and consultant groups, along with regular discussions within the project team. These workshops helped the programme to identify areas for change and improvement, along with recognising areas that were working well.
6. **Identify opportunities to streamline project meetings, reporting and administrative aspects of the programme.** Programmes should look to 'maximise the doing', by finding ways to streamline process and administrative aspects of their programmes. This could mean, a structured timetable of reviews, which reflects on which activities, meetings or reports are adding value, and which have become less important, and then adapting activities accordingly. Extension 350 stakeholders noted that meeting, reporting and administrative activities could be quite time consuming for those involved, and they worked to streamline these activities over the course of the programme. It is noted that this will always be a balancing act in order to meet the needs of different stakeholders.
7. **Incorporate and fund evaluation activities from the start of the programme.** Evaluation frameworks and activities can support decision making at all stages of a programme, from informing programme design, supporting programme execution and monitoring impact and outcomes. Ideally, evaluation would therefore begin with the start of the programme. Extension 350 sought and received additional SFFF funding in 2020, which enabled the programme to ramp up evaluation activities for the last two years of the programme. The experience from Extension 350 confirmed that initial evaluation activities should include:
 - a. Identification of key measures
 - b. Collection of baseline data
 - c. Determination of how impact will be calculated across all key areas of the programme.

Questions for future programmes to consider

Extension 350 stakeholders have identified a series of questions that they recommend future programmes consider:

- **How will you continue the momentum of aspects of the programme, after the formal programme ends?** For example, what does sustainability for the programme look like? Could a tapered funding profile help?
- **What are the key attributes of your farmer cohort, and what does this mean for their engagement and change journey?** For example, Extension 350 focussed on middle tier farms, with the goal of lifting the Northland pastoral sector as a whole. This creates opportunities, but also brings some challenges which need to be mitigated, as these farms vary in the quality of their networks, knowledge, engagement and skills.
- **What is the acceptable distribution of benefits between different groups of farmer participants?**

- **Which extension models are most suitable for achieving change in different areas?** For example, could less-intensive programmes be more suitable when introducing new concepts such as environmental sustainability?
- **Which extension models are most suitable when you want depth or breadth of topics and participant engagement?** For example, is the cluster model most suitable when you want to engage a large number of participants, or is it more suitable when depth is the priority?

Summary

The Extension 350 programme has been a significant undertaking for the partners involved, and one which they can be proud of. Overall, the total financial benefit of the Extension 350 programme is modelled to be between \$7 and \$18 for every \$1 invested in the programme, with a midpoint of \$11.40. It is noted that this figure excludes the values of environmental and wellbeing outcomes.

Many of the farmers involved have said that Extension 350 has been 'life changing' and a catalyst for improved environmental and financial sustainability on-farm, along with increased personal wellbeing. A particular highlight has been the strong farmer connections that have been formed over the course of the programme. However, other farmers had only limited engagement with the programme.

As the programme concludes, it is leaving Northland agriculture stronger than it started. In its wake we find:

- Improved farming businesses amongst those highly engaged farmers
- Strengthened farmer relationships, both with other farmers and rural professionals
- Engaged farmers who are looking for future opportunities to connect with others and contribute to the sector
- Connected funding partner organisations who have collaborated closely and collegially over the last seven years
- Experienced stakeholders who now have a suite of lessons learnt which can be applied to future activity and investments
- Expanded extension knowledge base (particularly related to resilience, behaviour change and the incorporation of a triple bottom line).

Part B: Full findings

This section presents the detailed evaluation findings across the key areas of farmer change and value, farmer engagement, farmer relationships and networks, programme stakeholders, programme design and cost-benefit analysis.



Farmer change and value

Summary

The key insights related to farmer change and value as a result of the Extension 350 programme include:

- **Extension 350 has had a substantial impact for a number of farms.** For some, the benefits to them and their business have already been considerable, while for others, the benefits are yet to be fully realised.
- **Financial gains have been made by many farmers.** This came about through both operational benefits (such as improved pasture management, enhanced reproductive performance, etc.) as well as strategic changes (such as faster career progression, better succession planning, accelerated equity growth, etc.).
- **Farmers have embarked on an environmental sustainability journey.** Some farmers have increased their knowledge of requirements in the environmental space, created FEPs and have started taking action in alignment with these FEPs.
- **Farmers have improved their wellbeing as a result of the programme.** Farmers have increased their wellbeing focused discussions and report improved wellbeing as a result of the programme.
- **A focus on strategic planning was a highlight for many.** Many farmers noted the value of the strategic planning they undertook as part of Extension 350 and have left the programme with a clear plan for their futures.
- **A portion of farmers have made limited changes.** This was particularly the case for a proportion of Associate farmers.
- **Many farmers felt they have received value from their involvement.** Farmers, particularly Target farmers, recognised the value they had received from their involvement in the programme.

Extension 350 has had a substantial impact for a number of farms

For some the benefits have been considerable

Some of the farmers involved have benefited substantially from their engagement with the Extension 350 programme.

Everywhere I look on farm there has been improvements made – I have a feeling of immense satisfaction. Target farmer (Farm exit discussion, group one).³

³ Note that while the majority of quotes within this document include the providers role, the source, and the year, at times this has been simplified to ensure anonymity.

On a scale of one to ten, where one means I didn't know I was even in Extension 350 and ten means it was life changing, I would say 12 - If I removed the three droughts that happened. Target farmer (Celebrating success, 2022).

We have learnt so much and our farming practices are improving exponentially each year. Target farmer (Six monthly survey, 2020).

Some farmers described how **Extension 350 had increased their confidence and helped them either achieve, or put them on a path to achieve, their goals.**

That's the biggest thing, the confidence [Extension 350 gave us]... It's not just confidence in our farming techniques either, it's confidence in our budgeting skills and everything that's going on behind it, from ground level up. Target farm (Farm exit interview, group three).

There's no way that we're the best farmers or absolute experts... well that's what we thought, until we started [with Extension 350], and we're [now] actually [doing much better]... [We want to take over the world now]. The goals are always evolving. It's just something that we work on... It's definitely not the end [for us now], we're not stopping at what we've got... Once we've got this [farm] then...[we'll] leverage off this one to get the next larger farm. Target farm (Farm exit interview, group three).

We've done a lot more capital development on the farm [because of Extension 350] that I hadn't expected to be able to do... I had some goals that by the time I'm [older] that I wouldn't be milking cows... The business would be good enough that somebody would be able to do it, or the farm would be up and running, or we'll have enough security that we don't need to be milking cows... We're well on the way towards achieving that. Target farm (Farm exit interview, group three).

Some of the farmers **noted they likely would have left the industry if it wasn't for the programme.**

I'm forever grateful... I actually achieved my ambition... And I would not have done it had I not had the outside help [from Extension 350]... I probably would have put the farm on the market [...if it wasn't for Extension 350]. Target farm (Farm exit interview, group three).

I think [Extension 350 is] a great idea, like I... might have left dairying if it didn't come along... If they're trying to keep dairy farmers in the game instead of leaving, I think they need more [programmes like Extension 350]. Target farm (Farm exit interview, group three).

[For me a highlight has been] those little magic moments, where someone says, 'I wouldn't be farming if it wasn't for the project'. Consultant (Review and reflection workshop, 2022).

For some, the benefits are yet to be fully realised

Stakeholders have noted that **for some farmers the true benefit of Extension 350 likely won't be fully realised until after the formal programme ends.** This is in part due to some changes taking a long time to reap rewards (this is particularly true for sheep and beef farmers), and in part because not all changes have been made yet. However, many farmers now have a long-term plan for these changes.

We have become more focussed and passionate around business and farm performance and will continue to do so. Target farm (Farm exit discussion, group two).

[We want to] carry on doing what we have been doing for the last three years and refining to be better. Target farm (Farm exit discussion, group one).

Where to next? We want to buy our own farm, employ staff, and have more time out of the cowshed. Target farmer (Farm exit discussion, group two).

Financial gains have been made by many farmers

A number of farmers reported **taking actions to improve their profitability**. As with the other planks, farmers' perspectives on profitability and productivity changed through their involvement with the programme. In particular, farmers developed a more strategic outlook, and increased their financial literacy to help them achieve their goals.

The highlight for me was learning the financial planning / budgeting. Target farmer (Farm exit discussion, group one).

The skills and information I gained have enhanced my business. Associate farmer (Six monthly farmer survey, 2019).

Other farmers valued the plan they now had in place, and the opportunity to focus on 'big picture' decision making.

I'm moving from doing day-to-day tasks that will earn me \$20 an hour, to bigger, longer-term decision making that is worth so much. It's been a huge learning curve. Target farmer (Celebrating success, 2022).

Now we know where we are going, financially, we've diversified into some other things. Target farmer (Celebrating success, 2022).

The impact of this action has been considerable for many farmers

Some farmers have reported an **impact on their profitability**.

We are now profitable says the bank manager! Target farmer (Six monthly farmer survey, 2019).

[It has helped my profitability by] making me justify my actions more. Mentor farmer (Six monthly farmer survey, 2019).

The financial impacts are different for different farmers, some examples include:

- Dairy farm A made improvements to pasture management, genetics and reproduction, and overall management of farm costs. Considering these activities, their high level of engagement and relatively small farm size, the estimated annual impact of their Extension 350 participation is between \$100,000 and \$300,000.
- Dairy farm B made improvements in pasture conversion efficiency, in the use of supplement feed, and reproduction. Considering these activities, their lower level of engagement and relatively small farm size, the estimated annual impact of their Extension 350 participation is between \$30,000 and \$100,000.
- Sheep and beef farm A made improvements to policies and implemented a new grazing system. Considering these activities, their high level of engagement and relatively large farm size, the estimated annual impact of their Extension 350 participation is between \$50,000 to \$100,000.
- Sheep and beef farm B made improvements to their breeding stock replacements, their rotation lengths, and their bull enterprise. Considering these activities, their lower level of

engagement and large farm size, the estimated annual impact of their Extension 350 participation is between \$30,000 to \$100,000.

In some cases, **the farmers recognised that their actions helped them to position themselves well for the future and to weather difficult times** (for example the impact of COVID-19 and recent droughts).

[Extension 350 has enabled me to make] the best of the resources available on my farm to achieve a more attractive venture for myself that will hopefully attract a good 50/50 sharemilker to enable my retirement. I would most definitely not be in this position if I had not joined Extension 350. Target farm (Farm exit discussion, group one).

It has been a bit of a difficult first full year of being involved with Extension 350 as the drought and COVID-19 have had a significant impact on our profit. However, we still have managed to make a profit this year and I think if we weren't involved with Extension 350 this may have been different. Target farmer (Six monthly farmer survey, 2020).

Consultants also noted the financial impact of the programme for the farmers they have worked with.

If Extension 350 hadn't come along they would be still where they were, averagely profitable and certainly not capable of increasing the size of their business. Consultant (Review and reflection workshop, 2022).

Almost three quarters of Target farms who have completed Farm exit discussions with their consultant felt they had achieved the best profit outcome they could each year (refer to Figure 3). This compared to about a third who felt this way prior to starting the programme. Most Target farmers were optimistic that they would continue to achieve the best profit outcome they could beyond the programme.

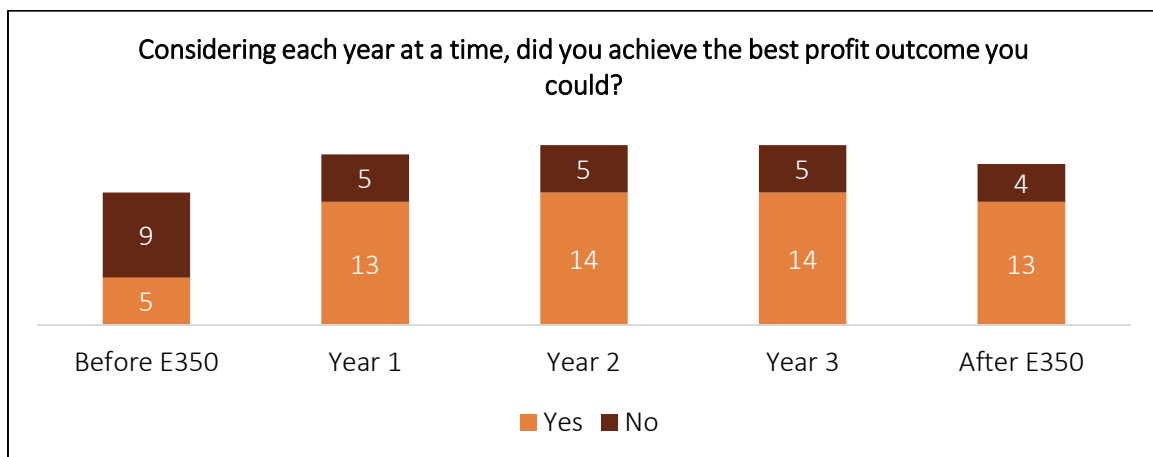


Figure 3: Target farm profitability (Farm exit discussion)

Some farmers who reported not experiencing an impact on profitability yet, often noted this was due to external factors such as weather, or personal circumstances and they envisaged this impact would come in time.

There has been very little impact on profitability due to droughts but with the reformed farming system we are due to reap the rewards. Target farm (Farm exit discussion, group one).

We have taken note of improvements that we can make, but at this point have not yet implemented. It's on the cards to do so, but it has to suit how and when. Associate farmer (Six monthly farmer survey, 2020).

Farmers have embarked on an environmental sustainability journey

Farmers created Farm Environmental Plans

Most Target farms completed FEPs as part of their Extension 350 activity. The importance of this process was noted by stakeholders, with the caveat that this in itself wasn't an environmental action, but rather the precursor for action.

We created an environmental plan, with timeline to achieve goals, - we are on track with this. Some goals have been ticked off, others are underway, and others will be started according to the timeline. Target farmer (Six monthly farmer survey, 2019).

Farmers increased their environmental knowledge

Some stakeholders noted seeing **shifts in attitude towards environmental sustainability as a result of Extension 350**. In particular, farmers began to see this as an integral part of their long-term business planning and activities as a result of the programme.

[A success has been] building on increasing awareness within both RP's and farmers that environmental sustainability wasn't something that could be dismissed with completion of a FEP - which was the perception at the start of the project. (Stakeholder survey, 2022).

Our view of environmental sustainability can partly be attributed to the networking opportunities we have been given through Extension 350, and from the fundamentals of Extension 350; recognising what we value and incorporating it into our business strategies and planning. Target farm (Farm exit discussion, group two)

We've changed our thinking from having the FEP folder in the bottom draw to 'front of mind thinking'. That's the biggest change for me, it's every day decision making now, you think about what you're going to do, how it will affect your water ways, etc. Farmer (Celebrating success, 2022).

Extension 350 stakeholders observed **some farmers becoming more aware of upcoming regulations and where they could go to get support and information**.

Being involved in this group meant we were informed about law changes giving us time to put solutions in place. Target farmer (Six monthly farmer survey, 2022).

Contact with the regional council made us aware of funding opportunities, otherwise we probably would not have planted the stream. Farmer (Exit interviews, 2020).

For some farmers, Extension 350 **provided an opportunity for them to learn from others who had made environmental changes**.

[We are] learning from the effluent systems of others. Associate farmer (Online survey).

Some farmers took environmental action

Some farmers have begun taking environmental action on farm.

All the main rivers are now fenced off, and we are planting natives and poplars. Target farmer (Farm exit discussion, group one).

For us, [the impact on environmental sustainability has been] massive. We have put in waterways fencing which allowed more subdivision, which has meant less pugging and less runoff. Target farmer (Farm exit discussion, group one).

It has given us the tools to look at environmental issues and fulfil a dream. Target farmer (Six monthly survey, 2019).

The opportunity to have a FEP created for us is amazing... It is great to have all those ideas and plans in one 'living' document... We have already achieved one of our goals of fencing off a gully area and the re-planting of it is starting this week. Target farmer (Six monthly survey, 2020).

It is noted that **for some of these farmers, this action begun prior to their involvement with Extension 350 and has continued through the programme.** Some were also already receiving environmental support from the Northland Regional Council.

[The farmer] had engagement with Northland Regional Council prior to Extension 350, and this has continued on... Now they have retired steep areas, put in trees, fenced waterways. (Stakeholder interviews, 2022).

[We] already had a Land and Environment Plan (LEP) in place. Associate farmer (Six monthly farmer survey, 2019).

We have been doing a lot of environmental work for some time. We've already fenced off streams, we stand cows off in wet weather to reduce pasture pugging, spray effluent onto the pasture instead of discharging into the stream. Mentor farmer (Six monthly farmer survey, 2020).

Target farmers involved in Farm exit discussions with their consultant all noted the progress they had made towards their FEP actions over the course of the programme. All planned to continue taking actions beyond the formal programme (refer to Figure 4).

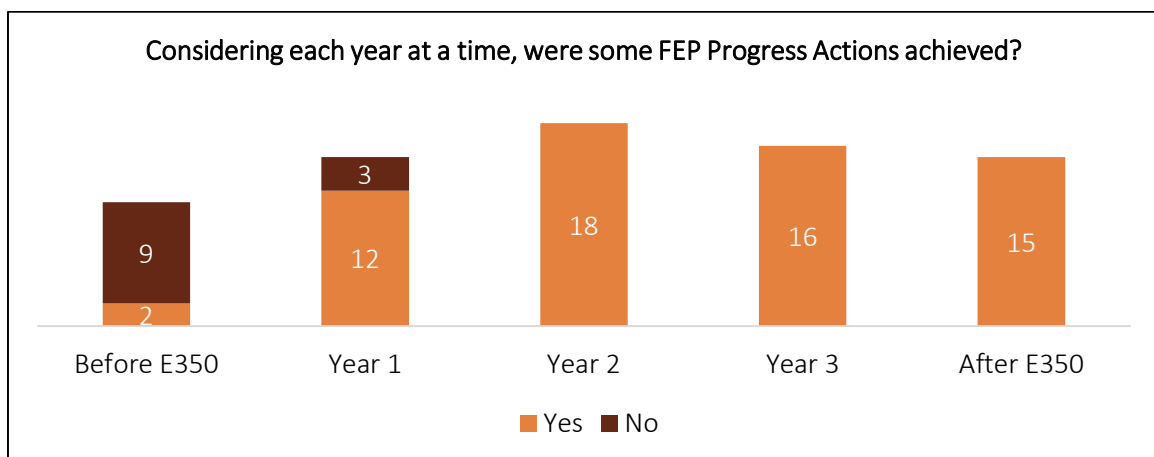


Figure 4: Target farm environmental sustainability (Farm exit discussion)

Farmers have improved their wellbeing as a result of the programme

Extension 350 farmers increased their wellbeing discussions

Prior to Extension 350, few Target farmers reported discussing wellbeing around the kitchen table or within their social networks (refer to Figure 5). During the programme, **all Target farms were part of wellbeing discussions**, and two thirds began to discuss wellbeing within their wider social circles. The majority envisage this will continue after the conclusion of the programme.

It was a term that I wasn't really familiar with until probably almost at the beginning of this. Farmer (Exit interviews, 2020).

Wellbeing became something that was talked about, from something that was never talked about. Consultant (review and reflection workshop, 2022).

Some farmers reported feeling more confident to have wellbeing discussions with others as a result of Extension 350.

Extension 350 has normalised wellbeing, we're not afraid to bring it up now. Farmer (Celebrating success, 2022).

Our worker was down and we're like 'we've got to do something about this'. Now, we always ask him every morning how he's feeling, which doesn't seem like a big thing, but it is a big thing just to ask somebody that. Farmer (Exit interviews, 2020).

We have also been able to recognise signs of lowered wellbeing and check in with others. Target farm (group two exit survey).

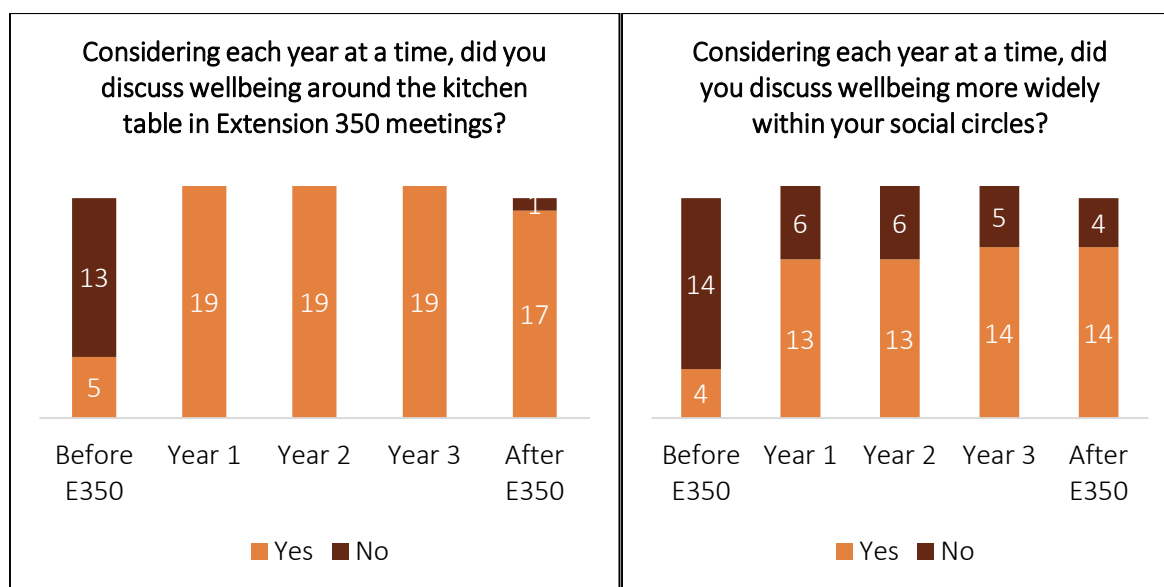


Figure 5: Target farmer wellbeing discussions (Farm exit discussions)

As a result of increased focus, many farmers noted improved wellbeing

Farmers have described a range of wellbeing changes they've made as a result of being involved with Extension 350. For many, this meant **achieving an improved work life balance** as a result of the programme.

Extension 350 has taught us to place a value and focus on wellbeing, proving that wellbeing has a large impact on our performance. It has provided reasoning that the things that improve wellbeing are beneficial, and that the farm isn't everything, and occasionally, you need to take a step back to move forward. Target farm (Exit survey, group two).

Managing our staff better, to make sure they [and ourselves] have plenty of time off. Associate farmer (Six monthly farmer survey, 2020).

We found some good, reliable labour, and had our first family holidays in five years, due to Extension 350. This was a part of our goals from our Whole Farm Assessment, and it was achieved. Farmer (Celebrating success, 2022).

Other farmers noted how the **advice and support they received from others involved in Extension 350 (consultants, Mentor farmers and sometimes Associate farmers) had improved their wellbeing.**

Our wellbeing was so low at the beginning of Extension 350... We cannot emphasize enough how it has helped our mindset having a team of Extension 350 people to help us improve ourselves. Target farmer (group three exit survey).

[The main thing that supported my wellbeing was the] honest and frank advice on handling staffing / financial matters. Also, a wonderful Mentor and Farm Advisor who were, and still are, available to talk to for advice. Target farmer (Group one exit survey).

Farmers noted the **value of getting off farm as part of the Extension 350 programme.**

Getting people off-farm is a constant challenge. But they really have to get off-farm because that is where you learn. Target farmer (Celebrating success, 2022).

When you go off-farm for the day, you come home and see your challenges from a new light. Target farmer (Celebrating success, 2022).

Others described how **increased planning due to Extension 350 improved their wellbeing.**

[The highlight for me was] making a financial plan that will soon enable me to retire and pass on responsibility for someone else to run the farm. Target farmer (group one exit survey).

The impact on wellbeing has been very good due to having a good vision for the future. Target farmer (Group one exit survey).

At times, the programme added periods of stress for some

It has also been reported that for some farmers, at times, participation in the programme caused periods of stress or frustration. It is noted that this is mostly 'good stress', and fairly different in nature to the impacts of external factors like drought, rising costs, uncertain regulation, etc. In the case of Mentor farmers, this appeared to happen when they felt frustrated with other participants' lack of action or commitment. In the case of other farmers involved, some felt a little overwhelmed at different points in the programme, though this typically was for short periods of time, and not across the whole length of their involvement.

Farmers were glad they did it – but the process itself was stressful – there was so much going on. (Stakeholder interviews, 2022).

I feel like I'm expected to be at too many events now. Associate farmer (Six monthly farmer survey, 2019).

I get frustrated when people say they are going to do something, and they don't. Mentor farmer (Six monthly farmer survey, 2019).

I have found it a bit stressful at times. Usually when I have to get the reports in and have other commitments that need to be fulfilled at the same time. Target farmer (Six monthly farmer survey, 2019).

A focus on strategic planning was a highlight for many

For a number of farmers, particularly the Target farmers, **the opportunity to develop and focus on a strategic plan was an area they enjoyed and that they felt added value.**

A whole new way of looking at things and changing things for the better. Target farmer (Six monthly farmer survey, 2021).

If we'd had a planning wheel [when we first started in dairy, like the one we got in Extension 350], I think we probably would have bought the farm by now. We would have made some completely different decisions. Target farmer (Farm exit interview, group three).

Rather than just running the farm and doing all that practical side of it, it helped bring a bit more theory in behind it all to what we're actually achieving or are trying to achieve. Target farmer (Farm exit discussion, 2021).

Yes, Extension 350 has benefited me, I had no idea where to go before, it's got me thinking and asking the questions I need to get the answers and achieve the change I need. I have a vision for the farm and the future now. Target farmer (Farm exit discussion, group one).

Mark and Measure was offered to all farmers at different times of the programme. **This was a highlight for many of the farmers who attended**, as it helped them to identify and align their business, family, and personal goals.

Mark and Measure made you think about what you want out of life. Farmer (Exit interviews, 2020).

Mark and Measure was life changing, it felt like marriage counselling for us... We drew the same picture of where we wanted to be in ten years. Before, I was concentrating on the kids..., and not understanding why my husband was so stressed... Mark and Measure brought me more on board. Target farm (Celebrating success, 2022).

Before Extension 350, few Target farmers had used a planning wheel or conducted a strategic plan / review (refer to Figure 6). Over the course of the programme, almost all Target farmers started to use their planning wheel and conducted a strategic plan / review.

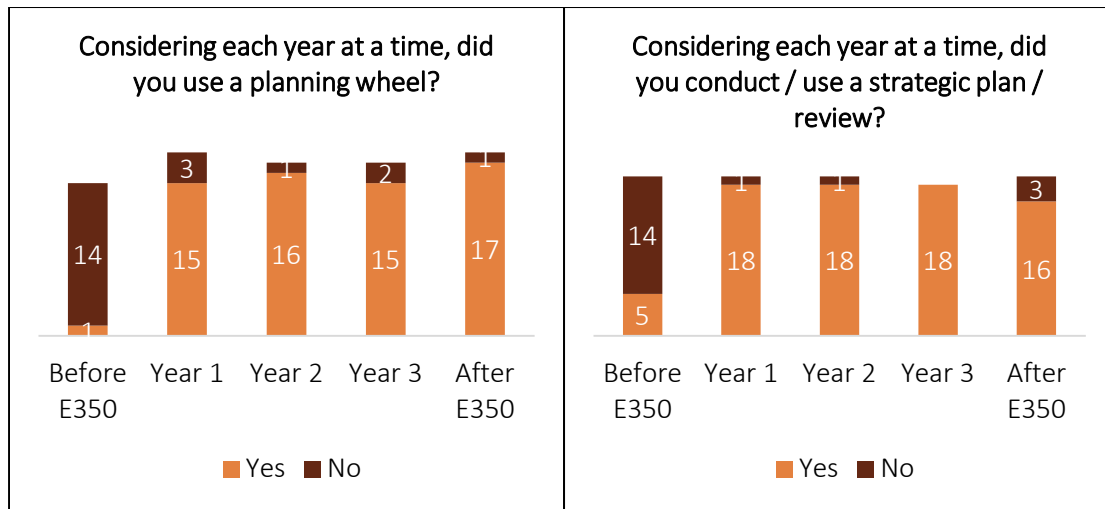


Figure 6: Target farms who had completed strategic activities (Farm exit discussions)

Many expressed their intent to continue to implement these plans after the formal programme has concluded.

It would be nice to take a short breather to consolidate our progress and assess where we are. But we also have future plans that have arisen as the result of the programme. Target farmer (Farm exit discussion, Group one).

Farmers grew their resilience

Another way to think about farmer change within Extension 350, is through the lens of rural resilience. Work undertaken in partnership with DairyNZ and Lincoln University researchers, identified that as a result of their involvement in the programme, farmers undertook five processes to grow their resilience against the increasingly complex and accumulating economic, social, environmental and institutional shocks and stresses in the primary sector.

1. **Buffering.** Building up both natural capital (e.g., feed supplies) and social capital (e.g., access to valuable knowledge) to withstand major shocks or changes.
2. **Enhancing networks.** Linking more strongly with people within the business network to access a range of perspectives (e.g., bank managers, regional council representative and milk processors).
3. **Foresighting.** Developing methods with mentors and farm advisors to investigate the impact of potential unforeseen changes (economic, environmental, personal) on the farm business.
4. **Learning from peers.** Learning through interacting with other farmers or structured training courses.
5. **System flexibility.** Having more diversity and flexibility in the farm system to cope with unforeseen large changes

The research undertaken by Lincoln University and DairyNZ has resulted in two journal articles, which have been submitted for publication. The resilience research has led to the creation of a resilience wheel tool. Future programmes are encouraged to consider utilising the resilience wheel in partnership with the wellbeing score (refer to Appendix B).

A portion of farmers have made limited changes

Despite these positive stories, the distribution of benefits was not equal across all programme participants. A portion of farmers had limited engagement, and as a result, received fewer benefits. We make an assumption that, *on average*, the impact of Extension 350 will be directly correlated to farmer engagement (you get out, what you put in). This is explored in the Farmer engagement section (refer to page 29).

Many farmers felt they have received value from their involvement

Associate farmer survey data from the last year of the programme suggests that 61% of Associate Farmers felt the programme had made either a *small* or *some difference* to them or their farm (refer to Figure 7). A quarter felt there had been *no difference* made on farm as a result of being a part of the programme and 13% felt it had made a *significant difference*.

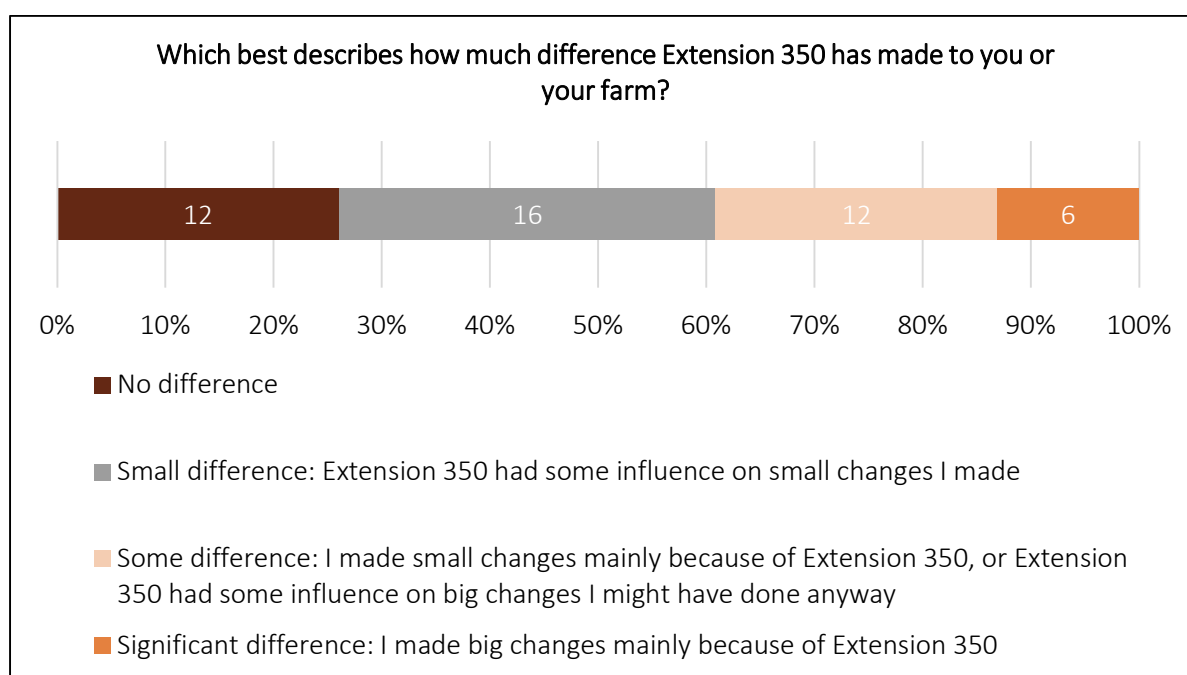


Figure 7: Associate farmers' perspectives on the difference Extension 350 made on their farm (Associate farmer survey, 2022) n=46

Much of the value that Associate farmers received from the programme, was from the connections they made to others – a fundamental element of resilience which will help these farmers along their change journey (refer to Figure 8).

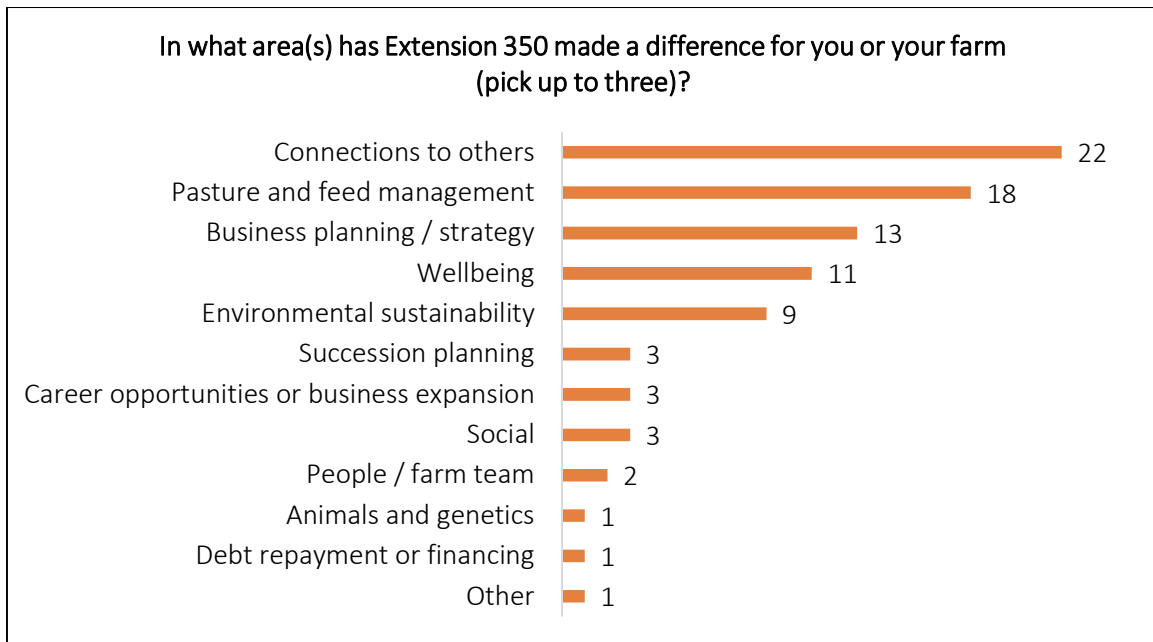


Figure 8: Associate farmers' perspectives on the difference Extension 350 made in different areas, by the amount of difference in total they felt the programme had made on their farm (Associate farmer survey, 2022) n=33⁴

⁴ Note that this was a multiple response question. Respondents could select up to three answers.

Farmer engagement

Summary

Key insights related to Extension 350 farmer engagement are:

- **Extension 350 saw a range of farmer engagement.** Many stories have emerged of farmers who have made the most of their Extension 350 experience and brought others along their journey. However, there are also farmers who had little to no engagement with the programme, these were predominantly Associate farmers.
- **The reasons for the variation in engagement were multi-faceted.** There is not one single factor that impacted upon engagement. Instead, a range of factors were evident, including personal, farm, external (particularly COVID-19 and consecutive droughts), Extension 350 process and recruitment factors. The design of the programme, with Associate farmers having less involvement than Target farmers, also played a role.
- **Variation in engagement is not unexpected in extension programmes.** While stakeholders had high aspirations for engagement levels, this range of engagement is neither surprising nor concerning for extension programmes of this type.

Extension 350 saw a range of farmer engagement

As noted in the previous section, many stories of change have been heard through the course of Extension 350. Nevertheless, the engagement of farmers (and particularly Associate farmers) has varied. There was a distribution of engagement, as we would expect from any initiative. A convenient way to report on this distribution, is to use one of the inputs from the impact model. This is Scarlatti's synthesis of:

- Survey findings (draw together engagement and impact data as one)
- Farmer feedback, collected during consultant workshops
- Farmer interviews.

We make an assumption that, *on average*, the impact of Extension 350 will be directly correlated to farmer engagement (you get out, what you put in).

The programme included a large group of highly and moderately engaged farmers, who have taken the opportunities given to them, and made substantial changes on farm. Based on evidence gathered through surveys, interviews and consultant case studies, as part of the impact model development process, the Scarlatti model uses an assumption that approximately 90% of Target farms, 90% of Mentor farmers and 40% of Associate farmers were *highly* or *moderately* engaged (refer to Figure 9). These farmers frequently shared stories of the substantial impact Extension 350 had on them and their farms. *Quotes from this group of farmers can be found in the Farmer change section (refer to page 17).*

In contrast however, there were also farmers who had low or even no engagement with the programme, and as a result have made limited or no changes to date. Modelling estimates that approximately 10% of Target farms, 10% of Mentor farmers and 35% of Associate farmers had *low* levels of engagement (refer to Figure 9). It is estimated that 25% of Associate farmers had *no* engagement.

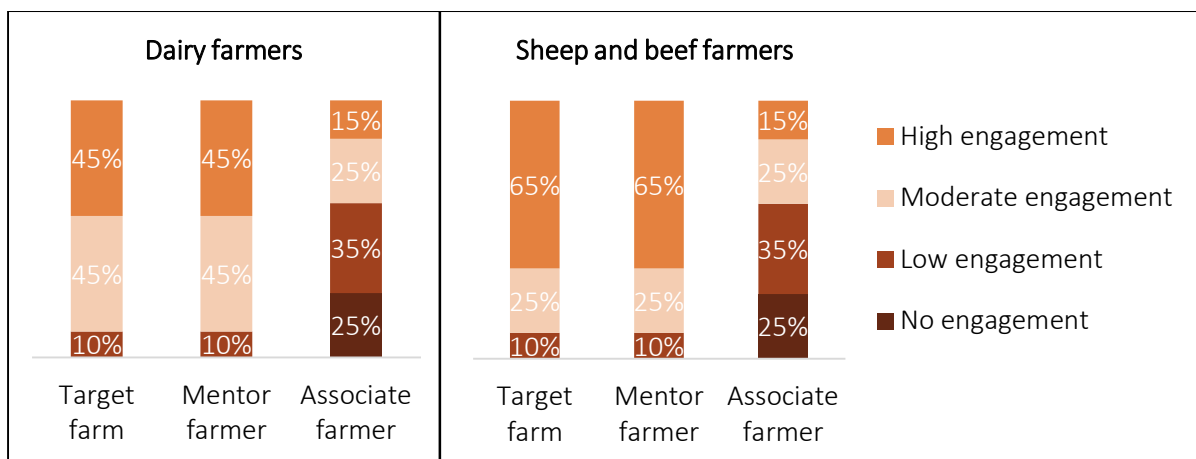


Figure 9: Distribution of engagement with Extension 350 (Impact modelling data, 2022)⁵

Associate farmer engagement was a particular challenge for the programme

As noted in the previous section, the variation of engagement was the greatest amongst the Associate farmer group, who by the nature of the model, received less intensive support, and instead were primarily there to learn by observing the Target farm’s journey.

We have had very little contact with our Associate farmers, however COVID-19 negatively affected this. (Farm exit survey, group three).

We really struggled with our Associate farmers – we tried very hard to get them to engage. Maybe if we had invited the farm owners, the wider team, it would have been different. Target farmer (Celebrating success, 2022).

This was noted by programme stakeholders during the programme, and various strategies were put in place to increase activity with this group. A successful application for SFFF funding resulted in a significant revitalisation of the Associate farmer programme from 2020 onwards. This led to the addition of facilitated farmer workshops, Associate farmer group meetings, a new Consulting Officer-led discussion group, field trips and Mark and Measure being offered to Associate farmers. In addition, other events were delivered to a wider group of farmers, including those focused on succession and sector updates.

Associate farmers typically had different drivers to join Extension 350

It is important to note that many Associate farmers joined the programme for different reasons to Target and Mentor farmers. Those that completed the Associate farmer survey noted that they often joined not only to improve productivity and profitability, but to see what other farmers were doing or to support a colleague (refer to Figure 10).

⁵ Note that this is modelled data, which involved the evaluation team and stakeholders working to quantify the proportions of each group. It therefore includes the assumptions made in this model.

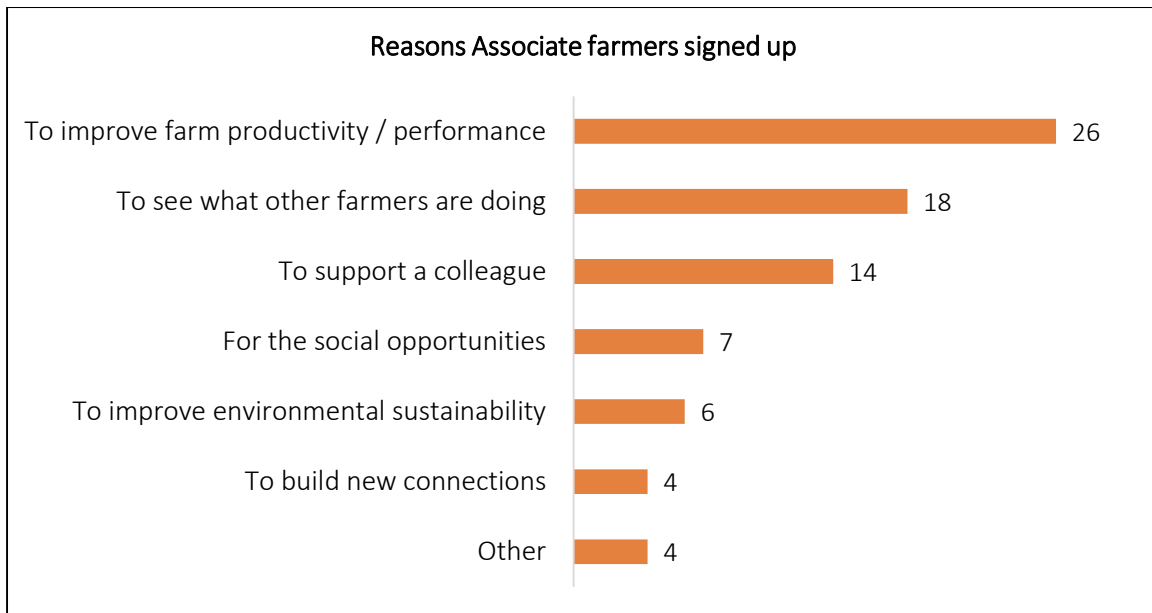


Figure 10: Reasons Associate farmers signed up to Extension 350 (Associate farmer survey, 2022)
n=47⁶

Associate farmers most valued the Associate farmer group meetings, these types of activities were added into the Extension 350 programme to increase engagement and were well received by Associate farmers (refer to Figure 11).



Figure 11: Most valuable activities according to Associate farmers (Associate farmer survey, 2022)
n=47⁷

⁶ Note that this is a multiple response question – respondents could select multiple answers.

⁷ Note that this is a multiple response question – respondents could select multiple answers (three in this case).

Reasons for the variation in engagement were multi-faceted

Over the course of the programme, there has been regular discussion amongst the governance, operations, evaluation, and consultant groups about what has caused this. Through this process stakeholders identified a range of factors they felt had contributed to this variation in engagement, including the following.

- **Personal factors.** There were a range of factors related to the individual farmers, which could influence their ability to engage effectively with the programme. This included their:
 - Level of authority on farm (whether they have the power to make change)

On-farm... it's more than just me making decisions. But it's very hard to change a person's mind if they have been doing it that way a number of years and have never been accountable to anyone. Target farmer (Six monthly farmer survey, 2019).
 - Ability to learn (the speed at which someone learns, or gains confidence)
 - Willingness to make change
 - Readiness to make change (where is the farmer at in their change journey)

I don't feel that the Extension 350 farmers that I was associated with were interested in change. Associate farmer (Six monthly farmer survey, 2019).
 - Time available (personal circumstances such as family commitments can limit engagement)

We have a young baby, which makes it difficult to attend courses together. Target farmer (Six monthly farmer survey, 2018).
 - Eagerness to connect (the level of interest they have to connect with others and be open to outside scrutiny).
- **Farm factors.** For some farmers their location and farm demographics impacted on their engagement. This included:
 - Farm demographics (things such as the farm context, land type, and size, and how similar / different they were to other farms in the cluster)
 - Location (the location of some farms meant Mentor and Associate farmers had to travel significant distances, or that they had to travel a long way to get to Extension 350 events)

The location of events... makes it very difficult for Far North participants to attend. Target farmer (Six monthly farmer survey, 2020).
 - Differences between farms (while slight differences could have a positive impact on learning, significant differences between farms could limit engagement).
- **External factors.** A range of external factors, beyond the control of the farmer, or the programme impacted on the way some farmers engaged. The successive nature of some of these events particularly impacted on some farmers' ability to implement their plans and engage beyond their day-to-day activities on farm, along with leading to fatigue for farmers (it is noted that these challenges were not unique to Extension 350 or to Northland over this period). External factors included things like:
 - COVID-19

- Successive droughts
- Floods.
- **Extension 350 process factors.** There were a few aspects of the Extension 350 programme that existed in the early stages of delivery, which could have contributed to the variation in engagement. These were largely mitigated by the project team upon identification. These aspects included:
 - A possible lack of clarity over responsibility (there was some confusion over who was responsible for Associate farmer engagement. There were some differences of opinion as to whether this was initially the role of the consultant, Target farmers or industry bodies)

I think it was assumed that the Target farmers could build groups based on who they already knew in the community, but this didn't happen. (Stakeholder interviews, 2022).
 - Lack of inclusion (the structure of the programme in the beginning meant that Associate farmers were more observers than active participants. This changed as additional activities were added to grow the involvement of this group)
 - Target farm reporting standards (consultants noted that reporting was important to bring Associate farmers 'along the journey', but standards and timeliness of this reporting varied).
- **Recruitment factors.** Recruitment had two characteristics worth noting here:
 - Inclusion of a range of farmers. Extension 350 was designed to focus on mid-tier farms, rather than the high tier farms (highly engaged and high performing) that are often represented in intensive extension programmes. As a result, a wider range of farms were included within the programme, but some faced additional barriers to change (see personal factors above).
 - Size of the programme. Some stakeholders felt that achieving scale and pace was a success for the programme, while others felt that, at times, the focus on numbers during recruitment came at the cost of quality of engagement.

The challenge for Extension 350 was that different combinations of these factors impacted on individual farmers. While some of these things were beyond the control of any programme, some stakeholders felt that some of these things could potentially have been mitigated against during recruitment. This would have involved identifying the characteristics of a 'perfect' Extension 350 farmer and only recruiting farmers who had these characteristics.

However, it is not obvious that a tighter recruiting process would have eliminated the engagement challenges Extension 350 faced, as this is an expected part of extension programmes (refer to the following section). It is also noted that this approach would have resulted in missed opportunities for change, particularly amongst two groups of farmers:

- Those at the beginning of their change journey. In order to make practice change on farm, farmers typically progress through a series of precursor steps, including increasing their awareness, skills, knowledge, and confidence. While not all Extension 350 farmers made change on farm, many did make progress along this journey – a valuable development in itself.

- Those who are unexpected adopters. Sometimes it is hard to identify on paper which farmers will be early adopters, and which will be laggards (particularly as farmers can move between these positions in different circumstances). Some of the highest achieving Extension 350 farmers didn't appear to be the 'perfect' fit on paper., and some that looked the 'perfect' fit on farmer, didn't achieve in the way that was anticipated.

Variation in engagement is not unexpected in extension programmes

It is noted that while stakeholders had high aspirations for engagement levels within Extension 350, this range of engagement is not unexpected for extension programmes.

While many of the successes seen in Extension 350 are due at least in part to its group-based design, so too are many of its challenges. Examples of challenges typical of group extension or monitor farms include:⁸

- Farmer groups often aren't representative. Those who participate most tend to be in economically advantageous positions and have larger properties.
- Topics are refined to those of interest to the host in the case of monitor farms. This inhibits the ability to develop long-term relationships and accumulate knowledge.
- Monitor farms often don't have influence beyond the host farm. They require significant collaboration, partnerships, and networks to have influence.

⁸ For a deeper understanding of challenges of such programmes, see:

- Ingram, J., Chiswell, H., Mills, J., and Debruyne, L. (2021). Situating demonstrations within contemporary agricultural advisory contexts: analysis of demonstration programmes in Europe. *The Journal of Agricultural Education and Extension*, 27(10), 1-24. DOI:[10.1080/1389224X.2021.1932534](https://doi.org/10.1080/1389224X.2021.1932534);
- Sutherland, L., and Marchand, F. (2021). On farm demonstration: enabling peer to peer learning. *The Journal of Agricultural Education and Extension*, 27(5), 573-590. DOI: [10.1080/1389224X.2021.1959716](https://doi.org/10.1080/1389224X.2021.1959716)
- Marsh, S., and Pannell, D. (2002). Agricultural extension policy in Australia: the good, the bad and the misguided. *The Australian Journal of Agricultural and Resource Economics*, 44(4), 605-627.
- Vanclay, F. (2004). Social principles for agricultural extension to assist in the promotion of natural resource management. *Australian Journal of Experimental Agriculture*, 44, 213-222.

Farmer relationships and networks

Summary

Key insights related to farmer relationships and networks include:

- **Farmers have established or strengthened relationships with other farmers.** This was a highlight for many farmers involved. Of particular note were the relationships formed between the Target and Mentor farmers.
- **Farmers have formed or deepened connections with rural professionals.** This includes relationships with the regional council, banks, accountants, and vets.

Farmers have established or strengthened relationships with other farmers

A highlight for many has been the connections that have been made between farmers involved with Extension 350.

I see huge value in the peer support focus. Associate farmer (Six monthly survey, 2020).

For some farmers these connections **helped increase their confidence to reach out** if they need support, or advice.

I've got more confidence to call other farmers now – if something goes bad, I would have kept it quiet before – there is nothing better than hearing someone else's bigger failure! And that makes me forget my problems and we have a laugh together. A problem shared is a problem halved. Target farm (Celebrating success, 2022).

The big benefit, and certainly towards the later end of the programme, has been the connections between farmers. It's the connections and support networks... These relationships have given them confidence to ask for help or advice. (Stakeholder interview, 2022).

[We've made] life-long friends that we can ring and discuss options going forward. Target farmer (Six monthly survey, 2020).

Target farmers reported improved social networks over the programme (refer to Figure 12).

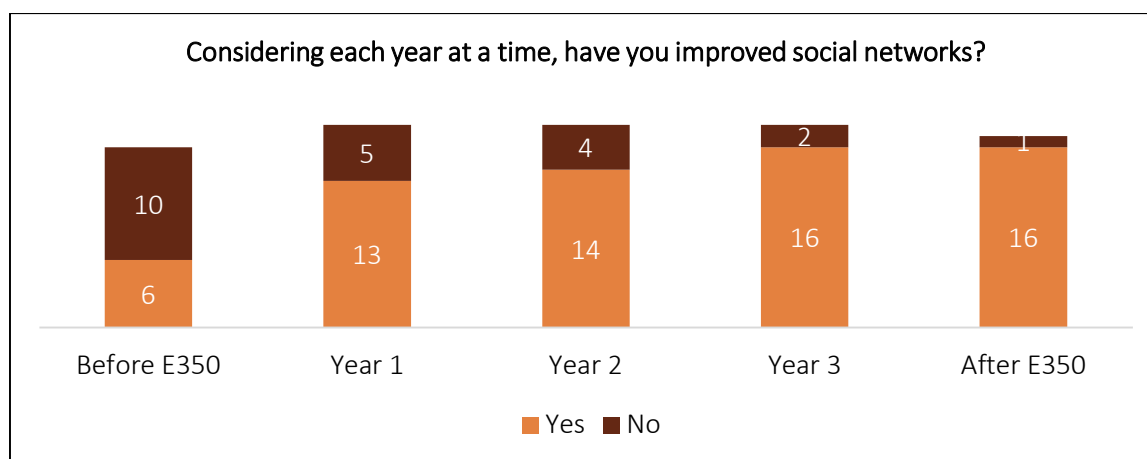


Figure 12: Target farmer social networks (Farm exit discussion)

Many Target farmers especially **valued the relationship they developed with their Mentor farmer.**

[A highlight for me has been] the friendships between the Target and Mentor farmers. Project stakeholder (2022).

Having a mentor and neighbours has been my opportunity to learn – my [parents] didn't share knowledge with me... so we entered farming knowing nothing about it. Target farmer (Celebrating success, 2022).

[The highlight for me has been] developing the relationships with [Mentor farmers] - having conversations with like-minded people. Target farmer (Farm exit discussion, group one).

There is significant value in linking farmers in less connected areas with Mentor farmers that are happy to invest time to understand the Target farm business and their goals. Many of the Target farmers found value from expanding their networks and hearing feedback / ideas from other farmers. (Stakeholder survey, 2022).

Mentor farmers also reported receiving value from the experience.

I'm getting a lot out of the contact... it is making me review my own farm. Mentor farmer (Six monthly survey, 2019).

It is a great forum to pass on our knowledge and experience. Mentor farmer (Six monthly survey, 2020).

[It] keeps my mind open to new ways of running a successful business. Mentor farmer (Six monthly survey, 2019).

For some Extension 350 farmers, their involvement in the programme meant **strengthened relationships with their partners and families**, as they increased their understanding of each other.

I came away knowing I'm an owl, my father is a dove, my mother is a peacock – I know now we are very different people. In terms of farm decision making, we would start to niggle at each other, but now we understand each other, we are working more as a team. Target farmer (Celebrating success, 2022).

I wasn't really part of the farm before Extension 350, but it was like I sort of thought, you know, this could be really beneficial and so I went to make sure he had that support. Farmer (Exit interviews, 2020).

Many farmers hoped to continue these relationships beyond the scope of the programme.

Going forward, I want to stay together with these people I've got relationships with, I want to bring other farmers up. Target farmer (Celebrating success, 2022).

I want to... continue to learn from what [others] are learning on their properties. Target farmer (Six monthly survey, 2019).

Maybe we could share our journey with others- mentoring or being involved in the local discussion group. Target farmer (Six monthly survey, 2020).

These connections were not always smooth sailing

For some farmers, it was noted that the connections with their Extension 350 teams wasn't always an easy process. This was unsurprising, and most managed to work through these challenges, and they ended the programme with positive relationships.

Throughout the process, [our Target team have] had continued differences... As we progressed, we developed a respect and understanding of where our consulting team and Mentor farmer were coming from; allowing our Target team to take on board the ideas and mentorship that the overall team was willing to provide. Target farmer (Farm exit discussion, group two).

Farmers have formed or deepened connections with rural professionals

Some Extension 350 farmers also developed, or strengthened, their networks with rural professionals, such as veterinarians, bankers, regional council representatives and milk processors as a result of the programme. For some farmers, this was a significant change:

We opened up our farm to other people – to consultants, bankers, fertiliser reps. We didn't let or ask these people onto our farm before... Extension 350 meant we had to open our doors. Target farm (Celebrating success, 2022)

Some examples of these connections, and the impact of the increased relationships are noted below.

- Regional council:

I have formed a relationship with the regional council, fenced all waterways and although not achieved all that is needed at the moment, when more time is available, I will use their expertise to plan to plant out riverbanks. Target farmer (Farm exit discussions, group one).

- Accountant:

They suggested to change accountants, which we did and that has had a positive outcome. Target farmer (Six monthly farmer survey, 2021).

- Bank:

A massive part of [participation in Extension 350], which we can't underestimate, is our relationship with our bank... [Now] our bank manager is involved with our team and that's been a game changer... [as] they're part of the process of our decision-making, so when it comes to borrowing money, there's been no issues. Target farmer (Exit interviews, 2021).

Having a relationship with our banker now has been game changing as now the banker knows us and trusts us. Target farm (Celebrating success, 2022).

- Vet:

The vet [is involved], he came out to one of our meetings too. We work with the vets a little bit now. Farmer (Exit interviews, 2020).

Target farms reported increased business networks over the course of the programme (refer to Figure 13). Most imagined this would continue beyond the programme.

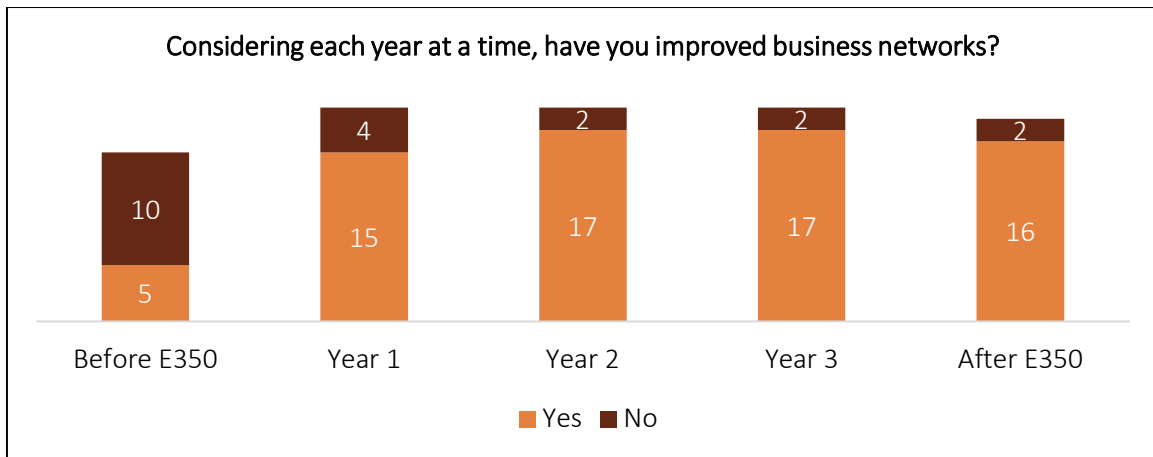


Figure 13: Target farm business networks (Farm exit discussion)

Like with social networks, **many farmers hoped to continue these professional relationships beyond the life of the programme.**

I want to continue with our consultant and our Mentor farmers. Target farmer (Six monthly survey, 2019).

I'd like to still have two or three consultant visits per year. Target farmer (Six monthly survey, 2020).

Consultants also valued the relationships they developed

Consultants themselves also spoke of the connections that they made with the farmers they had worked with, the programme partners and other consultants.

[The highlight was] the relationships, meeting some cool people around the countryside that I wouldn't have otherwise met. Consultant (Review and reflection workshop, 2022).

Programme stakeholders

Summary

Key findings related to the programme stakeholders involved with Extension 350 were:

- **The programme was driven by dedicated groups of people.** The programme benefited from the inclusion of committed and skilled people within all facets of the programme.
- **The programme marched on through changing times.** The Extension 350 team managed to continue to deliver the seven-year programme, as various things changed in their external environment.
- **The partnership showcased what organisational and cross-sector collaboration could look like.** The programme achieved high levels of collaboration, which was a highlight for many involved. The majority of stakeholders agreed that collaboration led to better farmer outcomes.
- **Collaboration did bring some challenges.** This particularly relates to meeting the needs of all involved, ensuring the right people were involved in the right aspects of the programme and navigating turnover amongst funder and stakeholder organisations.
- **In some areas, the time and resource allocations were regularly reviewed.** This is not unexpected in programmes of this nature, and largely related to the levels of funding for the consultants' work, administration / reporting, and evaluation.

The programme was driven by dedicated groups of people

It is important to acknowledge the contribution that different groups of people made to the success of this programme.

- **Those in project initiation.** Project stakeholders have noted that the reason the project 'got off the ground' was because there was a dedicated group of people driving it. This group were proactive, had a good mixture of skills, and utilised strong personal networks to make things happen, despite navigating complexities, ambiguities, and multiple stakeholders.
- **Those in management, governance, and evaluation.** The programme was designed to be adaptable. Throughout the years, regular reflective workshops were undertaken within the different programme groups (such as governance, operations, and evaluation). These workshops facilitated honesty, trust and transparency, and sought to identify areas for change and improvement.

Extension 350 managers and administrators tried hard and collaborated whenever they were able. (Stakeholder survey, 2022).

I was surprised that the place where I expected challenges (based on previous programmes) Extension 350 worked well to reduce the frequency or the impact of these challenge areas. To give a couple of examples: for a 5-year programme I thought the momentum was sustained well. Similarly, I found the governance model and Chair worked very well to ensure cross-agency participation and collaboration and to keep a clear focus on the core goals and reduce scope creep. (Stakeholder survey, 2022).

- **Those in delivery.** The consultants, extension teams and Land Management Advisors contributed substantially to the success of the programme. Those that worked directly with the Extension 350 farmers brought a wealth of experience to the project. Of particular note are the consultants, who adapted to working with groups of farmers, and tailored the Extension 350 delivery model to meet the needs of their groups.

You have multiple farming businesses that you have to work with, if you are in the true consulting world, a couple of mine I would have given up after the first year – but you can't. You have to make the best out of the situation, and we did make progress, albeit slow.
Consultant (Review and reflection workshop, 2022).

The project marched on through changing times

Changing external environment

It is important to acknowledge the changing external environment that Extension 350 has operated in over the last seven years. Evaluation group stakeholders identified a range of changes:

- Political (for example, change in government and changes of personnel within partner organisations, resulting in a range of engagement and ownership from stakeholders)
- Economic (for example a shift in focus from volume to value, a decrease in the number of farms operating within Northland, fewer opportunities to own your own farm)
- Social (for example, an increased focus on wellbeing, changes in consumer preferences and an improved license to farm due to farming's status as an essential service during COVID-19)
- Technological (for example increased use of technology within farming businesses)
- Environmental (for example, consecutive droughts, floods, increased focus on climate change, emissions, and diversification)
- Legal (for example increased regulatory complexity and compliance, from local and central government and industry bodies, especially related to the environment).

While these changes are beyond the control of the programme, Extension 350 adapted as best it could, and remained agile to navigate these things.

COVID-19

One of the most significant external challenges, was COVID-19, the impact of which was felt near the end of the programme (2020-22). As a result, group one farms had their post Extension 350 engagement disrupted, while group three farms faced obstacles near the beginning of their programme journey. COVID-19 affected the programme in numerous ways, including:

- Limits on travel (particularly to / from those farms that are in the Auckland boundary)
- Repeated and unavoidable cancellation of consultant delivery (events, farm-visits, etc.)
- Additional administrative work for project team and consultants required to replan
- Move to online interactions (Teams, Zoom, etc.)
- Farmers became more focused on day-to-day operations
- Loss of momentum both during and after COVID-19 lockdowns.

The partnership showcased what organisational and cross-sector collaboration could look like

One of the aspects considered important to the success of the programme was the collaboration between funder and wider stakeholder organisations, which spanned sectors. In the case of Extension 350, this has often been mentioned as a highlight for those involved. It is noted that the funder organisations contributed both funding and in-kind time to this collaboration, and a number of wider stakeholder organisations also contributed in-kind time.

Most recently, this was seen in the Stakeholder survey, which showed that **approximately three quarters of respondents felt Extension 350 was either *much more* or *slightly more* collaborative than what they would normally expect or experience** (refer to Figure 14). Two stakeholders felt Extension 350 was *much less* collaborative, this is explored further below (refer to page 43).

I have personally enjoyed the collaboration with other agencies and believe this is a common theme amongst the parties involved. (Stakeholder survey, 2022).

It has been a genuine partnership. We all believed in what we were trying to do, and saw the value in it, and trusted each other. We didn't get it all right all the time, but the success in this was that we were able to learn when things didn't work, take the feedback... and keep improving. (Governance group member, 2022).

We mixed in really well, I enjoyed the concept of being involved with other consultants and other farmers, like the Mentor farmers... Also, having involvement with other parties [i.e., DairyNZ, Beef + Lamb New Zealand, etc.]. Consultant (Review and reflection workshop, 2022).

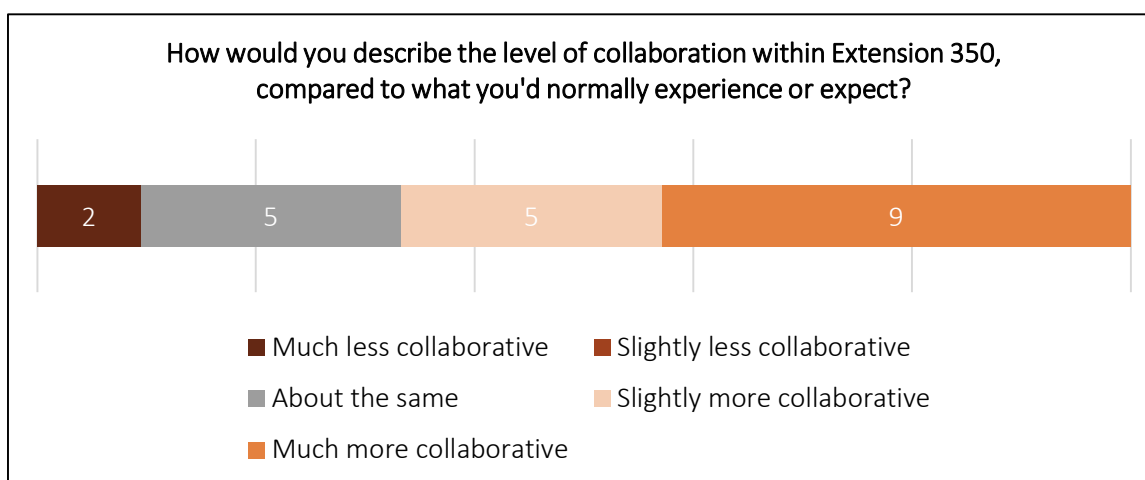


Figure 14: Collaborative nature of Extension 350 in comparison to what stakeholders would normally expect / experience (Stakeholder survey, 2022) n=21

Some stakeholders noted how **industry working together led to better shared outcomes**.

[A success is] the blend of funders - so essential for these to be connected and for farmers to see the active collaboration. (Stakeholder survey, 2022).

Engagement between sector groups / industry and Regional Council has improved through mutual involvement on the operations group. (Stakeholder survey, 2022).

This programme reinforces how the industry can achieve much more when working together with a united vision. (Stakeholder survey, 2022).

Some stakeholders noted that the Extension 350 project has **contributed to valuable connections being made between rural professionals**. Some also noted the value they had gained from the connections, and that interactions like those fostered in Extension 350 can help rural professionals learn from each other.

I have taken a lot from what I learnt from the consultant. I use some of their processes with farmers. In fact, I have even taken some of [their] ideas and done them on my farm. (Stakeholder interviews, 2022).

The Fertiliser rep asked: 'what did your consultant recommend?'. Farmer (Exit interviews, 2020).

The project team and operations group have been influential in pulling together a number of events that have helped engage rural professionals across the region. (Stakeholder survey, 2022).

The project team were keen to foster that network between RP, bankers, council, consultants, and this helped shine a light on environmental issues. (Stakeholder interviews, 2022).

We had an environmental workshop. Northland Regional Council was speaking, with folks from DairyNZ and Beef + Lamb New Zealand, and Fonterra, talking about how we could support farmers with environmental matters. That kind of collaboration wouldn't have happened without Extension 350. (Stakeholder interviews, 2022).

Many aspects of collaboration were evident in the programme

The Extension 350 evaluation group identified the six core dimensions of collaboration within the programme. Stakeholders were asked about progress against these dimensions within the Stakeholder survey, stakeholders felt that all had improved over the programme:

- Trust within the partnership (9/13 noted an improvement over the programme)
- Networks between organisations (8/13)
- Understanding of what other organisations have to offer (6/13)
- Knowledge transfer between organisations (5/13)
- Communication between the organisations involved (5/13)
- Resource sharing between organisations (4/13).

The standout amongst these dimensions, were networks between organisations and level of trust within the partnership – in both cases, more than half of respondents selected these as having improved the most.

The Extension 350 collaboration made a difference to Northland farmers

This level of organisational collaboration – which involved cross-sector collaboration - was thought by almost all Stakeholder survey respondents to have led to better outcomes for Northland farmers (refer to Figure 15).

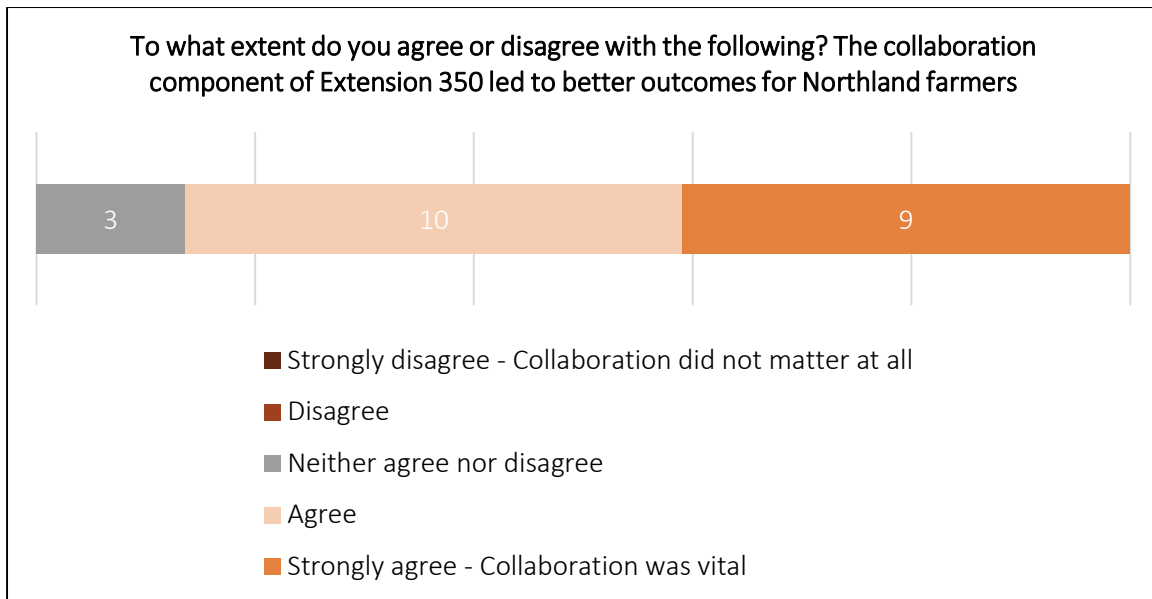


Figure 15: Extent to which stakeholders agreed or disagreed that the collaboration component led to better outcomes for Northland farmers (Stakeholder survey, 2022) n=22

The Extension 350 internal teams (such as the governance group, evaluation group and consultant group), brought together different organisations, perspectives and areas of expertise, which brought value to the programme. These internal teams provided a good structure to the programme. The project team also noted that through their positioning within Northland Inc, the project was supported by other teams and initiatives within the organisation (i.e. access to comms and HR support, etc.).

On-the-ground this collaboration brought tangible outcomes for farmers, as tools were developed or shared between the sectors (such as Mark and Measure, and the Whole Farm Assessment which both came from the dairy sector), and events were held where farmers could meet and learn from one another, such as environmental field days.

It was really good for the dairy farmers to have sheep and beef farmers at Mark and Measure. Neither of them really knew what the other did, so it opened that level of understanding, and it developed tools for the sheep and beef guys that they didn't have. Consultant (Review and reflection workshop, 2022).

Now, if there was a discussion group for dairy farmers, I'd go possibly, even though I'm a sheep and beef farmer. They are talking about similar things (pasture, soil, animals), I could learn a lot. Before I would have thought – 'oh stinking dairy farms, I don't want to go there!' Farmer (Celebrating success, 2022).

Most stakeholders felt their time in the programme was *about right* (refer to Figure 16). Approximately a quarter of Stakeholder survey respondents indicated they had *too little* time in the programme and that they would have liked more involvement (refer to the following section for further details).

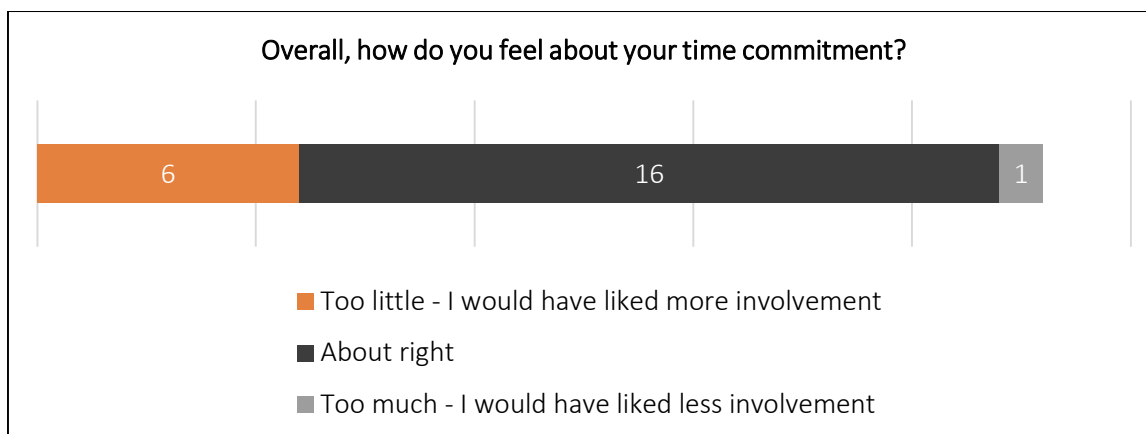


Figure 16: Stakeholder perspectives on time commitment (Stakeholder survey, 2022) n=23

Collaboration did bring some challenges

As seen earlier, the overall consensus was that Extension 350 was a highly collaborative programme, which itself had a range of benefits. Nevertheless, it is acknowledged that collaboration is not always easy, and does bring challenges. Two of the challenges that come with programmes that involve a diverse range of partners, relate to acknowledging and balancing their varying priorities, needs, and expectations; and staff turnover.

Turnover of representatives within funding partners and wider stakeholders had an impact on the programme

A challenge the programme faced was turnover of representatives within the funding partners and wider stakeholder organisations. While this is to be expected over the course of a long-term programme, it did create disruption which needed to be mitigated. The Extension 350 team worked to establish relationships with multiple people within each organisation (across different roles, and levels) and increased programme communication. This helped create resilience to turn-over.

It's easy to underestimate how much influence a single person has in an organisation... So, a key learning for us was that we needed to embed the support for the programme within the organisation, rather than just within the individual. Governance group member.

At times, it was a challenge to balance priorities, needs and expectations

Some stakeholders felt that they could have contributed more at various points in the programme. For example, a quarter of Stakeholder survey respondents felt they did not have input into the right things in Extension 350 (refer Figure 17).

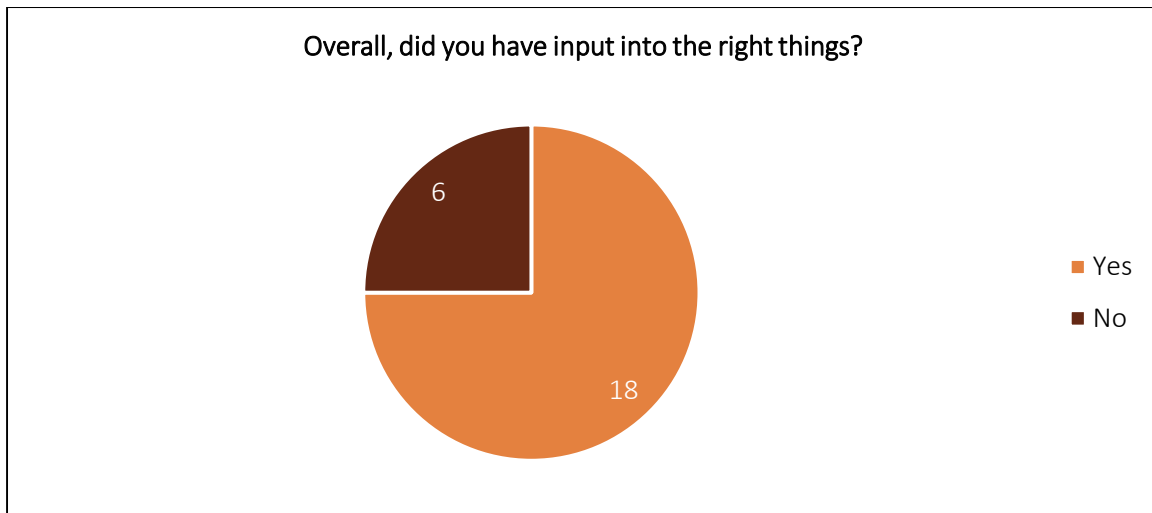


Figure 17: Stakeholders’ perspectives on whether they had input into the right things (Stakeholder survey, 2022) n=24

Often, these respondents were stakeholders who interacted with farmers but were outside of the core Target team (Target farmer, Mentor farmer and consultant) relationship, such as council and industry body representatives. Some felt that they didn’t always have, or were prevented from having, the level of opportunity they would have liked to contribute and develop relationships with the farmers involved, particularly those farmers that they hadn’t interacted with previously. For some of the funding partners, these new relationships would have been a good metric of success for the programme.

As time went on, and I understood the programme more, I felt myself and the others’ voices were heard more. (Stakeholder survey, 2022).

I would have liked to have walked the farm with them all at least once or twice in the process, to see what everyone else was seeing. (Stakeholder interviews, 2022).

A few stakeholders noted that they felt Extension 350 was at its best when there were representatives from the different funding partners:

- Sitting around the kitchen table with consultant, Target farmer and Mentor farmer, offering their expertise, and then developing a plan together
- Attending programme events / meetings, so that during the discussion they could answer questions, provide advice, or offer guidance to ensure farmers met their obligations.

You have to be there in the moment to have those conversations. (Stakeholder interviews, 2022).

There were times in the programme where these stakeholders felt these things happened effectively, and times where there were opportunities to improve. It was noted that there were different roles within the cluster model (refer to page 6), and that the core relationship was between the Target farmer, Mentor farmer and consultant. Stakeholders were mindful of not having too many people involved in discussions, from a resourcing perspective, to avoid overwhelming the farmers involved and to maintain the farmer centric design.

In some areas, the time and resource allocations were regularly reviewed

As is the case for most extension programmes, finding the right balance of funding and resourcing for each activity needed regular review. The budget for the programme was established on day one, and the programme has adapted and learnt as it was underway, and continually worked to balance the proportions of time and resourcing that went into different programme activities to enable the best outcomes possible for the farmers involved.

Some felt that greater overall levels of funding were needed

Some stakeholders felt that greater levels of funding were needed to achieve the scale, scope and ambition of the programme.

Additional funding at the start of the project would have enabled correct resourcing to begin with. (Stakeholder survey, 2022).

Some stakeholders noted that greater funding should come with increased accountability to deliver on key outcomes or performance measures.

The funding at grass-roots level needs to be coupled with a better system for ensuring providers are more accountable for delivery. (Stakeholder survey, 2022).

The programme needed to be better and more adequately funded, conditional on higher and adequate funding should have been a higher level of accountability for consultants and other service providers to ensure planned outcomes were delivered according to Business Plan outcomes. (Stakeholder survey, 2022).

[This model] needs more funding at farm level coupled with a much higher level of accountability... Some examples are 1) consultants are funded for finding each [target group]; 2) once group is approved, the consultant is funded to prepare and present a Business Plan with support of groups, 3) one business plan is approved then the consultant is funded on previously agreed milestones within the business plan, and so forth. (Stakeholder survey, 2022).

Some felt that the consultants required greater funding for the work they undertook

The consultants were contracted to undertake work over three and a half years with a cluster. This was a fixed cost contract, which gave the consultants a high level of ownership and flexibility to deliver in the best way possible for their cluster. The contracts had a number of fixed costs associated with them (meetings, etc.), and consultants with multiple contracts were able to manage these costs more easily.

It was noted that over the course of the programme (particularly in the early years of delivery) many of the consultants worked additional un-funded hours in order to deliver on their Extension 350 commitments.

There are different contracting approaches that the programme could have taken. While the contracts did enable flexibility and reduce the administration time needed to implement them, they were largely input based. Some stakeholders noted that an outcome-based contract could be utilised for future programmes (refer previous section).

Funding allocations for administration and reporting were adapted

There were different perspectives on the resourcing allocated to administration and reporting activities. Some stakeholders felt that this was an area that was under resourced initially relative to the scale of the project. Approximately 6-12 months into the project, the governance group reallocated budget into administration to ensure core tasks were performed.

Project [management] needed more than 2.5 days per week. (Stakeholder survey, 2022).

In contrast, some stakeholders felt that too much was spent on administration activities and events, rather than going directly to the work with farmers. However, the value of such events to building farmer networks and farmer wellbeing was also noted through the evaluation activities.

Too much money spent on administrators. (Stakeholder survey, 2022).

Appeared to be a lot of money being spent on meetings and celebrations when it may have been better spent on accountability for delivery at farm level. (Stakeholder survey, 2022).

Not enough resource was allocated to evaluation activities initially

Evaluation was an area of the programme that received limited resourcing for the first 4-5 years. The resourcing for evaluation work was to largely come from in-kind contributions from project funders, however, this proved a challenging way to resource the evaluation activities, as not all funding partners had the capability or capacity to support the programme in this space.

Despite the limited resourcing, the Extension 350 team developed an evaluation framework and logic model early in the programme, and they focused on data collection (including farmer surveys, reports from consultants and insights from reflective workshops).

In 2020 Extension 350 sought, and received SFFF funding, a proportion of this was allocated towards external evaluators. Scarlatti helped the project team undertake a variety of data collection activities (refer to page 4) and reporting.

Programme design

Summary

The key insights related to the Extension 350 programme design were:

- **The three-plank design helped to ensure a tailored approach for farmers.** By using this approach, all farmers were introduced to the ‘triple bottom line’ concept, that a successful farm business balances financial and environmental sustainability, along with farmer wellbeing. The tailored nature of the approach allowed farmers to identify the goals for their business, and develop actions that aligned with these
- **Some felt the environmental plank could have been a bigger focus.** There were different perspectives on the best ways to incorporate the environmental focus of the programme, particularly related to the timing of when this was introduced to the Target farmers. This likely reflects the challenge of balancing different planks and stakeholder needs.
- **The cluster model provided a catalyst for the growth of farmer relationships and networks.** Farmers increased their relationships with other farmers, consultants, and rural professionals. A particular highlight for many were the relationships that formed between Target and Mentor farmers.
- **The cluster model was adapted for different groups.** On one hand, this was a strength of the model, in that the consultants and the farmers involved were able to adapt the model to best fit their needs. On the other, it meant that different farmers had different experiences with the cluster approach.
- **Many Extension 350 stakeholders would recommend the cluster model but with some changes.** The changes suggested largely relate to how work is undertaken with Associate farmers, including increased activities to enhance engagement.
- **Opportunities for future programmes were identified.** This included focusing on meaningful engagement with Māori farms and trusts and growing Northland consultant capacity.

The three-plank design helped to ensure a tailored approach for farmers

Stakeholders involved in the programme’s inception described how the Extension 350 programme always involved a broader focus than just financial outcomes. During programme development, it was decided that the programme would have a focus on financial, environmental and wellbeing outcomes. Over time, these concepts were refined, and became known as the ‘three planks’, which were easy to articulate to farmers, funders and stakeholders, and cemented the programme’s focus on the ‘triple bottom line’.

The Extension 350 design was also intended to be tailored. Rather than setting standardised goals for Target farms, they undertook Whole Farm Assessments, attended Mark and Measure workshops (these were not available in year one of the programme), and undertook strategic discussions with their Target teams to develop their own personal and business goals through the lens of the three planks. The benefit of this approach was that the goals were driven by the farmers involved, making them more relevant, and facilitating engagement.

The wellbeing plank was a highlight for many

Governance group members felt the Extension 350 programme was among the first group of extension programmes in New Zealand to formally include increased wellbeing as one of its core objectives, alongside environmental and financial outcomes. This has since become more commonplace amongst New Zealand extension programmes.

A particular highlight in this space was the wellbeing score that was developed in the early stages of the project. The wellbeing score is a 1-10 scale that consultants used to check in on their farmers. This was noted by many to be a key success of the programme, as the quantitative nature encouraged participants to be more exact about their wellbeing and provided them with better opportunities to have wellbeing discussions, both one-to-one and in group settings.

Putting a number on [wellbeing], allowed people to express how they were feeling in quite a safe way, it prompted, conversations and contact ... that probably wouldn't have happened otherwise. Consultant (review and reflection workshop, 2022).

This developed a system that you could talk in public with a group of people, without putting them on the spot. I think you've created a level of discussion about wellbeing that you would have had one-on-one, but that you wouldn't have had necessarily in a group, because no one would like to share. Consultant (review and reflection workshop, 2022).

My wellbeing is now a seven or an eight most of the time. Before it was probably a two. Farmer (Celebrating success, 2022).

Some consultants reported that they are using this wellbeing score more widely than just with their Extension 350 farmers, and that it has become known within Northland.

Some felt the environmental plank could have been a bigger focus

Evolution in the environmental area

As part of Extension 350, farmers were encouraged to take steps to improve the environmental sustainability of their farms. It is noted that when the programme began, environmental sustainability was a changing area within the primary industries, with many new regulations on the horizon. While the general direction of this change has become clearer over recent years, some uncertainty remains about what this will mean for individual farmers. The FEP development process has particularly evolved over the course of the programme, in the earlier years, Northland Regional Council and Fonterra completed different parts of the plan for Extension 350 farmers. Auckland Regional Council funded the development of Farm Environment Plans in their territory. More recently this process has all been put together into a streamlined FEP process.

We had to start somewhere, and this project coincided with a time where there was a ... lot of uncertainty about what was coming. Consultant (Review and reflection workshop, 2022).

Focus on the environmental plank

A few stakeholders felt the environmental plank did not have the same weighting as the other planks during the design stage of the programme. It was noted that the Whole Farm Assessment and (for many) Mark and Measure were undertaken early on in a Target farm's involvement with the programme, where the FEP was often developed about a year in. Some felt that this meant that the

core goals for the programme were established prior to the FEP process, which some felt made it difficult for the environmental goals to be incorporated or prioritised.

If you have an issue, [and it could mean] you aren't going to be compliant in two years' time, you need to organise this when you set your goals. (Stakeholder Interviews, 2022).

The environment stuff we could have done in a more streamlined process. Consultant (review and reflection workshop, 2022).

Other stakeholders agreed that ideally the FEP would be completed in the initial stages of a Target farmer's involvement with the programme, however, they felt this wasn't always possible within Extension 350. Reasons for this included:

- Focusing initially on building trust and relationships amongst the Target team (Target farmer, Mentor farmer and consultant)
- Managing the time commitment of the Target farm in the first six to twelve months of the programme (it was noted that, for some this period was overwhelming because of the volume of activity, refer to page 24)
- Navigating the environmental processes that were evolving, the FEP process became more streamlined over the course of the programme and more people were able to complete the full FEP process (particularly for group two and three farmers).

Some stakeholders felt that an opportunity was missed to demonstrate to farmers that environmental sustainability is key to successful business.

A lot of these environmental things are key business decisions too, e.g., securing a \$120 water meter, it's not a big thing, but it will have a big impact on your business. (Stakeholder interviews, 2022).

These stakeholders noted that in future, the Whole Farm Assessment, Mark and Measure and FEPs should be completed at the beginning of the programme, and then an action plan developed incorporating all these elements. It was noted that, upon recognition of this timing issue within the programme, the project team encouraged the development of action plans for the groups two and three farmers, and when this happened it did work well.

The consultant took the plan they got from council, sat down with the farmer and the LMA from NRC, and helped them identify which actions they were going to focus on. Then created an action plan. (Stakeholder interviews, 2022).

Some stakeholders noted that future programmes could consider monitoring a suite of environmental indicators, including things like progress made against FEP actions and environmental compliance.

Environmental progress has been made by farmers

Many participating farms had FEPs by the end of the programme. These FEPs are the first step towards making environmental change. As noted above (refer to page 21) some stakeholders also reported the growing awareness amongst farmers and rural professionals of environmental sustainability as a result of Extension 350.

Balancing multiple outcome areas is a challenge for extension programmes

A significant theme that emerges from the discussion above, is the differences in perspectives around where the prioritisation should have been in Extension 350. Scarlatti's observation is that it is challenging for extension programmes to equally balance multiple objectives. It is only relatively recently that extension programmes have been required to consider environmental, financial; and wellbeing outcomes simultaneously. It is not surprising that the best way to balance these, at times, competing priorities still needs to be determined.

The cluster model provided a catalyst for the growth of farmer relationships and networks

As noted in the Farmer relationships and networks section (refer to page 35), a highlight of the programme for many involved were the relationships developed by the Extension 350 farmers. This included relationships with:

- Other farmers
- Consultants
- Rural professionals.

The design of the cluster model has been a catalyst for these relationships.

One of the most highly regarded features of the model was the Mentor farmer role

Stakeholders recalled that prior to Extension 350, 'go to farmers' were often called on by others, including consultants. The inclusion of these 'go to farmers' in an official mentorship role was a fundamental part of the Extension 350 design.

While consultants were important because they brought technical skills, and organised the structural aspects of interactions and follow-ups, it was the Mentor farmers who supported the Target farmers to learn new things and provided confidence to Target farmers when it came to enacting change. Mentor farmers were valuable due to their real-world experience, as they could give confidence to Target farms that they would get through tough times. Often, Mentor farmers made themselves available to Target farms by phone whenever they needed it.

I really valued the mentor's input that we had. Target farmer (Six monthly farmer survey, 2020).

The advisors, and the mentor farmers are great value, particularly the mentor farmers who give up their time so freely. Target farmer (Six monthly farmer survey, 2020).

The mentor is the gel that holds it all together. Farmer (Exit interviews, 2020).

In groups where the Target farmers already knew the Mentor farmer prior to the programme, this appeared to help with initial trust building

The cluster model was adapted for different groups

As is often seen in group-based extension models, the Extension 350 cluster model did function differently in different circumstances. On one hand, this is a strength, in that the consultants and the farmers involved were able to adapt the model to best fit their needs. On the other, it meant that different farmers had different experiences with programme. The model accommodated different factors, including:

- **Exclusivity.** Some clusters were exclusive, and others invited farmers from the wider group to meetings.
- **Experts.** Some groups participated in the existing activities or extension, and others brought in experts in areas of interest.
- **Formality.** Some groups ran formally with structured meetings, while others involved informal social events.
- **Meeting format.** Some did most things in person and others did more by phone / online.
- **Meeting frequency.** Some met regularly and others met infrequently.
- **Meeting type.** Some had few Associate farmers and cluster wide events, and others had a large number of these.
- **Prior relationships.** Some clusters include people that knew one another beforehand, and others were initially strangers.
- **Role of Associate farmers.** Some had Associate farmers in the traditional sense and others had Associate farmers that were more like Mentor farmers.
- **Size.** Some groups had over ten Associate farmers, some had five (the original intention) and others had no Associate farmers.

The group model fostered accountability

Some farmers noted **the value of the group model**, both for holding themselves accountable, and also being part of a team.

Being in a group made us accountable, we had to report to them. Target farmer (Celebrating success, 2022).

Being in a group means it is not all on you, you are making decisions together. Farmer (Celebrating success, 2022).

Many stakeholders would recommend the model but with changes

As we have seen, engagement with Extension 350 varied widely, and the various reasons for this have been explored in earlier sections (refer to page 17). Stakeholder survey findings suggest that just over half of respondents are likely to recommend this model to future programmes with *some* changes (refer to Figure 18). A third were unlikely to recommend without *significant* changes. Such results are not unexpected, as through programme delivery stakeholders identify the areas that could be improved for next time and the wider context / needs can evolve over time.

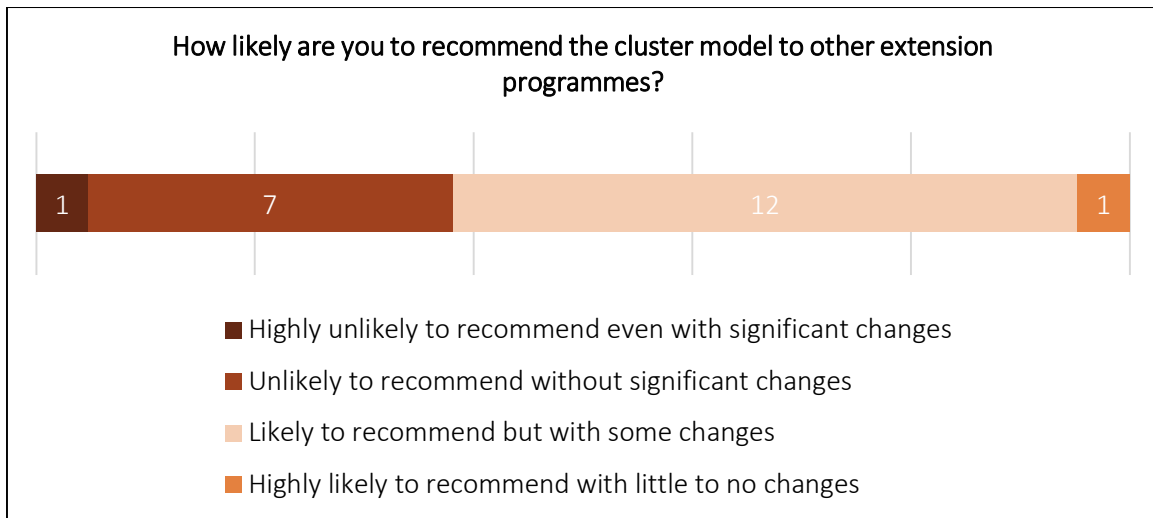


Figure 18: Likelihood to recommend the cluster model approach to other extension programmes (Stakeholder survey) n=21

Almost half of respondents who provided a comment suggested that the area that they would make changes to relates to the way the Associate farmer group operates, including increased and consistent activities for this group in order to increase engagement (refer to Figure 19).

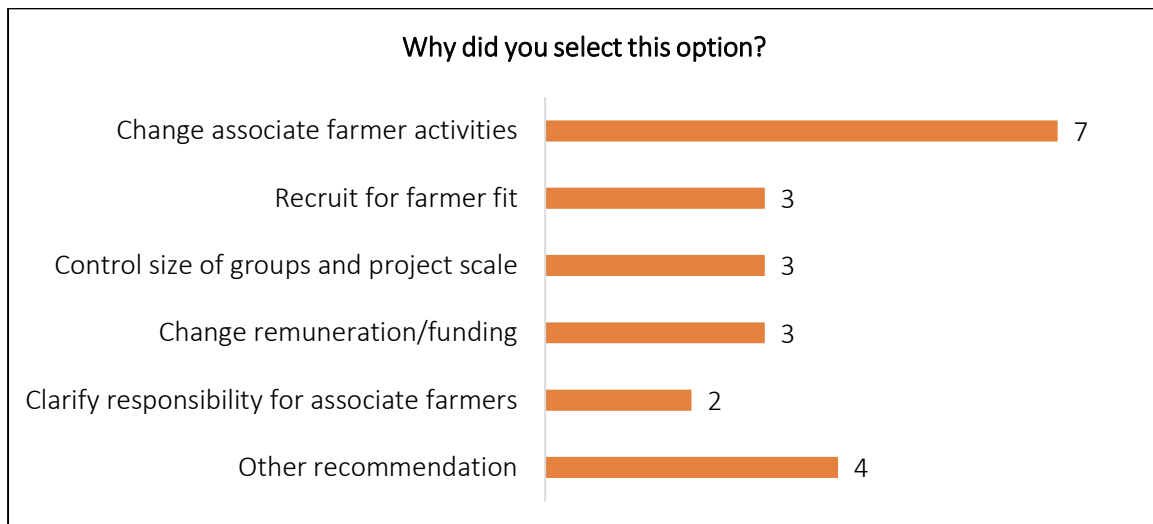


Figure 19: Stakeholder suggestions on how they would change the cluster model in future programmes (Stakeholder survey, 2022) n=18

Opportunities for future programmes were identified

Meaningful engagement with Māori farms and trusts

As early as it could be resourced (2018), the programme completed a Māori strategy review and hui to discuss the ways in which the programme could best engage Māori farms and trusts. This involved local Māori, MPI, TPK and other stakeholder organisations. One of the outcomes of this process, was that the best approach for Northland Māori, was a by Māori for Māori approach to extension. While this was beyond the scope of what Extension 350 could deliver, stakeholders sought additional funding to either broaden the scope or for a third party to pick up this work, however only some was secured.

Stakeholders agree that there are therefore still opportunities to design future programmes with resource set aside for this at the beginning.

Opportunities to grow rural professional capacity and capability

Programme funders note that there is a limited pool of consultants operating in Northland, and that there is an opportunity to grow consultant capability and capacity. At times, the lack of appropriately skilled consultants was a challenge for Extension 350. Approximately 20% of the consultants involved with the programme were in the early stages of their consultancy career, and the programme aimed to support their growth.

Some stakeholders noted that programmes like Extension 350 provide a great opportunity for rural professionals to learn from each other. Where this did happen within the programme, it was a highlight for some of the consultants and rural professionals involved (refer to page 40).

It could have provided our newer [team member] to work with the consultant and farmer and learn about the wider farming business, learn about the constraints on farm that some of us maybe aren't thinking about, or where the money needs to go on farm, and their priorities. (Stakeholder interview, 2022).

Programmes like this do help get new consultants going with consultancy. Consultant (Review and reflection workshop, 2022).

Cost-benefit analysis

Summary

A cost-benefit analysis was developed to quantify the ratio of the financial benefits generated by Extension 350 to the level of investment. It is important to note that other benefits (such as in the environmental sustainability and wellbeing space), are not calculated here but should be considered in addition to the ratio discussed. The key insights from the cost-benefit analysis work undertaken for Extension 350 are:

- **Extension 350 was a good investment, from the financial benefits alone.** The total financial benefit of the Extension 350 programme is modelled to be between \$7 and \$18 for every \$1 invested in the programme, with a midpoint of \$11.40 (Table 2).
- **The modelled benefit-cost ratio is of a similar magnitude to the business case.** The benefit-cost ratio modelled in this analysis is of a similar magnitude to the benefit-cost reported in the Nimmo Bell business case of 14.8.
- **The types of benefits realised extend beyond operational / production.** While not an explicit output of the cost-benefit model, a key observation during the analysis was that participating farms were realising several types of financial benefits. Operational benefits generated from on-farm practice changes were the primary source of financial benefits, although multiple farms also realised accelerated career progression and improvements in their equity position as other financial benefits. The financial impacts of these benefits were estimated and included within the cost benefit analysis.
- **A small share of farmers realised a large share of the benefits.** The total financial benefits generated by the Extension 350 programme (Table 2) are not realised equally by the participating farms. Approximately 10% of participating farms realise approximately 50% of the total benefits (primarily the Target farmers), while approximately 50% of participating farms realise approximately 90% of the total benefits (Figure 21). Fifty-nine Associate farms (17% of total participating farms) were modelled to realise no financial benefits. When this distribution was considered as part of the closing discussions of this work, it became apparent that some funders' expectations had been for a more even distribution. However, these expectations were not discussed explicitly at the start of the project, nor considered in the original business case analysis.
- **The cost-benefit analysis outputs are particularly sensitive to two assumptions.** The findings are most sensitive to inputs relating to:
 - *Level of engagement.* The more a farmer, of any participant type, was engaged with the programme and their cluster, the higher the expected financial benefit realised.
 - *Participant type.* Target farmers are assumed to realise the most financial benefits from the programme (Figure 21). As the role of Mentor and Associate farmers are to support the change journey of the Target farmers, they are both assumed to realise about a 25% of the financial benefit of Target farmers on average. This value of 25% is a key assumption used in the model.

Context

The scope of this analysis is defined by three characteristics

For the purpose of interpreting this section, it is important to first acknowledge what the cost-benefit analysis does and does not do.

- 1. Focus on financial benefit.** Extension 350 generated a range of non-financial benefits such as better environmental and wellbeing outcomes. However, this cost-benefit analysis focuses only on the financial impacts for two main reasons:
 - While it is possible to attribute economic values to non-market outcomes, such as environmental impacts and wellbeing, these values vary from stakeholder to stakeholder. This creates a risk of reporting results that are not as robust as an analysis of financial impacts which, in turn, creates a risk of ‘diluting’ the confidence in the financial analysis.
 - The results show that the financial impacts alone justify the Extension 350 programme. It is not necessary to include non-market impacts to argue that the programme was worthwhile.
- 2. Focus on returns to public-sector investment.** This analysis focuses on the return from the point of view of public-sector funders (Northland Regional Council / Northland Inc., DairyNZ, Beef + Lamb New Zealand and the Ministry for Primary Industries), rather than from the perspective of participant farmers for the purposes of funders being able to evaluate their investment.⁹
- 3. Focus on direct benefits.** The public-sector funders of Extension 350 are interested in two types of benefits – an increase in farm business profitability (a direct benefit) and the creation of flow-on benefits for the wider Northland economy (an indirect benefit). This analysis focuses on direct benefits.

This analysis focuses on farm financial impact

The primary indicator that is used to measure success is a ratio of the present value of:

- The investment made in Extension 350 by public sector funders (both cash and in kind)
- Cumulative, incremental farm profits.

The reason for using this measure is because the direct beneficiaries of Extension 350 are farm-businesses rather than the funders themselves. As such, return on investment (ROI) measures that might be used if the main funders were the beneficiary, do not apply.

Using this measure, what can be considered a good rate of return is gauged by benchmarking alternative investments – keeping in mind that these are not always perfect comparisons.

- DairyNZ cites a value of 15:1 for the return that it provides to its levy-payers

⁹ That said, the analysis does actually cast some light on the return on investment from the farmers perspective – this varied widely from farm to farm, with the best farms achieving many multiples of their time and cash investment back, and the worst getting close to no returns.

- The Red Meat Profit Partnership was estimated to provide a return of approximately 17:1 (Scarlati, 2020)
- The original Nimmo-Bell business case for Extension 350 projected returns of 14.8:1 (Nimmo Bell, 2016).¹⁰

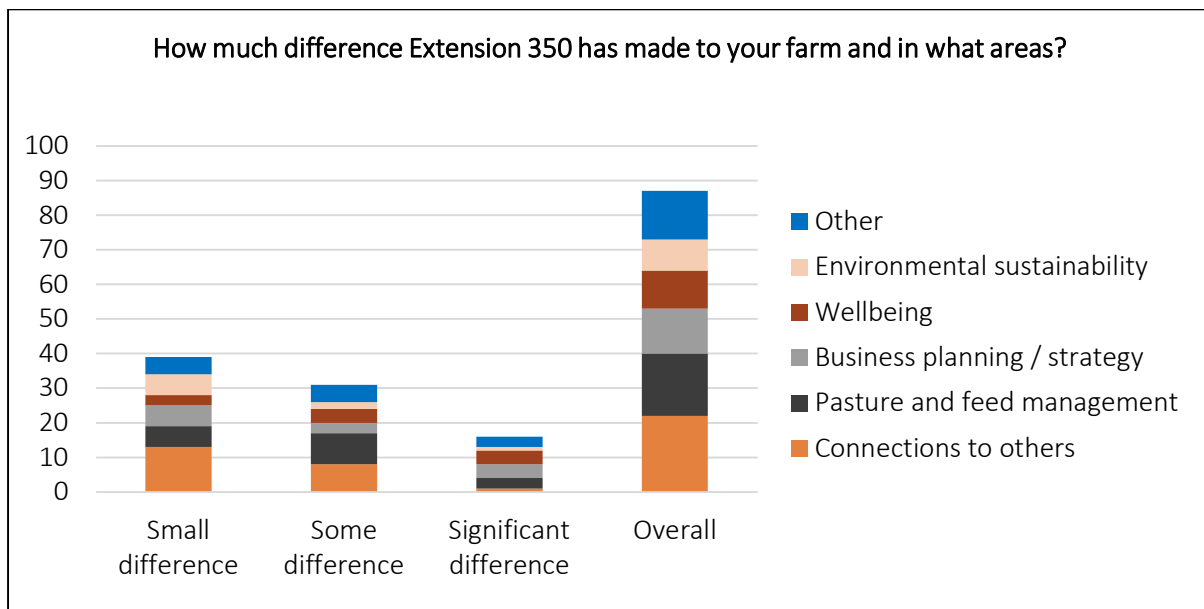
Based on these benchmarks, one may consider that a 15:1 return would be considered ‘worthwhile’ if we were considering the financial benefits alone. Given the mixed focus of Extension 350 with environmental and wellbeing benefits, a lower ratio might be appropriate – such as 10:1.

The distribution of benefits is also important

A further consideration in evaluating the success of Extension 350 is the distribution of benefits. When this distribution was considered as part of the closing discussions of this work, it became apparent that some funders’ expectations had been for a more even distribution. However, these expectations were not discussed explicitly at the start of the project, nor considered in the original business case analysis. Had this been done, different design decisions may have been made. This is potentially an important observation for future programmes.

Methodology

Primarily, the financial benefits were production-based, resulting from an on-farm practice change, but also include accelerated career progression and equity improvements on some occasions (refer to Figure 20). As part of this analysis, we sought to put indicative financial values on these outcomes (in consultation with the consultants and the project team) and used them to calibrate the wider model. It is noted that these outcomes are of a similar order of magnitude as operational profit for many farmers.



¹⁰ Note that the timeframe used within this analysis is the same as was used in the original Nimmo Bell business case.

Figure 20: Associate farmers' perspectives on the difference Extension 350 made in different areas, by the amount of difference in total they felt Extension 350 had made on their farm (Associate farmer survey, 2022) n=33¹¹

Two approaches were used to model the financial benefits. The production-based benefits were modelled using a 'top-down' framework using the variation in Northland farm profitability, as reported in industry statistics, as an indicator of what reasonable improvements could be achieved. The impacts were also modelled using a 'bottom-up' framework using farmer case studies designed with the consultant group. The two approaches were reconciled by a stakeholder group to arrive at a triangulated set of values for the benefits received by Target farmers. The financial benefit for Target farmers was then discounted using a set of assumptions (see now above about key sensitivities) to model the financial benefits for Mentor and Associate farmers.

Cost-benefit analysis results

The modelled financial benefits of the Extension 350 programme are presented in Table 2 below. A lower and upper bound have been created to acknowledge the level of uncertainty in inputs and future outcomes to create a financial benefit range (i.e., we could reasonably expect the financial benefits generated by the Extension 350 programme to be between the lower and upper bound).

The key output in Table 2 is the ratio of the present value of financial benefits received to the present value of the total investment made between 2016 and 2036 in the bottom row¹². The modelled financial benefits for the Extension 350 programme suggest that for every \$1 invested in the programme, between \$7 and \$18 in industry financial benefits will be generated as a result, with a midpoint of \$11.40.

Table 2: Modelled financial benefits of the Extension 350 programme

Particulars	Lower bound	Midpoint	Upper bound
	\$ millions	\$ millions	\$ millions
Annual farmer financial benefits			
Target farmers	1.9	3.6	6.8
Mentor farmers	1.0	1.2	1.4
Associate farmers	1.6	1.9	2.3
Total annual farmer financial benefits	4.4	6.8	10.6
Total farmer financial benefits (2019 – 2036)	59.9	91.3	142.6
Total investment¹³ (2016 – 2022)	4.1	4.1	4.1
Present value (2016) of farmer benefit	23.2	35.4	55.3
Present value (2016) of investment	3.1	3.1	3.1
Present value farmer benefit / present value investment	7.5	11.4	17.8

¹¹ Note that 'other' included succession, career opportunities, social, people / farm team, animals and genetics, and debt repayment or financing.

¹² A benefit to cost ratio is similar to a return on investment. A benefit to cost ratio is used in this analysis instead because the benefits generated by the programme were not realised by the same stakeholders who made the investment.

¹³ Investment includes both cash and in-kind contributions.

It is important to note though that the industry financial benefits generated by the Extension 350 programme are not equally realised by all participants. Figure 21 below illustrates the distribution of financial benefit realised by each of the participating farms. A small share of the farmers realised a large share of the industry financial benefits generated. Specifically, approximately 10% of participating farms realise approximately 50% of the total financial benefits generated (primarily Target farmers), and approximately 50% of participating farms realise approximately 90% of the total financial benefits. Of the participating farmers, 59 Associate farms (approximately 17% of total participating farms) are modelled to have realised no financial benefit from their involvement in the programme, primarily due to their lack of engagement within their cluster.

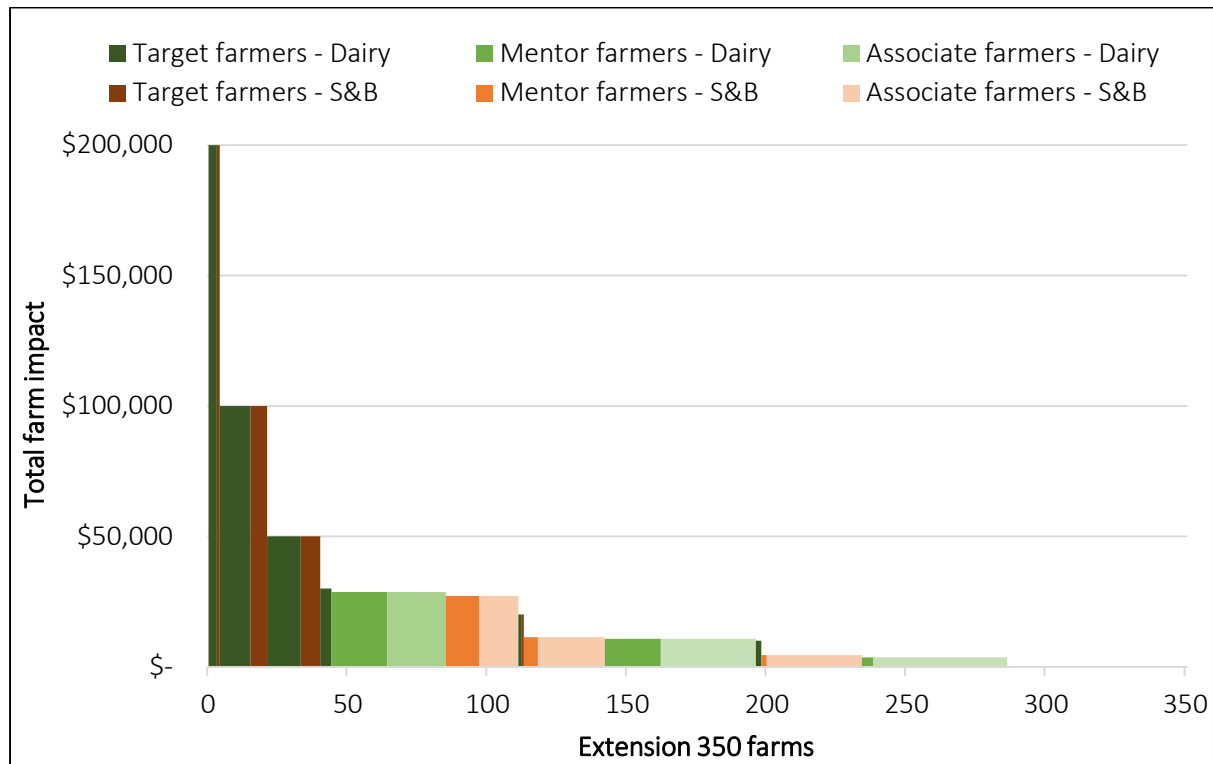
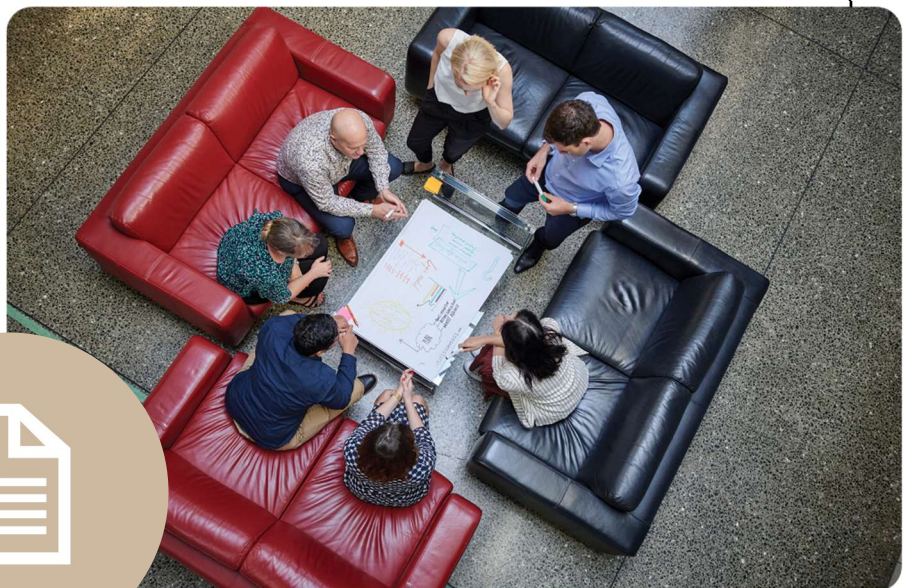


Figure 21: Modelled benefits (midpoint) for Extension 350 participating farms

Appendices



Appendix A: Evaluation methodology

Objectives

The key objectives of the Extension 350 evaluation work were to:

- Capture and understand farmers' journeys
- Ensure learnings from Extension 350 as a whole are able to be shared and implemented appropriately to future projects.

Research questions

A series of research question were identified to deliver and expand on the above objectives. These were:

- What has happened within the Extension 350 programme?
- What changes in skill, attitude and behaviour are being exhibited by farmers and stakeholders, and what has driven this change?
- How well has Extension 350 been designed and delivered?
- Has Extension 350 achieved the cross-agency collaboration and 'learn as we go' philosophy that the programme aspired to?
- What benefits has Extension 350 delivered for farmers and programme partners?
- Has investment in the programme been worthwhile for farmers and programme partners?
- What has been learnt through the development, delivery, and evaluation of Extension 350?

Overview of evaluation methodologies

The following table presents an overview of the key data sources that have been utilised within this report. This includes those led by AgResearch, Scarlatti and Extension 350 funders.

Table 3: Summary of evaluation methodologies

	Ad hoc meetings and discussions with project stakeholders	Exit Interviews by Lincoln University, DairyNZ and Scarlatti	Six monthly farmer survey	Deep dives into key indicators of success	Impact modelling
Date	2016 - 2022	October 2020 – August 2022	2018-2022	June 2021, October 2021	2021-2022
Method	Meetings with consultants, project team, governance group and stakeholders.	Exit interviews at the end of each groups' Extension 350 experience.	Online survey.	Stocktake review, interviews, literature review, workshop with wider Extension 350 evaluation group.	Modelling, based on evidence gathered through surveys, interviews and consultant case studies.
Objective	A range of ad-hoc discussions and meetings were undertaken to refine the evaluation approach, ask questions and collect insights.	Capture experiences, lessons learnt, and the changes participants have made.	Understand the perspectives of participating farmers on overall value; its impact on profitability, sustainability, and wellbeing; and on their barriers to making change.	Identify the possible key drivers of Target farm group success, in order to understand what makes certain groups successful.	To quantify the ratio of the financial benefits generated by Extension 350 to the level of investment.
Sample	NA	Farmers and consultants from groups one, two and three.	Target farms, Mentor farmers and Associate farmers.	NA	NA
Sample size	NA	Round A: 1 programme coordinator, 3 consultants, 6 Target farms, 8 Associate farmers, 6 Mentor farmers (group one). Round B: 20 Target farms, 13 Mentor farms (group two). Round C: 16 Target farms (groups one and three).	Varied for each survey.	NA	NA
Frequency	Ongoing.	Annual	Six monthly	One off	Ongoing
Note		Find within three separate exit interview reports, 2020, 2021, 2022.	Find within the interim report, 2021.		

	Governance group survey	Associate farmer survey	Stakeholder survey	Stakeholder interviews	Document stocktake
Date	February 2022	July 2022	July 2022	May 2022	September 2020
Method	Online survey	Online survey	Online survey	Online interviews	Literature review of existing documentation.
Objective	Capture governance group perspectives on overall tracking of the programme, key successes and challenges, lessons learnt and what they would do differently next time.	Understand why Associate farmers became involved in Extension 350, what activities they valued most, and what difference (if any) Extension 350 made to their them or their farm.	Understand involvement, the main successes and challenges, impact of the collaboration, perspectives on the cluster model and what lessons were learnt.	Understand key successes and challenges, but also how expectations of participants, project activities and goals have evolved since inception and what caused these changes	Create a stocktake document which provides an overview of the evaluative data and information collected to date.
Sample	Governance group members.	Associate farmers.	All stakeholders (from every year of the programme)	Stakeholders involved with the programme	NA
Sample size	8	47	21	7	NA
Frequency	One-off	One-off	One-off	One-off	One off
	Farm exit discussions	Evaluation group meetings	Evaluation activity led by Ag Research		
Date	Throughout the lifetime of the programme	2016 - 2022	2016-2020		
Method	Discussion with consultant, guided by a form.	Workshops (either online or in-person).	A range of evaluation activities, including reflective workshops, data collection and reporting.		
Objective	Understand the impact of the programme from the farmer's perspective.	To share evaluation insights, and to receive feedback and direction to help guide the evaluation work.	To reflect on progress, celebrate successes, note areas of improvement and collect evaluation insights.		
Sample	Target farms	Representatives from the partner organisations.	NA		
Sample size	18	NA	NA		
Frequency	As each group finished the programme.	Quarterly	Ongoing		

Logic model

The following is the Extension 350 logic model created in 2017 by programme funders.

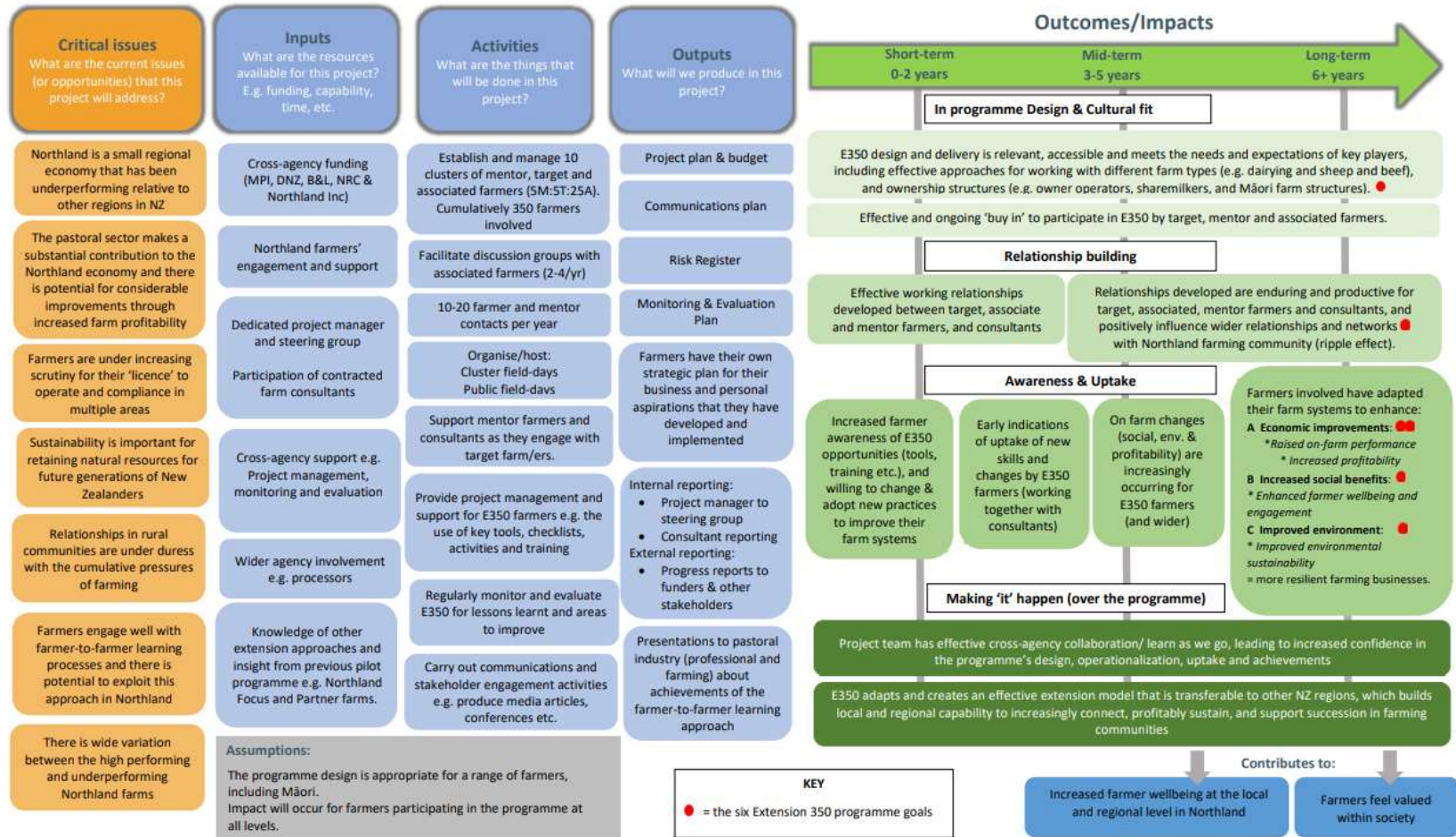


Updated: v5, April 2017

Extension 350: "Farmers learning from farmers"

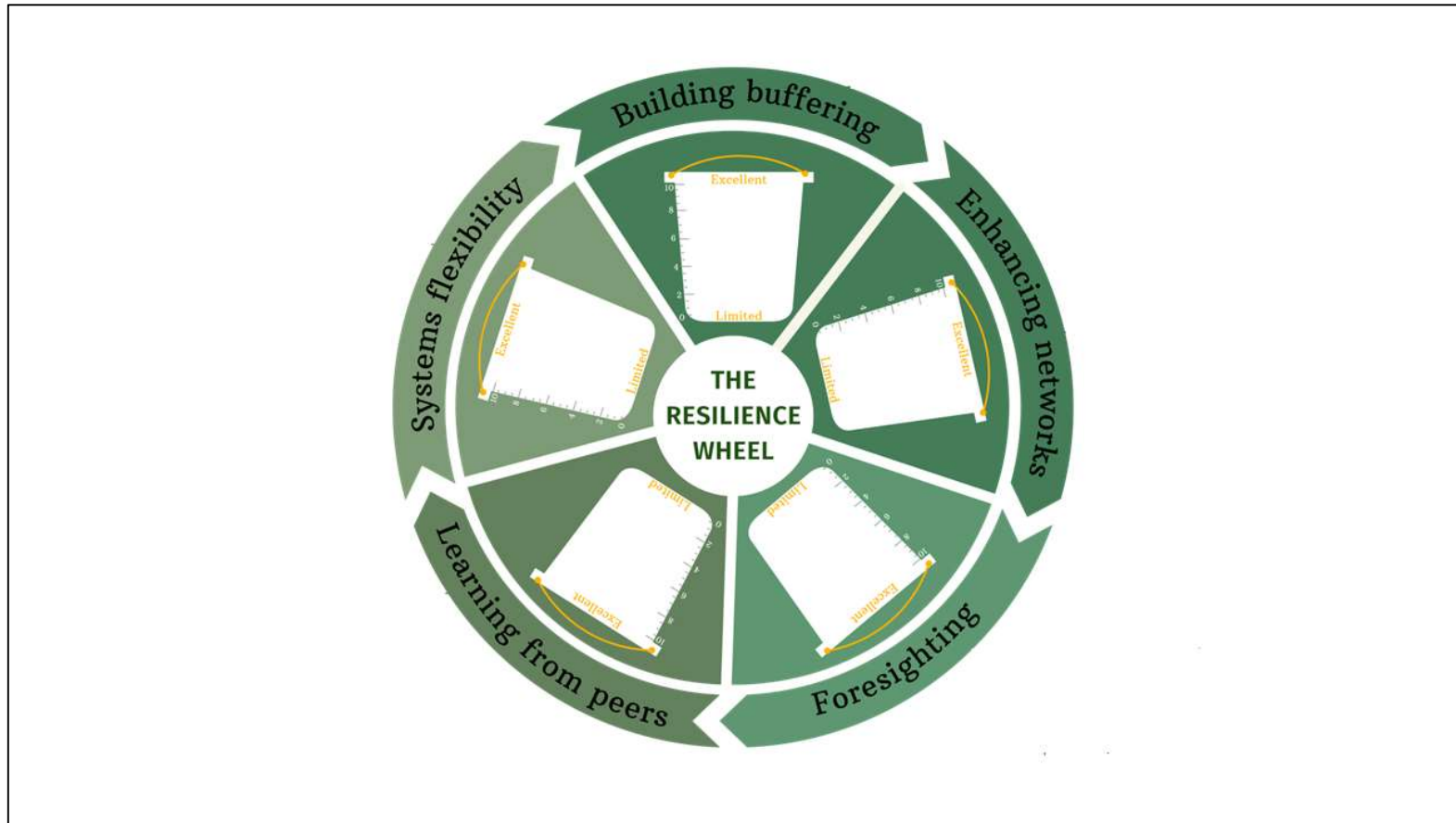
Farmer focused, farmer led programme in Northland

2016-2022



Appendix B: Resilience wheel

The resilience research undertaken by DairyNZ and Lincoln University as part of the Extension 350 evaluation, has led to the creation of a resilience wheel tool¹⁴. Future programmes should consider using the resilience wheel in partnership with the wellbeing score.



¹⁴ Knook, J., Eastwood, C., Beehre, L., Mitchelmore, K., and Barker, A. (2022). Building the rural knowledge economy and resilience through agricultural extension programmes. Land Management and Systems, Faculty of Agribusiness and Commerce, Lincoln University. [To be published].