

Evaluation of the Sustainable Farming Fund

Main Report

31 January 2014

Prepared for: Ministry for Primary Industries

Prepared by: Judy Oakden, Judy Oakden Consultancy
Julian King, Julian King & Associates
Dr Will Allen, Learning for Sustainability

Published by: Kinnect Group
P.O. Box 2590 Wellington 6410
New Zealand
email: judy@kinnect.co.nz

ISBN 978-0-473-27326-2



Kinnect
group

Judy Oakden Consultancy • Research Evaluation Consultancy
The Knowledge Institute • Julian King & Associates

Citation:

Oakden, J., King, J., Allen, W. (2014) *Evaluation of the Sustainable Farming Fund: Main Report*. Kinnect Group: Wellington

Published by: Kinnect Group
P.O. Box 2590 Wellington 6410
New Zealand
email: judy@kinnect.co.nz

ISBN 978-0-473-27326-2

Contents

Acknowledgements.....	6
Evaluation team.....	6
1 Executive summary	7
2 Introduction	9
Terms of reference for the evaluation	11
Key evaluation questions.....	12
Methodology	12
3 The unique value proposition of the SFF	15
Summary	15
Introduction	16
Explicit role of SFF versus other funds.....	16
Funds of interest	16
Strengths of SFF in relation to other funds	19
Perceived challenges for SFF in relation to other funds.....	20
4 Has SFF been worth the investment to date?.....	22
Summary	22
Understanding MPI and partner investments.....	22
Areas where SFF contributes positively	28
Increased capability.....	29
Development and adoption of new technology	31
Enhanced relationships	35
Behaviour change with positive environmental benefits.....	36
Protecting or growing economic value.....	39
Unanticipated outcomes	41
Cumulative impacts of successive projects	41
Building capacity of SFF Project Managers	42
Māori self-determination supported	44
Enablers and barriers to the success of the SFF.....	45
Enablers.....	45
Barriers.....	47
5 Maximising value for money from SFF	50
Investment in MPI Advisers	50
Administrative support for grantees.....	50
Harnessing the existing capacity of SFF Project Managers	51
Communications and extension strategy	51
Reframing eligibility criteria	51
In summary.....	53
6 Appendix A: Context to the SFF	55
7 Appendix B: Evaluative rubric.....	56
8 Appendix C: Evaluation methodology	59

Phase One – Scoping	59
Phase Two – Data collection and analysis	59
Self-completion questionnaire for SFF Project Managers	60
Key stakeholders.....	61
Focus group with Fund Managers	61
Case Studies.....	61
Other data sources included in the review	64
Limitations	64
9 Appendix D: Challenges to evaluating and attributing impacts.....	66
10 References.....	67

Tables

Table 1: Key current policies that link to SFF	11
Table 2: Total mentions of SFF projects for each region	25
Table 3: Summary of enablers and barriers to the success of the SFF.....	45
Table 4: Changes in political and operating environment for SFF	55
Table 5: Evaluative criteria	56
Table 6: Evaluative rubric defining “value for money” from the SFF	57
Table 7: <i>Examples</i> of possible SFF outcomes by Bennetts Hierarchy level	58
Table 8: Summary of data collected for SFF evaluation	60
Table 9: Cases for performance stories	62
Table 10: Outline of topic guides	63
Table 11: Other data sources included in the evaluation.....	64

Figures

Figure 1: Overview of the key people involved in SFF projects	9
Figure 2: Outcomes Framework for the Sustainable Farming Fund..	10
Figure 3: Key performance dimensions considered in assessing VFM.....	13
Figure 4: Focus of SFF and other funding programmes with similar aims	15
Figure 5: Overall landscape of funding from the key organisations supporting environmental and agricultural innovation and production in New Zealand	18
Figure 6: Total value of grant applications approved by fiscal year..	23
Figure 7: Number of projects receiving SFF grants each year	23
Figure 8: Average value of each SFF grant by fiscal years.....	24
Figure 9: Distribution of SFF projects by duration of time to completion	25
Figure 10: SFF projects and funding by sector.....	26
Figure 11: Total (all-sources) project funding alongside SFF funding by fiscal year.....	27
Figure 12: Social benefits arising from SFF	29

Figure 13: Extent of technology transfer	32
Figure 14: Enhanced relationships from SFF projects	35
Figure 15: Behaviour change with positive environmental benefits .	37
Figure 16: Assessment of the value of the SFF projects.....	39
Figure 17: Extent to which Project Managers believe SFF contributes to growing economic outcomes.....	40
Figure 18: Diverse backgrounds of SFF Project Managers responding to the online survey	43

Fileref: 140131 SFF Main Evaluation Report vxx
Last saved: 3-Feb-14

Disclaimer: The information in this report is presented in good faith using the information available to us at the time of preparation. It is provided on the basis that the authors of the report are not liable to any person or organisation for any damage or loss which may occur in relation to taking or not taking action in respect of any information or advice within this report.

Acknowledgements

The evaluation team would like to express their gratitude to many people who have shared their knowledge to support this study.

Firstly, we acknowledge the insight and support from the staff of the Ministry for Primary Industries (MPI) who were closely involved in all stages of the project.

We also acknowledge the wider MPI team who participated in the development of the evaluative criteria and the sense-making sessions

We also express gratitude to the rural land owners and managers, representatives from industry organisations and agribusiness, and the researchers and consultants who took part in the study, either as representatives of the case study projects or by participating in the online survey.

Evaluation team

The Ministry for Primary Industries contracted Judy Oakden Consultancy, a member of the Kinnect Group, to carry out the review. Judy Oakden led the team and had overall responsibility for the project. The research team comprised Judy Oakden, Julian King, Kate McKegg and Nan Wehipeihana from the Kinnect Group in collaboration with Dr Will Allen from Learning for Sustainability.

Companion Documents

This is the main evaluation report. Also available (from the MPI website) are:

- A summary report (approximately 17 pages)
- A report documenting three case studies.

1 Executive summary

1. The Sustainable Farming Fund (SFF) invests in grass-roots projects with the aim of delivering economic, environmental and social benefits. The SFF was evaluated in 2013 to assess outcomes, value for money and possible adaptations to ensure the Fund remains effective and fit for purpose.
2. MPI commissioned this evaluation of the SFF portfolio to provide assurance of the outcomes and value for money to date (2000–13); and to capture learnings and an evidence base for possible adaptations, to ensure it is fit for purpose in the future. The evaluation uses an ‘evaluation specific methodology’¹ based on an outcomes framework, rubrics and mixed methods including economic methods. This methodology differs from a cost benefit analysis in that a wider range of criteria are considered in determining the extent to which the SFF was value for money.
3. **The evaluation found that the SFF is good value for money and makes a worthwhile and valuable contribution to primary industries and rural communities.** It supports the interests of science, the environment, agribusiness and the community in ways not replicated by other funding programmes.
4. Available evidence indicates that SFF funds are being allocated and used in accordance with the intended purpose and strategic priorities of the SFF, and that the SFF has a track record of investing in successful projects. Furthermore, the SFF has contributed to encouraging significant partner co-investment in these projects.
5. Among the key benefits of the SFF are its contribution to:
 - increased capability for problem solving at individual, community and sector levels
 - enhanced relationships and networks between farmers, rural communities, scientists, local government and industry bodies
 - behaviour change that supports sustainable farming, including farmer engagement and emergence of leaders to champion ongoing change
 - development and adoption of new technology and environmentally sustainable practice

¹ For further information on what constitutes an ‘evaluation specific methodology’ see the following publications:

Davidson, E.J (2013) Evaluation-Specific Methodology: the methodologies that are distinctive to evaluation. GenuineEvaluation. Retrieved 20 December 2013 from <http://genuineevaluation.com/evaluation-specific-methodology-the-methodologies-that-are-distinctive-to-evaluation/>

King, J., McKegg, K., Oakden, J. & Wehipeihana, N. (2013) Rubrics: A Method for Surfacing Values and Improving the Credibility of Evaluation. *Journal of Multidisciplinary Evaluation*, 9: 21, 11-20.

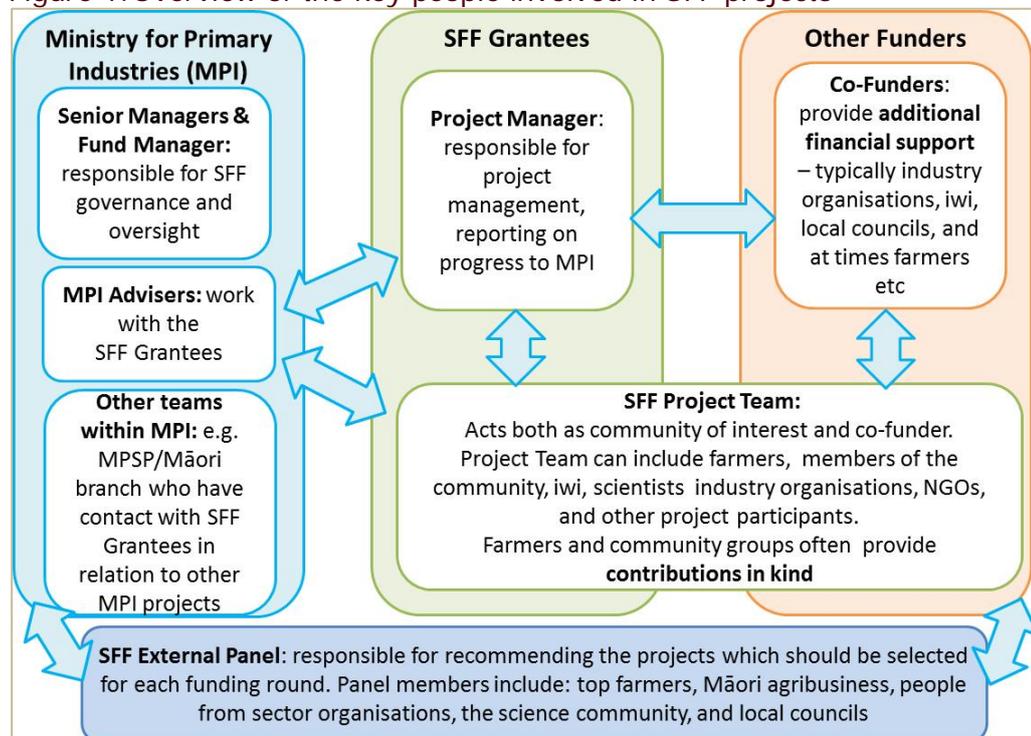
Scriven, M. (2008). A summative evaluation of RCT methodology: & an alternative approach to causal research. *Journal of Multidisciplinary Evaluation*, 5, 11-24.

- protecting and growing the economic value of primary industries, including export opportunities.
6. In addition to achieving its aims, the SFF has contributed to unanticipated benefits, including:
- cumulative impacts from a number of related SFF projects over time, with later projects building on learnings from earlier ones
 - development of skilled Project Managers who help broker relationships, support individual and group change, and facilitate project management
 - supporting Māori self-determination.
7. Enablers and barriers to the success of the SFF have been identified to guide future programme development. Opportunities to gain further value for money from the SFF include: investment in MPI Advisers, administrative support for grantees, harnessing the capacity of Project Managers, a communications strategy and reframing eligibility criteria.

2 Introduction

8. The Sustainable Farming Fund (SFF) invests in farmer²-led projects that deliver economic, environmental and social benefits to New Zealand's primary industries and rural communities. The Fund was set up in 2000 and so has now been in existence for 13 years. Aquaculture was added in 2011.³
9. Its operation is based around annual funding rounds, which are run by Ministry for Primary Industries (MPI) staff. Projects typically run for one to three years, and the Fund invests up to \$200,000 per annum per project (see paras 52 - 68 and figures 6 - 11). The following diagram provides an overview of the key people involved in the operation of SFF projects.

Figure 1: Overview of the key people involved in SFF projects



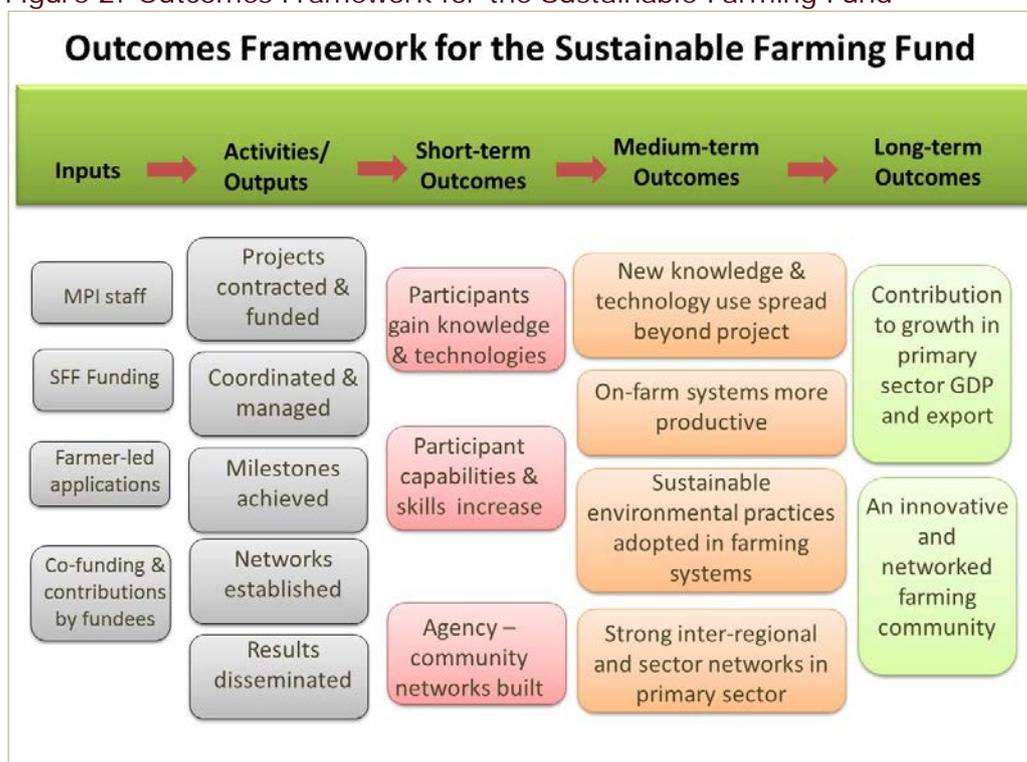
10. The SFF is a complex intervention operating in a range of primary sectors. Projects have been funded with the broader intention of seeing them contribute to: improving the economic performance of land-based sectors, improving environmental outcomes and supporting rural communities. The SFF initiatives and projects respond to the needs of multiple stakeholders and relationships in their particular contexts, and intermediate outcomes (both expected and unexpected) emerge over time.

² The word “farmers” refers to farmers, growers, fishers, foresters and aquaculturalists, and this includes business owners and managers.

³ For further background on the Fund, please refer to Appendix A.

11. Overall, the SFF aims to provide support to farmers to:
- develop skills and capabilities to tackle shared problems and opportunities
 - facilitate the development of broader relationships between them and industry organisations, scientists and other consultants – to support the building of resilient communities
 - help position participants to leverage other funds
 - support technology transfer
 - champion projects that address the potential for market failure – a public good aspect of the intended outcomes from SFF.
12. The following Outcomes Framework provides an overview of the theory of how change occurs for communities of interest associated with a project as a result of support from the SFF.

Figure 2: Outcomes Framework for the Sustainable Farming Fund



13. Over the course of the Fund, the political and operating environments have evolved, requiring the Fund to demonstrate how it contributes to, and aligns with more recent Ministry and Government-level strategies and policies. These clearly spell out desired long-term national and sector outcomes in terms of economic growth, risk management and environment.

Terms of reference for the evaluation

14. MPI commissioned this evaluation of the SFF portfolio in 2013 to provide assurance of the outcomes and value for money to date (2000–13). MPI also sought an evidence base for possible adaptations to the SFF portfolio design, to ensure it is fit for purpose in the current and future funding landscape. In addition, MPI wished to learn how it could improve SFF implementation and the Ministry's collaborative partnering with related funding programme managers. (Although the findings below are expressed in the past tense, the SFF continues to operate.)
15. The objectives of the evaluation were to:
- tell the story of how well the SFF portfolio has performed, achieved intended outcomes and provided value for money
 - identify SFF's key barriers, drivers and learnings
 - compare SFF against other like public funding programmes, and evaluate the extent to which the SFF design remains fit-for-purpose or needs to adapt
 - provide added-value elements to the MPI business, such as collaborative partnering, demonstrating the innovative use of evaluation, and/or building evaluative capability with MPI staff (Ministry of Primary Industries, 2013, p. 1).
16. This evaluation was designed to align with Government policies and strategic priorities that intersect with the SFF project. The following table shows the key policies that were taken into account in undertaking this evaluation.

Table 1: Key current policies that link to SFF

Relevant policies	Key points
NZ Government's <i>Business Growth Agenda</i> (BGA)	<ul style="list-style-type: none"> • Includes goal of lifting exports as a percentage of NZ's GDP from 30% to 40% by 2025⁴ • Recognises that increased value from primary industries is critical to achieving this goal • Includes themes of 'Building Innovation' (e.g. doubling business expenditure on R&D to more than 1% of GDP), building exports (with targets for value and growth of exports), and regional economic development. http://www.mbie.govt.nz/pdf-library/what-we-do/business-growth-agenda/rear/REAR%20Publication.pdf
MPI <i>Strategy 2030</i>	<p>Includes two points of focus:</p> <ul style="list-style-type: none"> • maximise export opportunities and improve sector productivity; and • Increase sustainable resource use and protect from biological risk. <p>Strategies to achieve these include (among other things):</p> <ul style="list-style-type: none"> • partnering with primary sectors to identify and seize opportunities for improved productivity and market returns, while ensuring that growth is environmentally sustainable • encouraging and co-investing in industry innovation and adoption • partnering innovative approaches to environmental challenges. • engaging with Māori to improve economic returns for Māori and NZ as a whole.
MPI <i>Māori Agri-</i>	This was a focus of SFF funding in 2012. See the announcement of the

⁴ Achieving this means doubling the value of New Zealand's annual primary sector-based merchandise exports to \$64 billion in real terms by 2025. This has become known at MPI as the Ministry's Export Double goal.

business Strategy	special funding round: http://www.mpi.govt.nz/news-resources/news/funding-to-promote-sustainable-resource-use-in-pri
----------------------	--

Key evaluation questions

17. The evaluation addresses the following three questions, which provide the overarching structure for this report:
- *What is the current-day, unique value proposition of the SFF relative to other funds?*
 - *To what extent and in what ways has the SFF been worth the investment to date?*
 - *What are the opportunities to maximise the value derived from the SFF?*

Methodology

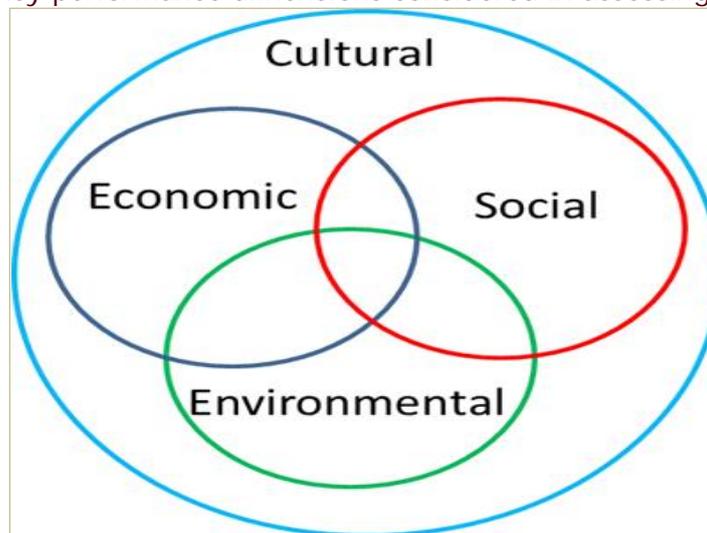
18. This uses an evaluation specific methodology and the evaluation draws together evidence from a range of both quantitative and qualitative sources including:
- a review of the SFF project database of 906 projects
 - a survey of 136 SFF Project Managers (with experience of approximately 400 projects)
 - case studies of three clusters of SFF projects (see box summaries in this report below paras 90, 118 and 123; and the full case studies in the companion document)
 - workshops with MPI staff and Fund Managers of MPI Funds and other relevant funding programmes
 - a review of past evaluations⁵ and other SFF documentation.
19. Evaluation is the systematic determination of merit, worth or significance (Scriven, 2012). An **evaluation-specific approach** was applied for this project, which is an approach that provides robust information about *how good* the evaluation subject is, whether it is *good enough*, and *how it can be improved* (Davidson, 2005).
20. **Value for money** in this evaluation refers to whether government and SFF beneficiaries are using *their combined resources well*. Funding and other resources (such as time, knowledge and skills) are limited. There is an opportunity cost associated with their use. It is therefore desirable to allocate resources to activities that return high-value outcomes.
21. **Evaluation of value for money** combines the above concepts. It provides robust information about whether something is *valuable enough*

⁵ BERL (2004), Barton (2002); MPI (2010) Ten Years of Grassroots Action.

to justify the government and SFF recipients' resources used. This provides the basis for addressing KEQ 2: To what extent has the SFF been worth the investment to date?

22. For this evaluation, Cost Benefit Analysis (CBA) was not considered appropriate, as the evaluation scope was broader than economic value alone and it was felt that a CBA might not adequately describe the full value of the SFF.⁶ The SFF is specifically designed to improve economic, environmental and social performance, and is also cognisant of the cultural environment of communities. Therefore this study incorporated economic, social, environmental and cultural dimensions in addressing VFM. Figure 3 conceptualises how the different aspect of performance relate to one another.

Figure 3: Key performance dimensions considered in assessing VFM



23. Rubrics (a kind of performance framework) provided a process and conceptual framework for integrating economic and other dimensions of value within an evaluation that drew on the conceptual ideas in Bennett's Hierarchy⁷. The evaluators worked collaboratively with MPI managers and staff to develop evaluative performance criteria that specified what "excellent", "very good", "good" and "adequate" value for money might look like in terms of the intermediate outcome areas to be identified in the outcomes framework, within the timeframe of interest. More information on this process is included in Appendix B.

⁶ Further, CBA would be difficult to apply credibly to this evaluation because it would necessitate extrapolation of long-term economic outcomes from intermediate outcomes and attribution of some proportion of these to the SFF, and then require all outcomes to be valued in dollar terms. Significant assumptions would have to be made which, though potentially useful for scenario analysis, would fall short of providing credible evidence to evaluate the extent to which the SFF actually represents VFM.

⁷ Bennett's Hierarchy identifies the higher order outcomes that might occur in a well-established project, as well as the earlier outcomes that might be expected, and separates these from the inputs, activities and outputs that are undertaken as part of the project. Level 5 in Bennett's Hierarchy includes short-term and local outcomes, Level 6 includes medium term outcomes at a wider level, and Level 7 includes longer-term outcomes at a national or industry level. A more complete description of these levels can be seen in Appendix B, Table 11.

24. The evaluation methodology was submitted for approval to the Ministry and its Quality Assurance (QA) group for the project (comprising the internal Ministry project team, two internal experts on MPI funds, and three evaluators from MPI and other government agencies) in March–April 2013.
25. More detail on the analysis of the SFF database, the online survey of SFF project managers, the development of the three case studies and the desk research undertaken as part of this project can be found in Appendix C: Evaluative research methodologies. This section also covers limitations of the study.
26. The evaluation was undertaken between March and October 2013.

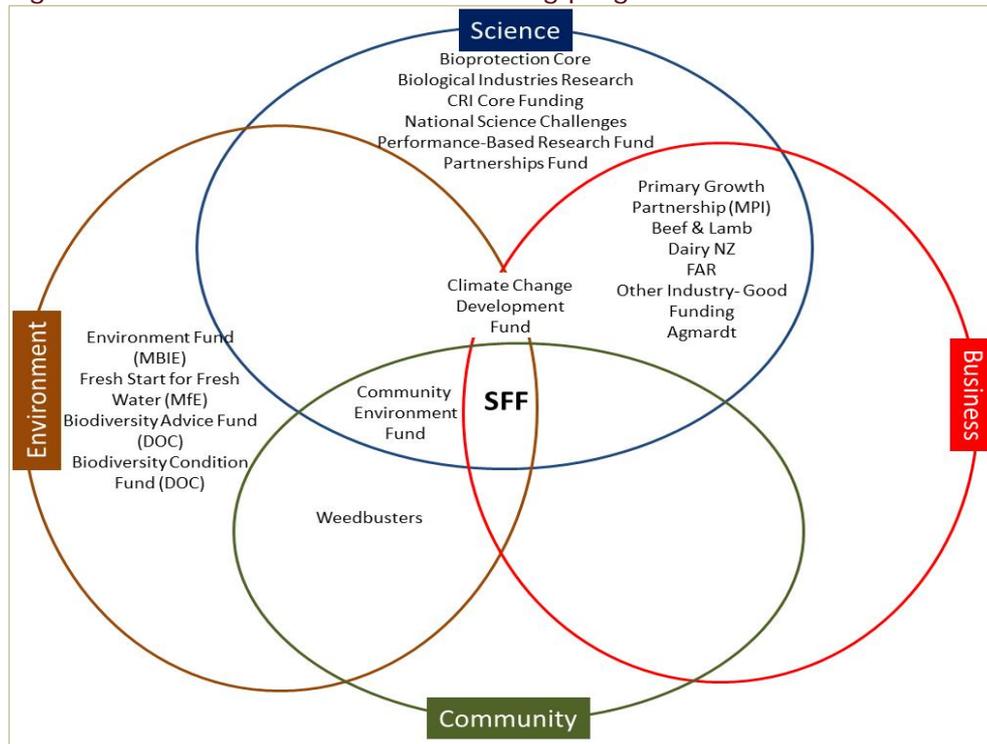
3 The unique value proposition of the SFF

27. This section of the report summarises detailed findings to address the first Key Evaluation Question: *What is the current-day, unique value proposition of the SFF relative to other funds?*

Summary

28. The SFF is unique as it supports the interests of science, the environment, business and the community in ways that are not replicated by other funding programmes. The unique value proposition of the SFF relative to other funding programmes is that it *supports grass-roots, science-based initiatives to protect and grow primary production businesses and rural community resilience.*
29. The evaluation found the SFF remains fit for purpose and makes a worthwhile and valuable contribution to primary industries and rural communities.⁸ The following diagram illustrates the unique position of SFF compared to other funding programmes with similar aims.

Figure 4: Focus of SFF and other funding programmes with similar aims



⁸ Data which informs this aspect of the evaluation for comes from:

- a focus group with six participants comprising Senior Managers and Fund Managers from a range of Funds, held at MPI in September 2013
- documents related to the Natural Resources Sector Review including: *NRS Non-Departmental Funds Duplication and Overlap: A report completed for Stage II of the NRS Non-Departmental Funds Review* (Ministry for the Environment and Ministry for Primary Industries, 2013), *Natural Resources Sector: Stage 2 Funds Analysis Review: Opportunities for efficiency and effectiveness and reprioritisation of NRS Non-Departmental Funds* (Deloitte, 2013)
- review of the websites for some of the key funds.

Introduction

30. There are a range of funds that support the primary sector. The diagram on page 18 outlines funds administered by Ministry for Primary Industries (MPI), Ministry of Business, Innovation and Employment (MBIE), Ministry for the Environment (MfE), Department of Conservation (DOC) and the Tertiary Education Commission (TEC). It also notes additional assistance available from New Zealand Trade and Enterprise (NZTE) and funds available from the Callaghan Institute, the private sector and the philanthropic sector.

Explicit role of SFF versus other funds

31. Overall, the funds that operate in a similar area to SFF tend to focus around at least one of four key areas:
- *Science*: the production of knowledge to solve problems, innovate, and protect or improve productivity
 - *The environment*: focusing on understanding environmental issues, environmental sustainability, renewal, etc
 - *Business*: improving sector productivity, being more innovative, raising value of exports
 - *The community*: supporting communities to solve their own problems, building community capacity and capability.

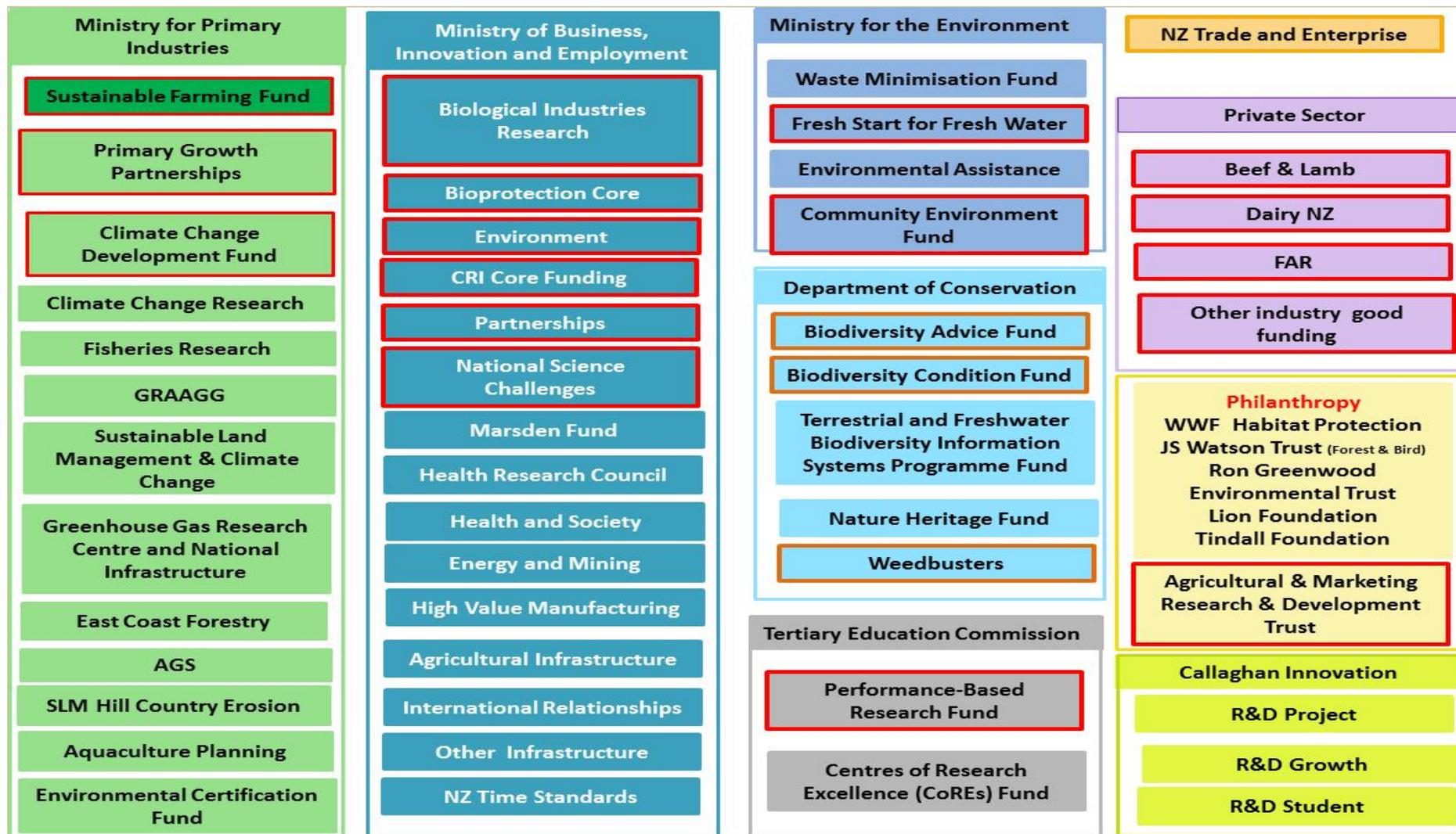
Funds of interest

32. Funds that were identified as operating in a similar area to SFF are:
- *the Primary Growth Partnership and the Climate Change Development Funds (MPI)*
 - *Biological Industries Research, Bioprotection Core, Environment Fund, CRI Core Funding, Partnerships Fund, and the National Sciences Challenge (MBIE)*
 - *Community Environment Fund, Fresh Start for Fresh Water (MfE)*
 - *Biodiversity Advice Fund, Biodiversity Condition Fund and Weedbusters (DOC)*
 - *Performance-Based Research Fund (TEC)*
 - *Trade and Enterprise support for export initiatives*
 - *Agricultural and Marketing Research and Development Trust (Agmardt)*
 - *other private-sector philanthropy*



- *private-sector industry groups including Beef + Lamb New Zealand, DairyNZ, the Foundation for Arable Research (FAR) and Deer Industry New Zealand (DINZ).*
33. The following diagram shows the key funding organisations supporting environmental and agricultural innovation and production in New Zealand, and the other funds they offer. Those that were identified by Fund Managers, from the literature and from web searches as operating in a similar area to SFF have a red border. (The three Department of Conservation Funds with a brown border also appeared similar to the SFF, based on searches of their websites.)

Figure 5: Overall landscape of funding from the key organisations supporting environmental and agricultural innovation and production in New Zealand



Note: Funds that were identified by Fund Managers, and from the literature, and from web searches as operating in a similar area to SFF have a red border.

Strengths of SFF in relation to other funds

34. Feedback from the focus group of Fund Managers reinforces evidence and perceptions by key stakeholders that the SFF is a bottom-up fund that helps build community cohesion. It often provides training and enables people to work in groups to a common cause. SFF is seen to have good output – farmers are active and get things done. According to Fund Managers the SFF appears to be used in three different ways:
- to build incremental capability and capacity of both people and ideas – a mature example is illustrated in the *Protecting the sustainability of New Zealand vineyards* case study (see case below para 118), and an early example is illustrated in the *Sustainable development and podocarp restoration on Tuawhenua lands* case study (see case below para 123)
 - to scale capability and capacity across regions – as illustrated by the *Top of the South: Setting an example for sustainable water quality* case study (see case below para 90)
 - one-off projects of interest to a particular community.

Benefits of SFF

35. Fund Managers and SFF Project Managers believe that the SFF offers a number of benefits. Firstly, SFF is the only funding mechanism that enables farming communities to address opportunities and solve problems with the support of both science and business.

SFF projects are a critical vehicle for using quality science to address farmer issues in a direct, focused and practical way. [Project Manager]

36. Both Fund Managers and Project Managers observed that the SFF process encourages groups to work together so farming communities really grapple with science to solve practical environmental problems that they face, and as a result significant development occurs within the community. The evaluators also found SFF supports applied research at a local level – indeed all the case studies we have developed include clear illustrations of this principle. A Project Manager summed up the benefits:

The Fund has supported important innovation in New Zealand farming systems. It provides a way to address real and practical farming community issues. The SFF is one of the few funds available to NZ farmers and growers that supports farm extension and adoption. [Project Manager]

37. SFF's flexibility in the way projects are administered, in order to respond to the needs and pace of the community, was acknowledged by Fund Managers and Project Managers. For instance, Project Managers said that if new learnings emerge, projects are able to alter their funding contract milestones to accommodate these learnings. However, they also reported there are sound administrative processes to ensure the funds are used as planned and adequately accounted for.

SFF has always been highly supportive and endeavoured to make sure the community of interest's needs are met. I think a key to SFF projects being successful is that they are able to do this without putting unrealistic expectations onto project teams if, for example, circumstances were to change unexpectedly or if emphasis on a certain objective needed to shift due to project results. A structure that is too rigid to accommodate fluctuations would limit the science and outputs achieved whilst creating unnecessary stress on project teams. I am grateful that my experience with the SFF has always been supportive and enjoyable. [Project Manager]

The application process is very good, with allowance for flexibility to change milestones as the project develops – which is vitally important. The process of developing the project, once accepted, to the contract stage is excellent and efficient. Changes have taken place to improve financial reporting, which is good. Simple systems work best for all. [Project Manager]

38. Fund Managers and MPI Project Advisers commented that the SFF provides significant visible support at a regional level, which would be noticed and missed if the SFF did not exist, and they believe this is appreciated at a political level by Ministers. Fund Managers responsible for a range of funds in the funding landscape (both within MPI and from other organisations) believe that those seeking funding would seek MfE Community funding instead if the SFF did not exist, reinforcing the view that MfE Community Environment Fund is the nearest fund to SFF.
39. The evaluators found SFF supports clusters of projects around common problems and enables a wide range of industry sectors to build capability incrementally over time – for instance as has occurred in the wine industry.
40. Furthermore, the evaluators identified from a recent MPI evaluation of its Māori Agribusiness work that the flexibility of SFF funding supports Māori to harness the productive potential of Māori resources. The evaluators found evidence that the SFF prepares Māori agribusiness to engage with other funding by helping build relationships between iwi, scientists and industry sectors.

Perceived challenges for SFF in relation to other funds

41. Fund Managers acknowledged that while the SFF helps build community capacity, this takes time. This is a challenge because the benefit of any funding is not immediately apparent.
42. Fund managers also acknowledged a negative perception that at times the same projects appear to be simply repeated in a number of regions. There is a range of complexity of projects. Some SFF projects have developed technologies that provide an immediate cost-effective solution to a largely private-good problem (e.g. an improved spray system for horticultural enterprises) and can fairly easily be incorporated into the existing production system. This contrasts with more complex situations, such as those faced by catchment communities trying to improve water quality. In these cases, the solutions are multi-faceted, may require the re-design of farming systems and often require negotiations and collective

actions by a number of stakeholders (Allen et al. 2002). In these complex situations communities need to learn things for themselves and develop unique collective and individual responses (Douthwaite et al. 2001). This shows why certain types of projects can't leap-frog early stages of project development based on the learnings of other people's projects, even though something similar has been done elsewhere.

43. Fund Managers did not see a clear current link between the SFF projects and a contribution to exports. They believed that if the SFF did not exist export earnings would not be directly affected. Fund Managers questioned, therefore, whether the right activities are being supported and whether there could be better leveraging between the SFF and other funds to support better contribution to export earnings. However, feedback from Project Managers indicates that the SFF is supporting exports, albeit in many instances by its contribution to protecting underlying sustainability and quality. This is covered in more detail starting on page 36.
44. Fund Managers believed there needs to be a more targeted and more strategic approach to the Fund, while retaining its bottom up access. A few Project Managers noted the re-focus on economic benefits, to align it with aspects of the Government's wider strategic focus, and felt an environmental focus was also needed, which would also align with the Government's strategies.

It seems SFF have gone away from sustainable and toward profit, so less concerned about wider environmental performance; more concerned with economic performance. This makes it more difficult to work on projects which have longer term benefits and require seed funding in preference to those which have clearer and quicker economic benefits but less clear environmental benefits. [Project Manager]

45. Fund Managers thought it would be good if there was a form of information about the different types of relevant funding, including SFF, set out on a development continuum. There was a sense that currently projects need "somewhere to go after SFF" though it was acknowledged a "next level up" fund does not currently exist. The PGP, for example, was seen to be too large a leap from SFF to be viewed as a next logical step for these projects, as observed by this Project Manager who saw SFF as an "essential funding source":

I think the MPI SFF is an essential funding source for the primary industries. It bridges a gap between the larger funds, PGP and MBIE, and accommodates relatively short-term projects of an applied nature that will deliver benefits to the industry. It is an increasingly important funding source for sectors and industry groups. [Project Manager]

4 Has SFF been worth the investment to date?

46. This section summarises detailed findings and addresses the second Key Evaluation Question: *To what extent and in what ways has the SFF been worth the investment to date?*

Summary

47. Overall, the evaluators found SFF provides good value for money, taking into account the range of social, environmental, cultural and economic benefits to grantees and their communities.
48. MPI spent \$122.8 million on 906 SFF projects across 14 fiscal years (2000–01 to 2013–14). Case studies, survey feedback from SFF Project Managers and other available information including past evaluations⁹ indicate that the SFF has a track record of investing in worthwhile and successful projects.
49. The SFF has contributed to encouraging significant co-investment from partners in *industry innovation and adoption*. For example, partners contributed \$1.27 of financial resources for every \$1 of SFF funding as well as further contributions in kind.
50. SFF also contributed to encouraging farmer, grower, forester and aquaculturalist-led projects to partner innovative approaches to *environmental challenges*, as identified in the case studies.
51. Among the key benefits of the SFF are its contribution to:
- increased capability for problem solving and project management
 - enhanced relationships and networks that support innovation
 - behaviour change
 - development and adoption of new technology
 - protecting or growing economic value.

Understanding MPI and partner investments

52. The SFF project database was analysed to better understand the nature of investment in the Fund. Overall, MPI allocated \$122.8 million on 906 SFF projects across 14 fiscal years (2000–01 to 2013–14).
53. The following graph shows that after the first year (when the total was lower), grants of between \$8m and \$10m were made each year. Funding allocations were fairly consistent from 2001–2008. Since then there has

⁹ Including past evaluations of the SFF: BERL 2004, Barton 2002; and the 2010 MPI publication *Ten Years of Grassroots Action*.

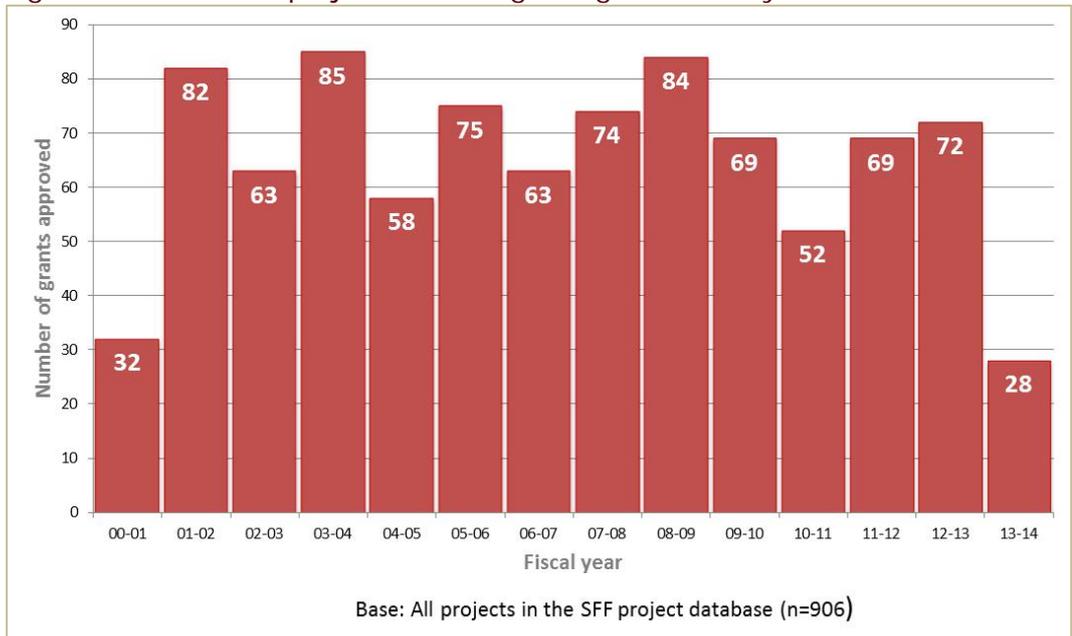
been more variation in funding, with the highest level of funding occurring in 2008–2009 and the lowest in 2010–2011.

Figure 6: Total value of grant applications approved by fiscal year



54. However, there was greater variation in the *number of projects* receiving SFF grants each year, as the following chart shows. Apart from the first year, the lowest number of grants – was for the current fiscal year 2013–2014.

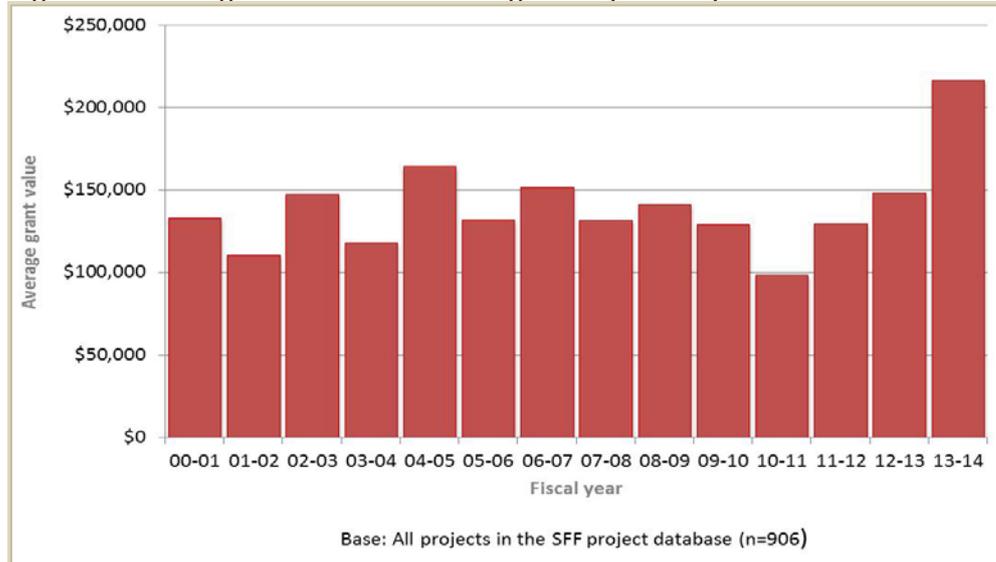
Figure 7: Number of projects receiving SFF grants each year



55. The average size of individual grants has moved within a given range over the years, from just under \$100,000 to around \$160,000 over the first 13 years. The evaluators note that in 2013–2014 the SFF moved toward

awarding fewer grants but allocating more money to each project compared with previous years, with an average annual allocation of over \$200,000 for the first time.

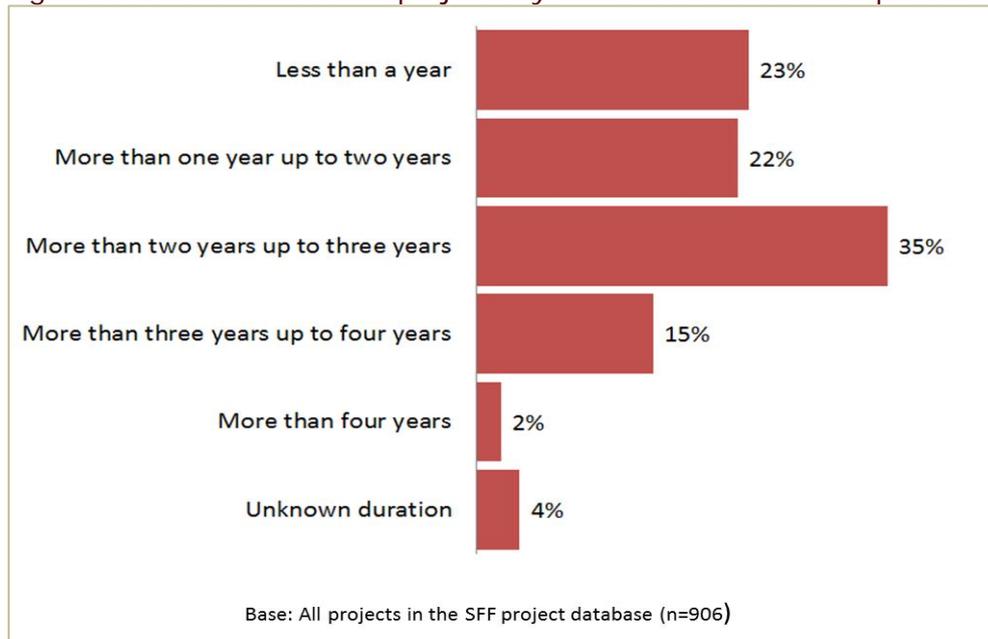
Figure 8: Average value of each SFF grant by fiscal years



Funding duration

- 56. The expected timeframe for SFF projects is between one and three years. As the following graph shows, the majority (79%) of SFF projects were completed within three years. Indeed, the median actual duration of funding was less than three years, at two years and two and a half months.
- 57. Of the nearly one in five projects (17%) that took more than the initially planned three year maximum to complete, most (15%) were completed within four years. Just 2% of SFF projects took more than four years to complete. The longest time taken for a project was five years and eight months. This indicates that the current strategy of allowing more time is appropriate at times and that projects can almost always be completed within a five-year time frame.

Figure 9: Distribution of SFF projects by duration of time to completion



Representation of regions

58. To assess the extent to which the projects were spread across regions, the evaluators analysed the SFF project database to determine how many projects could be attributed to each region. Overall, projects could be described as “nationwide” in total 36% of the time. The regions with the most mentions were Canterbury (18%), Hawkes Bay (9%), Otago (9%), Waikato (9%), Bay of Plenty (7%) and Northland (7%).

Table 2: Total mentions of SFF projects for each region

Regions	% of Projects	% of Funding ¹⁰
Nationwide	36%	35%
Canterbury	18%	20%
Hawkes Bay	9%	10%
Otago	9%	9%
Waikato	9%	10%
Bay of Plenty	7%	9%
Northland	7%	5%
Southland	5%	6%
Nelson	5%	4%
Marlborough	5%	5%
Auckland	3%	4%
Manawatu	3%	3%
Gisborne	3%	3%
Taranaki	2%	3%
West Coast	2%	2%
Wellington	1%	0%
Chatham Islands	0%	0%
No response	2%	3%
Total	124%	131%

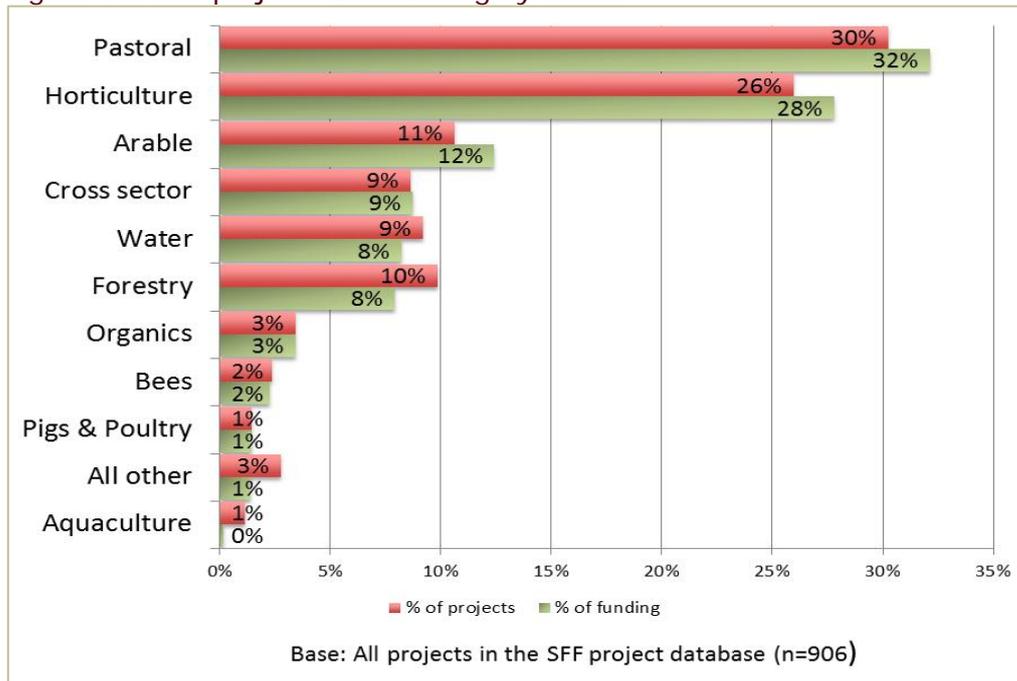
¹⁰ The “% of funding” column includes all funds that are fully or partially attributable to the region and therefore include some double-counting where a single project has been attributed to more than one region (and hence the column totals greater than 100%).

59. The second column of the above table also shows that the regions with the most projects also received the most funding overall.

Sectors

60. To assess the extent to which the projects represented the primary sectors, the evaluators analysed the total mentions for each sector in the SFF projects database.

Figure 10: SFF projects and funding by sector



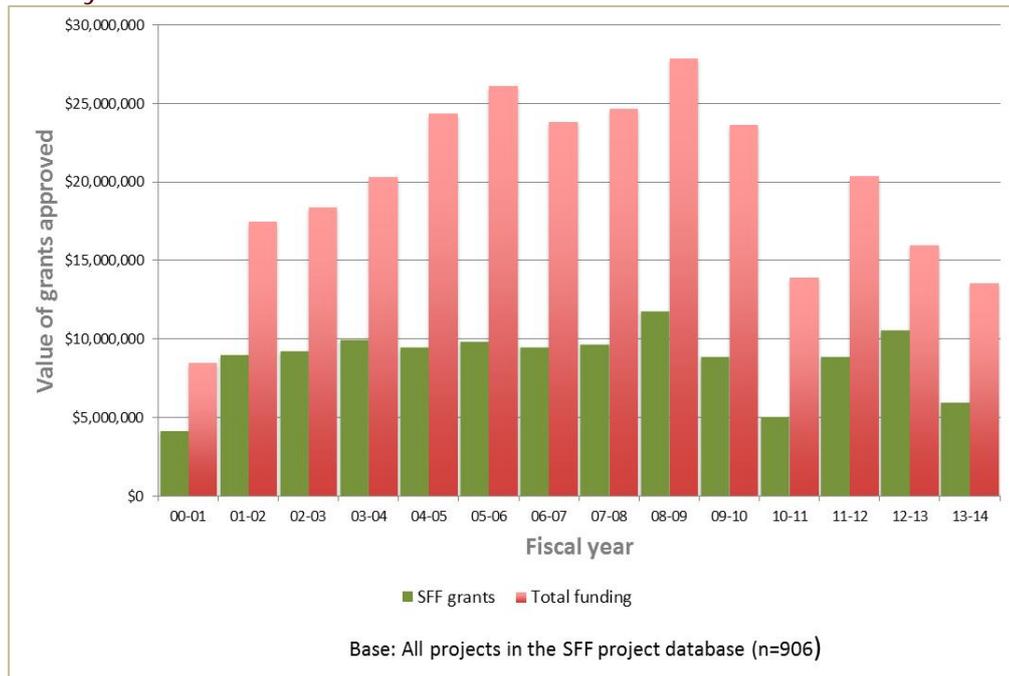
61. It is clear that the pastoral and horticultural sectors undertook the greatest number of projects and received the greatest amount of funding, followed by the arable sector, cross-sectoral initiatives, water sector and forestry sector.

62. In further analysis the evaluators assessed the extent to which funded projects worked for a single sector or more than one sector. Overall 73% of the total SFF funding was attributed exclusively to one sector, while the remaining 27% SFF funding was for projects that operated across sectors.

Attracting additional industry resources

63. On average, for every \$1 invested by the Ministry of Primary Industries through the SFF, a further \$1.27 in funding was contributed by others. The following graph shows total project funding – that is from all sources, alongside SFF funding, by fiscal year.

Figure 11: Total (all-sources) project funding alongside SFF funding by fiscal year



64. In addition to the above, partners have often contributed in-kind¹¹ resources. The database only provided the value of in-kind contributions for 33 recent projects, and it is unclear to what extent these may be representative of all SFF projects. Furthermore, it is unclear whether the full value of time and support has been included in the values recorded. These 33 projects had an aggregate value of \$42.9 million in SFF funds and received \$0.8 million worth of in-kind contributions. Thus, for every \$1 of SFF funding, the recorded value of in-kind contributions for these 33 projects averaged \$0.19, close to 20%.¹² Anecdotally, MPI Advisers consider the in-kind contributions of SFF projects are likely to be much higher than 20%.
65. In-kind contributions can include farmers' time, but at times also includes things like stock.

Farmers were willing to contribute financially to the project as well as supply lambs in good faith, to find out a little about relationships between pasture diversity and meat quality. [This] showed there was keen interest in learning more about [the relationship between] diets and livestock performance... I negotiated that the farmers could get their lamb carcasses back, which was really appreciated at the time. It may seem trivial, but there are attitudes in the industry that academics take advantage of the generosity of farmers, and this was a classic case where the scientists only needed a [sample] from an entire carcass for analysis. [Project Manager]

¹¹ In-kind resources include, for instance, the SFF project team's time.

¹² Anecdotally, MPI Advisers consider the in-kind contributions of SFF projects are likely to be much higher than 20%.

Intangible investments

66. MPI has made a considerable investment in building robust internal processes and efficiently running the Fund. In the early stages of the SFF, MPI was particularly careful to establish a system of accountability to ensure that funds were spent as intended. The system is seen as straightforward and pragmatic.

The Fund has been well managed. The role of MPI staff through the process, from prior to submission of the proposal to involvement in project team meetings, means the expectations are well managed and the outcomes to help the industry are readily delivered. In my view a clear strength has been the interest, knowledge and engagement of the Project Managers in ensuring projects deliver the agreed outcomes. [Project Manager]

A major advantage of SFF is the largely straightforward application and claim process. Other grant organisations can often be complex and extraordinarily fiddly to work with. We would be extremely concerned if these application and claim processes were to change. [Project Manager]

67. SFF milestone reporting captures the funds provided by MPI and also contributions from other funders and in-kind contributions. This means there is detailed information, in narrative form, for many of the projects regarding the leveraging they achieved both in attracting other funders, and in the time and support they achieved from farmers and local communities. (However, as noted above, this was only recorded in the database for 33 of the projects at the time the database was made available to the evaluators.)
68. There has also been significant investment from MPI staff, particularly the MPI Advisers, in SFF projects. Initially MPI Advisers were very involved with the projects and had considerable face-to-face contact with the project leaders. It is evident that, despite a simple system of accountability, a number of projects required additional support to get started. As MPI Advisers provided support to set up projects and help them successfully become established, they also built strong relationships with key project team members.

This was a large, early project [that started in 2002] and the science provider and the grower groups involved did not have structures set up to manage the finances and reporting of the project. These are well-established now. [Project Manager]

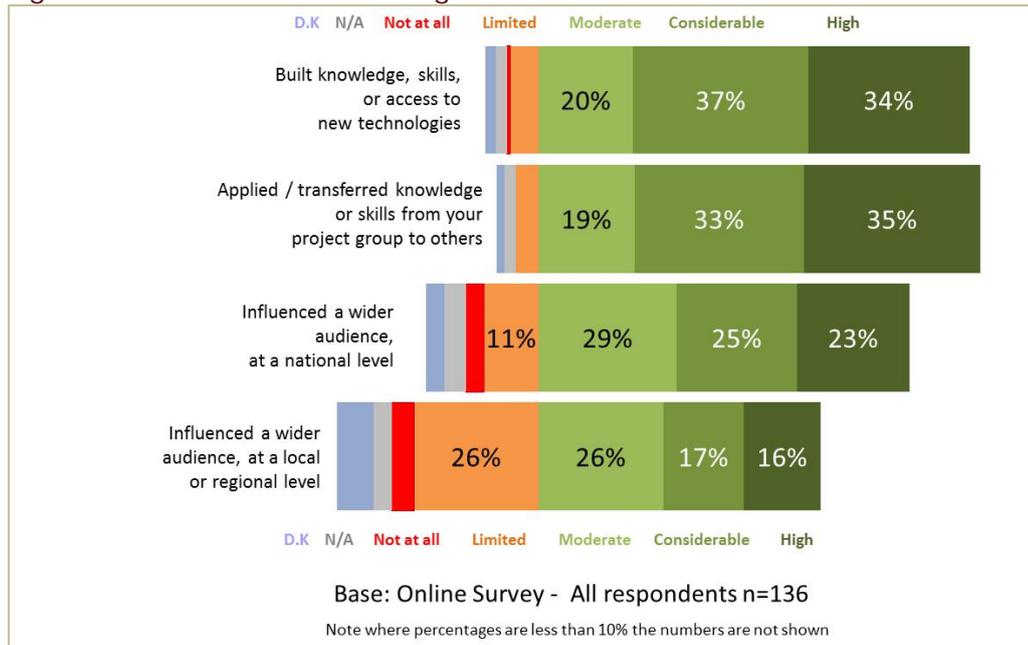
Areas where SFF contributes positively

69. The following sections outline the areas identified by the evaluators where SFF is seen to have made a positive contribution, either socially, economically, environmentally or culturally.

Increased capability

70. The survey of SFF Project Managers,¹³ the case studies, and feedback from MPI Advisers and a range of Fund Managers provides good evidence of the SFF contributing to social and organisational capacity and capability-building at individual, community and sector levels.
71. The following graph shows some of the findings from the online survey and illustrates the extent to which SFF Project Managers saw clear social benefits of capability building arising from SFF projects.

Figure 12: Social benefits arising from SFF



Building knowledge and skills

72. The majority of Project Managers (91%) said the SFF built the project teams' knowledge and skills, and the teams then used new skills to share new knowledge and technologies with others.

The key outcome of the project was to deliver a concise, practical field guide to growers. Although the project had enormous width, distilling the key messages and testing these with focus groups enabled the concepts we were communicating to be clear and useful. The project relied heavily on photographic recording and reporting and allows quick visual comparison in the field and identification of problems. [Project Manager]

73. According to Project Managers, SFF Advisers and Fund Managers, SFF grants help communities to build capability by supporting them to identify their own challenges and opportunities – and then to come up with ways to address them, as the following example from a Project Manager illustrates.

¹³ SFF Project Managers surveyed as part of this project represented a diverse range of stakeholders including farmers, or staff from industry bodies, community groups, Crown Research Institutes, rural consultancies, universities, local government or Māori trusts or incorporations.

*[The Top of the South case has showed that] what is important is that communities define their own problems clearly, in terms they can understand. This thinking has now been incorporated into other catchment initiatives around the country.
[Industry Representative]*

74. During SFF projects, farming communities have become aware of feasible approaches to farming practice. These then harness resources for optimal production whilst protecting the environment, in collaboration with scientists and other experts. They learned to accommodate the needs of other stakeholders and regulators, and to safeguard their industries for the longer term. The case *Protecting the sustainability of New Zealand vineyards* is an excellent example of social and organisational capacity and capability-building occurring at individual, community and sector levels. During this project, wine growers:
- learned about ways to implement sustainable production
 - took part in developing a Sustainability Policy (SWNZ) for the industry
 - took part in promising initiatives to eradicate leafroll virus
 - explored with scientists how mechanical thinning might be a viable tool.
75. The Fund Managers spoken to for this evaluation believe SFF encourages farming communities to really grapple with science to solve practical environmental problems that they face. This was also evident in the case study *Sustainable development and podocarp restoration on Tuawhenua lands*. This case provides clear examples, even at the early stage of this project, where SFF projects supported Tuawhenua Trust members and hapu to develop the skills and capacities to:
- obtain a greater understanding of the ecological challenges of their forest, and how these challenges might be approached
 - gain a better understanding of the feasibility of different timber extraction and milling options
 - identify areas for further planning and market development.
76. MPI Advisers and Project Managers agreed that in many instances SFF projects also assisted the project team members to develop transferable skills in project management, proposal development, project administration, and operational and financial management.

Accommodating the needs of Māori to build capacity

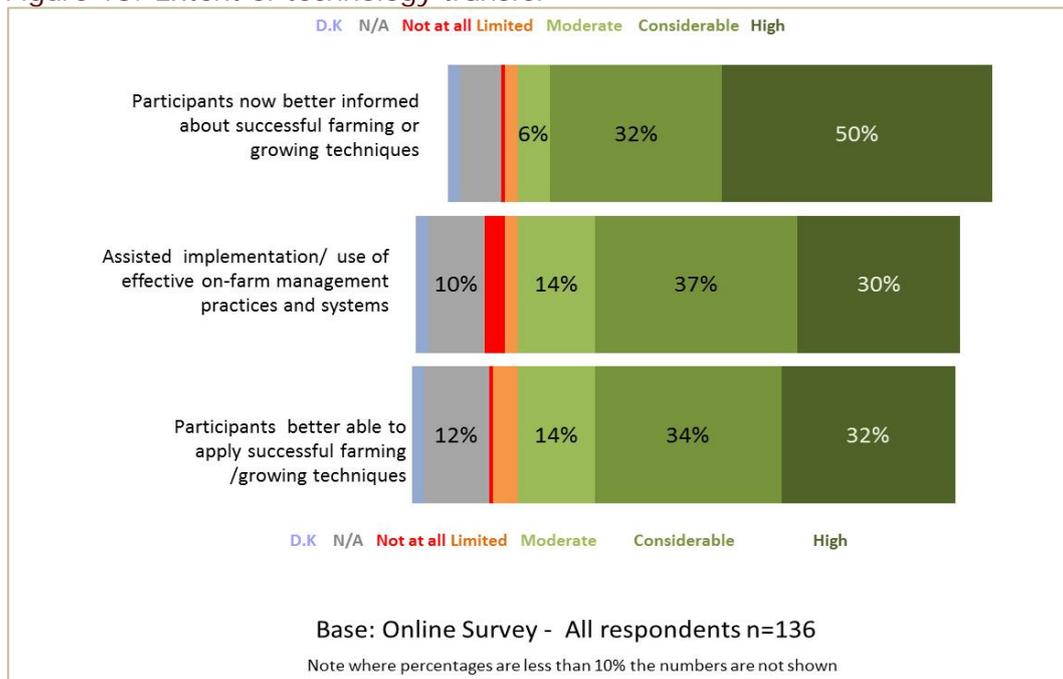
77. Feedback from the survey and case studies indicated the SFF is flexible enough to accommodate the needs of Māori but has been under-utilised due to a range of barriers (see para 140 below). Māori are owners of significant assets such as land that can be used for primary production but do not always have access to the skills, services or technologies to develop them. In 2012 MPI organised an out-of-cycle funding round

specifically for Māori agribusiness projects, including support to develop and implement successful projects. This was successful in attracting targeted applications. There is scope to further support Māori agribusiness needs and aspirations.

Development and adoption of new technology

78. There is evidence that SFF projects are contributing to increased development and adoption of new technology.
79. Another key social outcome is the SFF project support for the building of knowledge and its transfer out to other communities and stakeholders.
- [A highlight was] seeing a technique developed in our vegetable garden taken up by farmers from Southland to Northland. [Project Manager]*
80. Three quarters (77%) of Project Managers surveyed said this increased capacity went on to influence a wider audience at a national level.
- [We were] able to demonstrate to DairyNZ's Strategy and Investment Leader the differences in the greenhouse gas footprint for the different farming systems. This information will be used by DairyNZ to help farmers make more informed decisions on wintering-off systems. [Project Manager]*
81. At times the learnings gained are also about what did not work, i.e., 'failure' is valuable in itself, identifying what science or directions to not pursue or invest in further. Project teams appreciated that SFF is willing to acknowledge the value of this.
- This was a very complex project, but despite this it was well-structured. While the project did not find a specific solution, it eliminated many assumptions and provided a set of specific guidelines for future reference. [Project Manager]*
82. The evaluation also found that support from the SFF projects contributed to the development of a number of community groups that have continued beyond the life of the projects.
- In our sector the SFF funding has been a critical part of the formation of sector groups that have endured beyond the life of the funded projects. In an economically tough, predominantly non-export production sector, SFF funding has been almost the only form of assistance available to grower groups to get larger projects off the ground. The simplicity of the application and reporting processes and the willingness to assist funding of producer-led practical research and extension have motivated grower groups in our sector to keep putting up projects. [Project manager]*
83. SFF Project Managers believed participants are now better informed about successful farming or growing techniques (88%) and better able to apply them (81%). SFF Project Managers also believed that the SFF project assisted in implementation and use of effective on-farm management practices and systems (80%). The following graph shows the extent SFF Project Managers believe there has been successful technology transfer.

Figure 13: Extent of technology transfer



84. Both MPI Advisers and SFF Project Managers provided many examples of technology transfer amongst the farming community and maintained the SFF grants supported communities to embrace change.

The website we created has been a successful hub for information sharing. The field days received a lot of media attention and were well-attended, and farmers reported that they would change some management practices due to the information they received on the day. [Project Manager]

85. Technology transfer is embedded in the Fund activities for the more successful projects, not an afterthought. An important achievement from SFF is that farmers have the opportunity to develop solutions alongside scientists and industry, and through trial and reflection embed improved practice in their communities. While at times the resulting change may appear to be slow, these on-the-ground projects do actually achieve voluntary change.

Key memorable aspects were: one – the great collaboration between a number of participants and their willingness to offer material for reporting purposes; two – uptake of some of the technologies by farmers, and their enthusiasm. [Project Manager]

[A memorable aspect is] seeing the project take on life and continue even after funding ended. [Project Manager]

86. These comments highlight that achieving technology adoption is a socio-cultural process. It is not just a process of communication, relying on field days and newsletters to transfer information to farmers.

Adoption... takes place in a social context with farmers discussing their ideas with other farmers. Much adoption occurs when the idea or practice has become part of the normative concept of "good farm management" (Journeaux, 2009).

We need to recognise that information is key to learning and subsequent behaviour change, but learning will only happen if it is supported by a number of social processes. These include shared understanding, bounded conflict and a supportive environment. This implies a need to ensure that the different interest groups have adequate capacity to participate in such processes (Allen et al., 2002).

87. This is particularly true for projects with predominantly environmental outcomes that are not adequately recognised in the marketplace, and for outcomes that might be contentious amongst local stakeholders.
88. Understanding these social elements of technology transfer requires particular skills, and some of the experienced Project Managers working with the projects and the MPI Advisers are well-versed in this. At the moment the MPI Advisers have the overview of the projects and each oversees a range of projects. However, this national oversight is not being recorded and fed back to the community in a cohesive manner; and there is only information available on a project-by-project basis, which is much harder to locate.
89. However, technology transfer needs to occur at a number of different levels, and while there is an imperative for the projects to disseminate learnings as best they can, there is also an opportunity for MPI to provide a central point to help the learnings to flow across projects and sectors. Journeaux (2009) looked at the needs for a more efficient extension system and identified the need for co-ordination at a higher level in the system, rather than just relying on communication at a project level.

[The] model could be along the lines of the Sustainable Farming Fund (SFF), or an entity incorporated into the current SFF, whereby government provides funding for environmental extension, and industry, councils, private consultants and farmer/community groups bid into this for funding... (Journeaux, 2009)
90. A good example of a project where technology transfer occurs at a number of different levels is the *Top of the South case study: Setting an example for sustainable water quality*.

Top of the South case study: Setting an example for sustainable water quality

The work on the Sherry was pioneering, it set a level of expectation for our rivers and streams and demonstrated that improvements can be made. [Getting] cows out of streams returned quick results [and] improved effluent management can pay for itself over time. But when it comes to dealing with run-off from land, it is much slower to make improvements and effect meaningful results. [Project Manager]

It has become pressing for New Zealand to reduce contaminant losses from farms to waterways, and begin to reverse the degradation of our waterways. Apart from the environmental reasons for doing so, it is necessary from an economic standpoint to protect the international reputation of our agricultural farming industries in light of consumer demand – ensuring ongoing market access and sustainability of our primary exports.

In practice, addressing water quality issues is complex, technical and takes extended periods of time. Three SFF projects in the Top of the South (between 2006 - 2012) have together developed an effective model of collaborative action to improve fresh water quality in a catchment.

These projects left their farming communities with working plans for ongoing activities that provide a pathway forward over the next few years. Farmers have been encouraged as leaders of positive change. The projects also facilitated greater connectedness or social capital within the communities through partnerships between land managers and a wide range of other stakeholders including scientists, central and local government, and community and industry facilitators.

These projects in the Sherry, Rai and Aorere catchments each featured significant participation by dairy farmers. Dairy farmers provide a window on the multi-level and complex challenges communities face as they manage water quality issues. Their stories also demonstrate the value of community-level approaches to catchment management, and the need to develop partnerships with Councils, neighbouring communities and industry.

With annual exports in excess of \$13 billion, the dairy industry is New Zealand's largest export earner. Dairy productivity has risen markedly over the past decade, with increases in both cow numbers and milk yields per cow. At the same time, dairy farming is being increasingly held to account for associated environmental impacts including water quality.

Investment by the SFF and partners in the projects has demonstrated high levels of compliance with good management practice, such as that set out in the water accord (e.g. Effluent survey results 2013 – see below para 102). Water quality cannot be improved overnight, but significant steps have now been taken to arrest its decline. These steps involve the full range of land uses in the region. For example this has been achieved for a project investment across two projects (the Aorere and the Rai) of \$477,000¹⁴ through the SFF and a further \$2.2m from industry partners (including past and anticipated investment in best management practices) – less than 2% of projected 15 year dairy income for these catchments.

91. There are also other examples of the development and adoption of new technology in a wide range of sectors:

Development and distribution to all industry of a comprehensive manual related to the risk management of [Johnes Disease]¹⁵ on-farm [was] aimed at those who already were experiencing issues with the disease and also to aid those free of the issue to remain so. In addition, in association with the new action group, [we]

¹⁴ \$477,000 is the total investment for Aorere and Rai combined. We have not included Sherry in this part of the story because we don't have their dairy turnover data or the value of their industry contributions to the project.

¹⁵ Johnes's Disease is a wasting disease which occurs in cattle, deer, sheep, goats and wildlife.

developed a nationwide network of specialist veterinarians to work one-on-one with [deer] farmers. [Project manager]

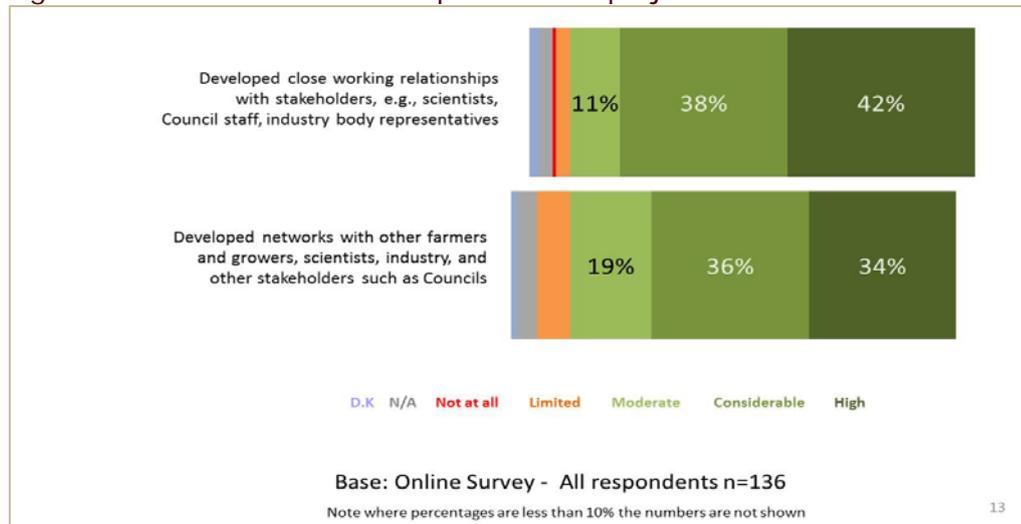
[The] project aim was to improve persimmon taste. We were able to demonstrate through Plant and Food Research that taste was related to astringency and soluble solids – sugars. We were then able to demonstrate to growers that astringency was related to cool growing seasons and soluble solids to harvest timing. [The] industry adopted the findings, and market and grower returns improved. [Project Manager]

One to-one on-farm visits and transfer of info, workshop that supplied info on limiting factors that influence water quality and identifying minimum and maximum nutrient limits required for different farm systems for the soils in that area. [Project Manager]

Enhanced relationships

- 92. SFF Project Managers, MPI Advisers and the Fund Managers all commented that a particular strength of the Fund was its support of SFF project teams to build relationships and networks between the farming community, science and industry.
- 93. The following Figure 13 shows the extent to which close working relationships were developed with stakeholders and networks, and evidence that relationships were enhanced through SFF projects.

Figure 14: Enhanced relationships from SFF projects



- 94. Almost all (91%) Project Managers believed the SFF projects assisted farmers to develop close working relationships with stakeholders, e.g., scientists, Council staff and representatives of industry-good organisations.

Mutual trust between the farmers and scientists has built up over a period of time before and during the SFF programme. [Project Manager]

The effort to engage with and involve interested parties, including the fact that meetings were held in local communities across the country, was a vital part. The project was the culmination of several years of consultation within the agricultural aviation industry, with the consensus that the industry needed to be proactive in managing environmental impacts, so the financial support from our co-funders

– supported by the SFF Fund – enabled real progress to be made. [Project Manager]

95. The majority of Project Managers (89%) also reflected that project teams had developed networks with other farmers and growers, scientists, industry and Councils.

The SFF supports clusters of projects around common problems, and enables a wide range of industry sectors to build capability incrementally over time – for instance in the wine industry. [Project Manager]

96. The case studies also illustrated the depth of relationships built in different sectors, and at the local, regional and national levels.

These research initiatives have contributed to wider efforts by New Zealand Winegrowers to create an industry that actively seeks to link research with practice. This leads to growers wanting to be involved in early field trials and a wider industry looking to take up subsequent best-practice findings. [Industry spokesperson]

Behaviour change with positive environmental benefits

97. Behaviour change is notoriously difficult to achieve, particularly amongst farmers, as they may have to prioritise spending – of at times very significant amounts – to trial new ideas.¹⁶

Well, my work showed that the combination of a farm visit and attendance at a Council field day did make a difference, on average, to farmers' intentions for improved waterway management. There was evidence that stream health improved where farmers did change their management. However, the degree of change in both instances was pretty small. My work showed other things that might help improve adoption rates, e.g. funding for fencing; also, importantly, working with farmers during conversions when new fencing is going in... It also seemed that non-fencing alternatives might be more readily adopted and still have some benefit. [Project Manager]

98. An important achievement from SFF grants is the level of active engagement of farmers in making changes, with support from others. SFF grants have enabled farmers to develop solutions alongside scientists and industry.

The change in thinking and the development of the catchment plan by farmers would not have happened without SFF funds. It takes time to build trust, particularly when there has been strong conflict historically between parties. I must say the Regional Council has turned markedly from a strategy of top-down directives to bottom-up listening, discussing and acknowledging the real concerns farmers have. [Project manager]

I have personally noticed an attitude shift from denial ("it must be some other source") to anger ("this will put us out of business") to quiet acceptance and getting on with it. The farmer-led process empowers people. [Council staff member]

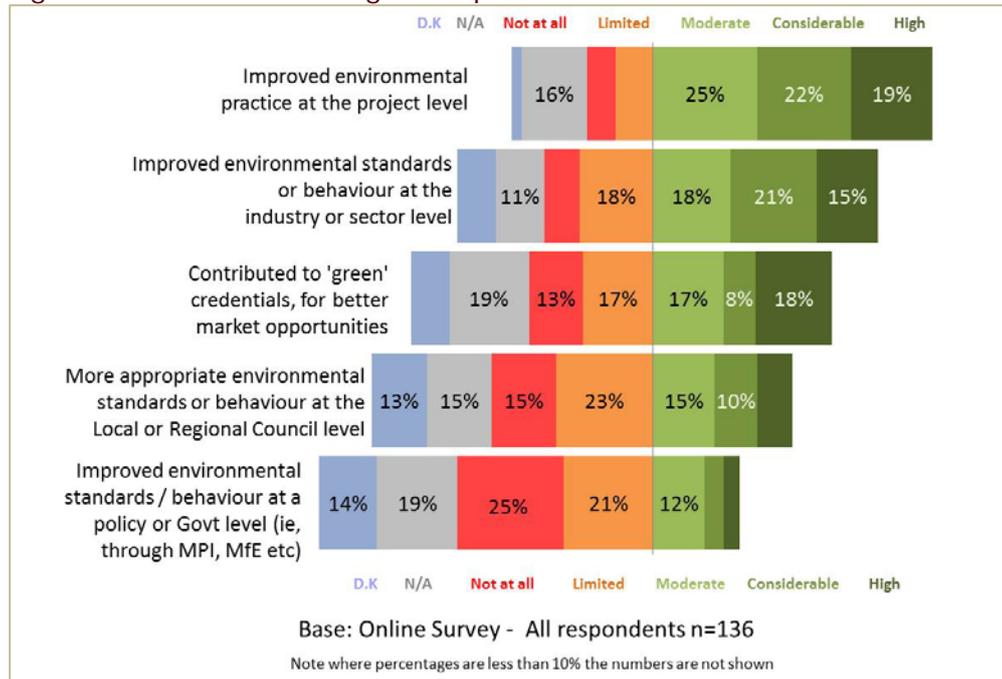
99. The SFF Project Managers considered that SFF projects contribute to:

¹⁶ Behaviour change is also difficult to evaluate. Mayne and Stern (2013) identify a number of attributes that provide challenges for evaluating and attributing impacts of projects, e.g. complex systems, market failures, multi-level impacts, long time-frames for impacts to emerge and unpredictable outcomes that are highly context-dependent, and these are applicable to SFF investments.

- improved environmentally sustainable practice amongst the farming community (66%)
- better environmental standards being incorporated in industry-level systems (54%) and to a lesser extent to the Council policy level (33%) or the Government policy level (21%)
- projects are able to leverage off environmental credentials to respond to market opportunities (43%).

100. The following graph summarises the areas of environmental behaviour change.

Figure 15: Behaviour change with positive environmental benefits



Greater use of environmentally sustainable practice amongst the farming community

101. The SFF has helped to achieve change on a number of levels. SFF projects have provided farmers with the readiness to change; helped them develop solutions that worked at a farm level and helped embed these solutions into their farm systems.

The project and its predecessor... made a significant contribution to poplar and willow use on-farm [to reduce erosion], and established a large database of users and interested parties. [Project Manager]

As well as [being] Project Manager role for this project, I have been involved in various other projects in a support or advisory role, and see real benefits. Within the Clutha District there have been real changes in farming practice as a result of SFF projects, especially in terms of environmental performance. The fact that farmers are both behind and directly involved in the projects is key to this. [Project Manager]

102. It is clear that the SFF made an important contribution to improving environmental practice in the Aorere Catchment. However, a recent report of the effluent survey results from the Aorere River Catchment Dairy Farm Survey (see box below) shows that while SFF helped farmers make good progress, this is still not enough to completely solve environmental challenges (such as stopping faecal spikes occurring). This demonstrates how challenging it can be to achieve the required changes and impacts on the environment, and the importance of considering intermediate outcomes (such as behaviour change) in assessing progress toward achieving longer-term environmental objectives.

"Effluent survey results"

Under a system classifying risk to the environment, **three out of 30** farms were found to have **effluent systems of high risk**, 12 were of moderate risk and 15 were of low risk. The council said the high-risk farms were in the process of designing and constructing suitable storage and commissioning low-application irrigation systems, while others in the moderate-risk category were also undertaking improvements.

Of the 697 stock crossing points located, **618 were found to be bridged or culverted**. By the end of the survey they included 101 of 126 across permanent waterways wider than a metre that were required to be covered by Tasman Resource Management Plan (TRMP) rules, with the other 25 allowed to operate uncovered as a permitted activity because of their less frequent use. The one non-compliant major crossing on the back channel of the Aorere, which had since been bridged, was discounted as a source of the May spikes. **Farmers had voluntarily bridged or culverted 517 of 571 stock crossings** over small, temporary or artificial waterways not subject to regulation or Clean Stream Accord definitions.

Stock were fully excluded either by fencing or by natural barriers from **89 per cent of the almost 100 kilometres** of TRMP-defined waterways. This fell to **49 per cent for waterways less than a metre wide** and to **28 per cent for drains and swales**. Further fencing has occurred since the survey was completed.

The bridging and fencing of significant waterways had reduced the likelihood of them being major contributors to faecal contamination, although sampling was needed to see what impact the 25 less frequently used permitted crossings had on the wider catchment. One sample taken 24 hours after **a crossing** had been used showed enough faecal contamination of the waterway to create a spike.

Source: Effluent Survey Results 2013¹⁷ (Note: Bolding added by the evaluators)

Better environmental standards being incorporated in industry-level systems

103. Project Managers and MPI Advisers were both able to provide examples of where better environmental standards have been incorporated into industry-level systems.

*Workshops associated with [the project] have resulted in many growers actually checking on flowering times in their orchards. The website material created for the hazelnut variety identification guide has [also] been used by overseas browsers.
[Project Manager]*

104. Furthermore, change is likely to be sustained as leaders have emerged from projects who are prepared to continue to champion ongoing change within the sector and across regions.

¹⁷ Source: *Effluent survey results* (2013, August 20) Fairfax NZ News. Retrieved from <http://www.stuff.co.nz/business/farming/agribusiness/9063955/Effluent-survey-results>

This group in the Sherry was the first group I worked with. Other farmers from different catchments listened to their experiences. [Then] Sherry Farmers visited Golden Bay and told their story. [Project Manager]

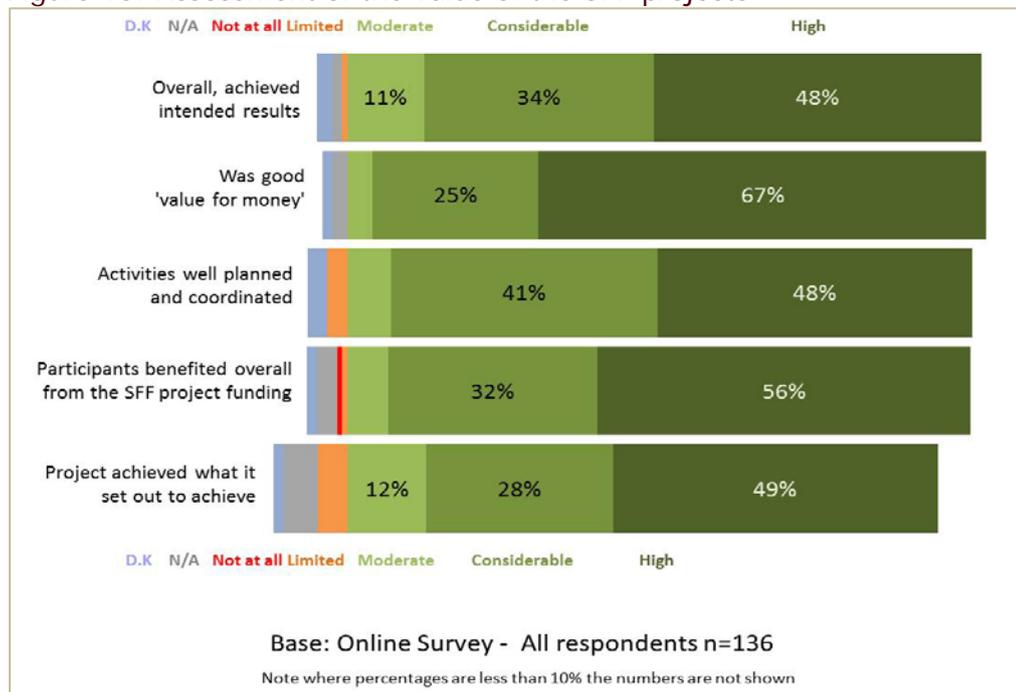
105. The case study *Protecting the sustainability of New Zealand vineyards* (see below para 118) provides a good example of how projects are able to leverage off environmental credentials developed with SFF funding to respond to market opportunities, and other examples such as the following were also provided by Project Managers.

What [SFF] has done to date is generate a lot more participation and interest in readily sharing [information] from growers of the dropping and picking varieties. The overall desire from growers for better quality macadamias and better marketing through a grower co-operative has contributed to this success. [Project Manager]

Protecting or growing economic value

106. Case studies and results from the survey of SFF Project Managers provide a consistent story of SFF grants protecting and growing economic value, including some projects contributing to export opportunities. The on-line survey data identified that overall, the surveyed Project Managers believed the SFF projects generally achieved their intended results (94%)¹⁸, and that the majority of projects (96%) were good value for money, as shown in the following graph.

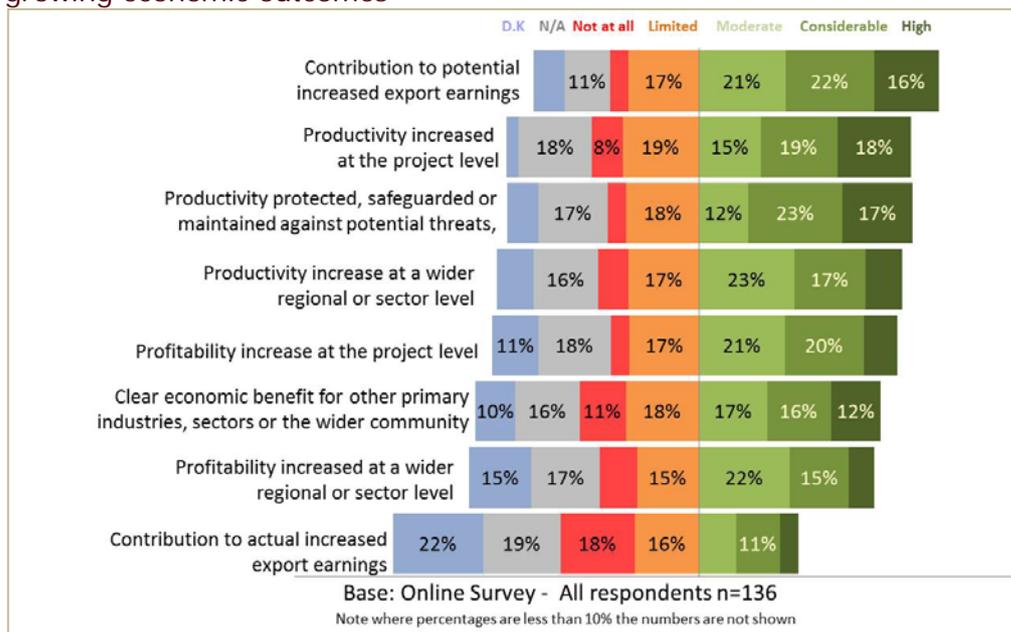
Figure 16: Assessment of the value of the SFF projects



107. The following graph shows the extent to which Project Managers believed the SFF projects contributed to growing economic outcomes.

¹⁸ Percentages unless otherwise noted show those SFF Project Managers who gave a combined rating of moderate, considerable and high degree – those shown in green in the graphs.

Figure 17: Extent to which Project Managers believe SFF contributes to growing economic outcomes



108. One quarter of Project Managers surveyed considered their projects contributed to actual export earnings (25%) while nearly three in five considered there was potential for their projects to contribute to future earnings (59%). Furthermore, over half those surveyed maintained that their SFF projects helped protect, safeguard or maintain *productivity* (52%), and that the projects contribute to increased *profitability* at the project level (49%).
109. There were also clear signs that primary producers and agribusiness were able to leverage off environmental credentials to respond to market threats and opportunities, as shown by the case studies involving the wine industry and water quality in catchment farming communities. The viticulture case study also exemplifies how a relatively small, strategic investment in a few key projects can have a significant impact on growing industry capability and premium market positioning.

Potential contribution to economic value

110. While it was beyond the scope of the study and available data sources to directly measure economic impacts of the SFF, evidence from case studies, survey feedback and past evaluations suggests there is a credible prospect of the SFF breaking even – that is, returning at least \$122.8 million worth of economic benefits to a sector with current annual gross revenues of over \$26 billion (2013) – given the aims and success rates of the projects funded.
111. Available evidence indicates that SFF funds are being allocated and used in accordance with the intended purpose and strategic priorities of the SFF. Case studies, survey feedback from SFF beneficiaries and other

available information¹⁹ suggest that SFF funds have substantively been invested in worthwhile and successful projects. Stakeholder feedback suggests a significant proportion (a quarter to half) of these projects have potential economic value.

112. The funding disbursed through the SFF in 2013–14 represents an investment of \$2.30 for every \$10,000 of national income from primary industries over the same period. Correspondingly, the SFF will break even if its contribution to protecting, enhancing or growing the industry is worth 0.023% of the annual industry contribution to GDP.
113. In a 2009 SFF study, a cost benefit analysis²⁰ identified a net present value of \$10.9 million from a cluster of deer farming projects that sought to improve the farm environmental and economic performance and the long-term sustainability of deer farming. If another 10 SFF projects over the past 14 years (about 1% of all projects) were similarly successful in economic terms, then the SFF would break even.
114. Similarly, a 2004 BERL study concluded that the actual and potential economic benefits of the SFF were “substantial” and suggested that selected areas of SFF investment totalling \$32 million could potentially return \$330–530 million per annum to GDP (through increased farm-gate production), noting that further investment would be required to realise this potential.
115. When all of these sources of evidence are considered together, they provide a general impression that the Fund has a credible prospect of providing a positive return on investment. However, it needs to be emphasised that this impression cannot be directly substantiated with available data.

Unanticipated outcomes

116. In addition to achieving its aims, the SFF has brought other, or unanticipated benefits, including:
 - realising the cumulative impacts of successive projects
 - building capacity of SFF Project Managers – which is currently relatively untapped
 - supporting Māori self-determination.

Cumulative impacts of successive projects

117. This evaluation identified many examples of grant applicants working strategically to develop an integrated programme of work by applying for SFF grants for a number of related projects. These projects have incremental and cumulative impacts, with later projects building on the

¹⁹ Including past evaluations of the SFF: BERL 2004, Barton 2002 and the 2010 MPI publication *Ten Years of Grassroots Action*.

²⁰ Giera, N. (2009). *Cost benefit analysis of SFF projects: Focus on Deer: Otago and Southland Deer Focus Farms*. Nimmo-Bell & Company Limited.

learnings from earlier ones. Previous evaluations have only viewed projects as individual entities and have not considered their collective impact. The three case studies undertaken for this evaluation all revealed the collective benefits of successive projects delivering added value to primary industries and rural communities.

118. The following case study is one example of how a cumulative group of SFF projects in the wine industry helped to establish a premium market positioning for New Zealand Wines.

Protecting the sustainability of New Zealand vineyards

*Collectively these research projects illustrate how the building of strong industry-research partnerships can facilitate ... on-the-ground uptake.
[Industry spokesperson]*

The New Zealand wine industry is an important and growing contributor to the economy, with annual export returns of \$1.2 billion and a further \$500 million in domestic earnings. Protecting the quality and productivity of this industry helps to facilitate ongoing market access and premium pricing.

Ten SFF projects over the past 12 years (2001 – current) have contributed to the wine industry establishing a premium market positioning through addressing a range of opportunities and challenges. *New Zealand Winegrowers* acted as the primary conduit for these SFF projects. The projects' foci included a disease challenge, managing vine yield, energy efficiency in winemaking, residue-free wine production and a sustainability accreditation programme. Later projects purposefully built on the work of earlier projects, enabling further development or up-scaling of activity.

A number of the early projects directly supported the development of certified environmental programmes for New Zealand vineyards, which have since collectively become known as Sustainable Winegrowing New Zealand (SWNZ). It is estimated that today more than 94% of the producing vineyard area is participating in SWNZ, with a further 3-5% under certified organic programmes. More recent projects involve the wider industry in developing best management practices to support quality vineyard production.

These projects illustrate how the SFF can punch above its weight, with small strategic investments having significant impacts. The projects involved SFF grants of \$2.9 million and industry contributions of \$3.2 million over 12 years. On an annualised basis, this is equivalent to 0.03% of current industry earnings (or \$1 per \$3,300). Given the aims and success of the projects, breaking even on this investment seems plausible (but cannot be substantiated with available data).

One project, for example, provided a tool that wineries can use to assess and improve their energy efficiency. Undertaken with SFF grants of \$170,000 and industry contributions of \$100,000, this project enabled the identification of potential savings of \$700,000 per annum for the 130 wineries that participated in the most recent energy benchmarking survey.

Collectively, these 10 projects created strong linkages between research and industry, supported high levels of innovation and uptake, and supported the development of industry best practice.

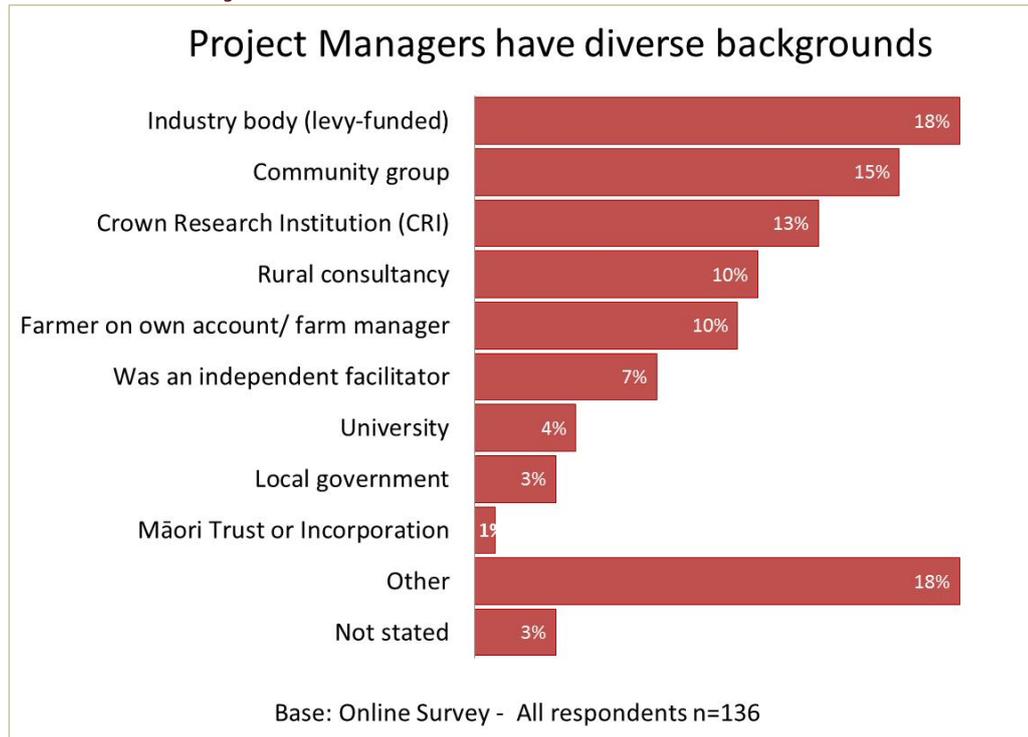
Building capacity of SFF Project Managers

119. The SFF has supported the development of a number of skilled SFF Project Managers who help farmers broker with scientists and industry sectors and also assist with project management and facilitation.

Who are SFF Project Managers?

120. SFF Project Managers surveyed as part of this project represented a diverse range of stakeholders and comprised farmers, or staff from industry bodies, community groups, Crown Research Institutes, rural consultancies, universities, local government or Māori trusts or incorporations. Nearly one in five respondents said they were from some “other”²¹ group.

Figure 18: Diverse backgrounds of SFF Project Managers responding to the online survey



121. Nearly a quarter of those who completed the online survey about SFF projects were Project Managers who had been involved with six or more SFF projects, and the evaluators estimate that this group of respondents may have been involved in around 400 projects overall.
122. Experienced Project Managers can ensure that projects are realistically scoped, well-planned and well-executed. They understand that time needs to be invested at the start to bring the right people together and ensure there is on-the-ground farmer leadership. They work in between projects to develop the climate and skills for new projects. They also often continue to champion projects beyond the scope of the direct SFF funding. Currently there is no recognition or accreditation of their skills and value to the SFF or the wider primary industry.

²¹ This “other” group includes: trusts, government departments, industry bodies that are not levy funded consultants, students, lecturers etc.

Māori self-determination supported

123. SFF's flexibility and bottom-up approach means it has the potential to improve the productivity of Māori agricultural assets and support Māori self-determination. Around one million hectares of Māori freehold land are potentially available for productive agricultural use, and Price Waterhouse Coopers estimate a potential \$8 billion in gross output and over three thousand jobs over ten years (with about \$3 billion investment).²² The evaluation found some instances where SFF specifically fostered opportunities to support agribusiness aspirations of Māori in culturally meaningful ways, as illustrated in the following case study.

Sustainable development and podocarp restoration on Tuawhenua lands

SFF enables local people to be more involved in ecological research, which in turn provides for the ecological research to be better tailored to the needs of local people. Partnering in this way builds a two-way flow of communication. Local people learn about measuring and recording; scientists learn about local use, knowledge and applications.
[Forest Ecologist]

The Tūhoe Tuawhenua Trust administers a large tract of land around Ruatāhuna, which is central to the identity and wellbeing of the hapu of Ruatāhuna and Ngai Tūhoe. The Trust seeks a future for Tuawhenua lands where the people and the lands are in harmony and thriving. As part of this, it seeks to restore podocarp (native forest) on its lands while creating economic opportunities for Ruatāhuna people.

Three SFF projects, one that was completed in 2010 and two that are on-going, have helped the Tūhoe Tuawhenua Trust to develop a holistic and natural approach to the utilisation and restoration of native forest blocks. The projects have supported the local community to gain valuable understandings of forest dynamics, suitable planting and husbandry techniques, and potential marketing strategies. The SFF projects are underpinned by Māori principles to ensure the outcomes meet local people's aspirations. The projects have also provided the opportunity for the Trust to build wider partnerships and networks that will support future management initiatives.

The Trust's long term vision for forest restoration recognises the 500-year plus timescale required for podocarp generation. Already, however, there has been good progress on environmental improvements as a holistic and natural approach to the utilisation and restoration of Trust lands has been developed, and implementation has started.

These SFF projects have yet to show an economic return. Nevertheless, the research has identified a way forward that may, over time, show economic potential associated with developing the market for indigenous timbers. In the Tūhoe context such economic returns, if realised, could contribute to future local economic potential through increased self-sufficiency and reduced utilisation of state assistance.

The development of the sustainable management approach illustrates the importance of taking the time to engage people and think through the elements needed to underpin sustainable and culturally appropriate management. These efforts have left the community with a plan that suits their people and their lands. The plan highlights the efforts of Trust members as leaders of positive change within the wider community.

²² PWC (February 2013) *Growing the Productive Base of Māori Freehold Land*: report for Ministry for Primary Industries. Available at www.mpi.govt.nz.

124. Other examples of where the SFF has fostered Māori aspirations were identified from the online survey. These include the following examples, which show how Māori were able to:

- pursue sustainable Māori foods

With funding provided, this allowed our groups to research full benefits of promoting endemic sustainable Māori foods to benefit all people, and researching products for marketable sustainable returns. [Project Manager]

- bring knowledge to, and participate in, a wider farming forum

It established a conduit for the research material that had been collected from all sources pertaining to Northland. An excellent hui [was held] involving Māori groups, who have now established a working group to be part of the Northland Agricultural Forum to grow Māori agriculture in Northland. [Project Manager]

125. However, while there is evidence of success for Māori arising from the SFF, there remain challenges to ensure equity of access for Māori to the Fund. This is discussed in the following section.

Enablers and barriers to the success of the SFF

126. Key enablers and barriers to the success of the SFF are summarised in the following table.

Table 3: Summary of enablers and barriers to the success of the SFF

Enablers	Barriers
<ul style="list-style-type: none"> • Project origination is bottom-up • Leveraging of sector resources • Effective MPI Advisers • Flexible approach to contract management • Skilled SFF Project Managers • Building and utilising relationships • Links to experts • Fostering innovation 	<ul style="list-style-type: none"> • Fund Model (process rules over effective outcomes) • Technology transfer not working optimally (stays within sectors or regions; limited timeframes) • Under-investment in MPI Advisers and those who might support them • Equity of access • New on-line grants management system will exclude people with limited resources

Enablers

127. Key enablers that support the success of the SFF have been identified in the earlier sections of this report and are summarised below.

Project origination from the bottom up

128. SFF is a popular fund that is significantly over-subscribed each year.²³ It is seen as a fund that originates from the grass roots and motivates farmers to get things done. Fund Managers of SFF and similar funding programmes, MPI Advisers and SFF Project Managers believe this helps build community cohesion. Grants require people to work in groups for a common cause.

²³ For the most recent funding round there were \$21mill worth of applications, significantly oversubscribing the available funds as with previous years.

Leverages sector resources

129. The SFF acts as a kind of seed funding that attracts other funding and involvement of the community, industry sector or from regional organisations such as Councils.

Effective MPI Advisers

130. The high quality of service from the MPI Advisers was frequently mentioned by SFF Project Managers as a reason for the high level of project success. MPI Advisers build relationships that help attract the right people; help people develop projects in ways that improve the likelihood of success; and help people maximise outcomes by maintaining flexibility without losing focus on agreed outcomes without necessarily adopting the sector's priorities.

Flexible approach to contract management

131. One of the unique features of the SFF is that it allows latitude for change during the life of a project (see paras 56-57 and figure 9 above). There is provision within the SFF approach to allow for the impact of weather and other unexpected events as well as to build on new learnings, and this maximises the potential for the projects to be successful.

Skilled SFF Project Managers

132. The evaluation identified a pool of experienced Project Managers working in research institutions, academia and in consultancy businesses who have each managed more than six SFF projects. These Project Managers are a valuable resource, working at the community level to help the SFF achieve success. They are skilled in navigating both political, social and project management challenges, as these next quotes illustrate.

Challenges were: keeping farmer involvement when they are already busy, [and] balancing Council and science aspirations against reality when working with people. Success when we got it right was rewarding, sharing the stories and evaluating meaningful results. I personally enjoyed interacting with all the people I worked with. We were learning together throughout the life of the project. I think this was an important component – that I did not know it all but was seen [by the others] as a peer. [Project Manager]

The overall management of the project, both in terms of logistics and financial and institutional reporting was a much bigger job than anticipated. The project relied on a lot of goodwill from the host farmers and the local farming community. [Project Manager]

Relationships

133. A stand-out feature of the SFF is that it supports the building of effective relationships and networks. The SFF supports the farming community to work collaboratively with industry sectors, scientists and other key stakeholders to address problems or opportunities in a holistic manner. Building trust is a key factor in the success of the projects, as is good leadership. In addition, it is evident that MPI senior managers engage

with sectors to understand industry priorities, which helps with the overall sense of strategic direction.

Links to experts

134. SFF Project Managers say farmers appreciate the opportunity to work with people with scientific knowledge who understand practical ways to improve environmental sustainability and on-farm productivity or performance. The collaboration of experts and farmers supports the use of systems approaches to problem solving and solutions based on science.

Fosters innovation

135. The Fund's role in supporting both innovation and sustainability is clearly evident. Furthermore, the SFF is cognisant of sector interests while ensuring that the interests of communities are prioritised.

Barriers

136. There are a number of barriers that need to be addressed to ensure SFF remains fit-for-purpose in the future.

Fund Model (process rules over effective outcomes)

137. Experienced SFF Project Managers advised that at times SFF processes and rules do not support the aims of the Fund. While SFF was complimented for being a well-run fund, there are some administrative challenges. For instance, the financial years for the SFF do not align with the farming calendar and this has impacts on budgeting for projects.

Funding start and finish dates [currently in July] do not align well with a pastoral farming calendar. This means only getting two seasons of research rather than three seasons [within the life of an SFF project]. [Project Manager]

The SFF financial year and the growing year are not well-aligned, and it is difficult to budget cash flow within the three years and achieve outcomes within three years. We have had an extension into the fourth year to achieve outcomes. [Project Manager]

138. Further, Project Managers believe the SFF focus on set-up and funding of new projects reduces the opportunities for scaling out an existing SFF project idea from one locality to other regions in follow-up SFF projects. For example, an application for a new project that has similarities to a previous project might be considered "same old idea to another region". Thus some scaling-out opportunities were possibly precluded under current rules. Project Managers believe the process of engagement during a project helps drive behaviour change, and that this is novel for each community involved.

Technology transfer not working optimally (stays within sectors or regions; limited timeframes)

139. Technology transfer needs to occur at a number of different levels. While there is an imperative for the projects to disseminate learnings, the

evaluators identified there is also an opportunity for MPI to assist by using its natural position as a centralised point to proactively ensure the learnings flow further across projects and sectors.

Equity of access

140. A wide range of projects across a broad cross-section of the primary industries have received SFF funding, as the evaluators have identified from the SFF project database analysis (see pages 23- 27). However, some Project Managers reflected that it is important that CRIs or industry bodies do not capture the process.

Typically the larger SFF projects have been captured by a CRI etc who have shiny management that is incompetent on-farm or with a skill set in management not the issue at hand. You then get well-managed projects that contribute very little but cheer admin staff up. ...[What contributes to a successful project is] a clear need, fuelled [by] strong farmer participation, and project management by folk who thoroughly understand the industry and the issues, and could apply effective on-farm science to that end... [Project Manager]

It's a long time since we did any SFF work. My impression is that it has morphed into funding for professional development-type, tech transfer projects or projects for big research organisations. We enjoyed being able to work on a knotty problem as a small farming community. [Project Manager]

141. One area that is underdeveloped is support for Māori. Treaty obligations require equitable access for Māori. There are just 33 SFF projects identified by MPI's Māori Primary Sector Partnerships (MPSP) branch as being specifically for Māori interests, out of 906 projects (0.03%) over the past 13 years of the Fund's existence. This indicates systems and processes are currently not generating equitable access and therefore outcomes.
142. Feedback from MPI Advisers and MPSP staff indicated that Māori need additional support to make competitive SFF funding applications. Further, at times Māori require longer time-frames to undertake negotiations at the start of the project to get the right people in the room. Additional mechanisms may be needed to support Māori within the existing process.
143. There are a number of Treaty settlements being made and additional support may be genuinely required as part of self-determination regarding land use into the future. At times Māori require more resource and support to get to the same outcome, and this may be one of those times.

New online system will exclude people with limited resources

144. The evaluators understand that SFF funding applications will now only be managed on-line. We suggest there needs to be some provision for those who want to apply but do not have internet access, or are in rural areas where consistent access is challenging, to ensure they are not excluded.

Under-investment in MPI Advisers and those who might support them

145. MPI Advisers themselves believe the support they are providing is “stretched”, and this has also been noticed by SFF Project Managers responding to the online survey.

[The main problem or challenge was] SFF administration. The original staff left, and the replacements were not as savvy in the field, and to compensate the ship listed toward a clunky bureaucracy. It has never recovered. [Project Manager]

5 Maximising value for money from SFF

146. This section summarises detailed findings and addresses the third key evaluation question: *What are the opportunities to maximise the value derived from the SFF?*
147. Greater value for money may be obtained from the SFF through:
- investment in MPI Advisers
 - administrative support for grantees
 - harnessing existing capacity of SFF Project Managers
 - a communications strategy and support
 - re-framing eligibility criteria.

Investment in MPI Advisers

148. As with any investment, the SFF needs to be well-managed and nurtured to maximise outcomes. It is clear that MPI Advisers' support of SFF project teams is a key enabler that has contributed to the success of the SFF to date. Maintaining appropriate staffing levels within the team is thus a necessary ingredient to maximise value for money from the SFF.

The role of MPI Advisers through the process, from prior to submission of the proposal to involvement in project team meetings, means the project expectations are well-managed and the outcomes to help the industry are readily delivered. A clear strength has been the interest, knowledge and engagement of the Project Managers in ensuring projects deliver the agreed outcomes. [Project Manager]

149. As part of their work, MPI Advisers build key relationships that help MPI maintain positive links with key stakeholders and be responsive to emerging sector issues and trends. It is vital to have a good system for sharing information between MPI management and the MPI Advisers to maximise the work of SFF across the different relational levels.

Administrative support for grantees

150. Projects with inexperienced SFF Project Managers can at times require substantial project management support. Even highly experienced and capable Project Managers indicated that they sometimes struggled to undertake the activities required to effectively coordinate their SFF project.

[The most memorable aspect was] the project exploding into a massive all-consuming monster. [Project Manager]

151. One possible way to provide additional project management support would be to hire internal project managers to work alongside MPI Advisers. This would free up MPI Advisers to focus on more strategic aspects of their roles, while providing necessary support to maximise equity of access to the SFF and successful project outcomes.

[Challenges were] changes in key project team members during the project, managing a multidisciplinary team - this worked better when we co-opted a person to specifically deal with project management, location of many key project members outside the region of study therefore a lot of travel was required, being too optimistic in what we could achieve. There were 4 SFF project managers during the 3 years of the project so it was hard to build a rapport with them and keep them informed. [Project Manager]

Harnessing the existing capacity of SFF Project Managers

152. Over time, some SFF Project Managers have developed considerable experience and strategic networks. For example, projects in both the Wine Industry and Top of the South case studies were often developed well in advance of funding applications by their project managers in those respective areas, who used their key industry contacts to identify emerging issues. Similarly, successful field days build on industry contacts and reputation to attract the right range of people – often from different geographic locations.
153. These Project Managers are a valuable resource to SFF and could be identified, potentially accredited and encouraged to support further SFF projects where there is a natural connection (e.g. in location or existing relationships). This could reduce the need for support from MPI's Project Advisers.

Communications and extension strategy

154. Currently best-practice information and results of SFF projects is only available on a project-by-project basis, which can be hard to locate and does not tell the cumulative SFF story of capacity and capability-building. While projects may communicate their learnings to the wider community, the evaluators believe there is also an opportunity for MPI to aggregate the learnings and promulgate them in a more cohesive manner. A communications and extension strategy could address:
- telling the success stories of SFF in a more integrated way, based on cumulative impacts of successive projects in a similar topic area
 - communicating best-practice findings from SFF projects, to maximise technology transfer to a wider audience
 - recognising the contribution of the SFF to social capital and the flow-on benefits of this for successive projects
 - promoting the benefits of working in collaborative partnerships
 - demonstrating how learnings at a local level can be scaled to influence environmental policy or practice at regional and policy level.

Reframing eligibility criteria

155. There is an inherent tension between supporting innovation – which involves taking calculated risks – and selecting projects that have a high

likelihood of success – which may encourage risk averse behaviour. The following table summarises the competing priorities for SFF funding that were identified during the evaluation.

Priority	Comments
<ul style="list-style-type: none"> Between SFF and other funds (macro) 	<p>Evidence shows SFF is providing positive outcomes from grass-roots, community initiatives. There is no other fund that has the right set-up to effectively meet farmers' and growers' needs at this grass-roots level if the SFF was discontinued.</p> <p>The SFF fills a gap not met by larger funds such as the PGP and MBIE funds.</p> <p>Further, SFF leaves communities and individuals with a better skill and capacity base from which they are better able to amend practices and take up innovations that may come out of other funds.</p> <p>The SFF also provides for the public interest in issues that sectors would not be able to locate commercial funding for.</p>
<ul style="list-style-type: none"> Māori development & equitable access 	<p>MPI staff report that Māori agribusiness sometimes has an additional layer of complexity that comes with multiple landowners and land being returned as part of settlement processes.</p> <p>In the past Māori agribusiness project applications were often not considered to be of sufficient standard to be successful. There were past concerns around project management, keeping to timeframes and financial management. This concern for accountability resulted in inequitable funding to Māori from this programme, which has started to be addressed.</p> <p>In future, it may be appropriate to prioritise Maori development projects in order to address some of this inequity. This may require additional project support to enhance potential for projects' success.</p> <p>Recent evaluation on Māori agribusiness has determined that with the right support Māori can make significant progress on their own terms, to achieve outcomes that are valuable to them and have wider public value.</p>
<ul style="list-style-type: none"> Between big and small projects (pipe-line) 	<p>Previously there has been a fairly well-established ratio of big to small projects funded within the SFF. However, there is no other fund that SFF projects, project teams and communities can easily move on to once the SFF contract has finished.</p> <p>It has been suggested that if it were possible for projects to have support to develop their learnings into a business case, there may be funding available from PGP, MBIE or Callaghan Innovation for further progress.</p>
<ul style="list-style-type: none"> Between big and small sectors 	<p>SFF will always need to balance the needs of the large sectors (e.g. dairying) against the benefits that small groups (e.g. persimmon or macadamia growers) might achieve from funding.</p> <p>There is also a challenge as to whether the Fund supports priorities at an industry (e.g. dairying) or regional (e.g. catchment) scale.</p>

<ul style="list-style-type: none"> • Risk averse behaviour & fund distribution 	<p>Risk averseness: SFF has a track record in delivering projects effectively. However, there is also some evidence the SFF has been cautiously administered to ensure selected projects have a good chance of success.</p> <p><i>Remember not all projects will work, you can't always guarantee outcomes but you need some stretch. [Interviewee]</i></p> <p>Perhaps there is room for some slightly riskier, more emergent, projects in growth areas. There is merit in considering having a slightly larger pool of the funding for more established projects with a proven track record.</p> <p>There is also an opportunity to include projects run by experienced Project Managers which might require a lower level of support from the MPI Advisers. However, the benefit of input from MPI Advisers should not be under-estimated, even for highly skilled Project Managers.</p>
<ul style="list-style-type: none"> • Other 	<p>There are a number of other tensions that will inevitably crop up during operation of the Fund, including:</p> <ul style="list-style-type: none"> • emergent versus established projects • growth areas versus developed areas • new initiatives versus building on existing initiatives • high-risk versus low-risk projects.

156. The choice of projects to fund comes down to a policy decision by those with governance responsibilities about where to take the Fund. Given the stated intent of the SFF to support grass-roots innovation and the high success rate of projects to date, MPI might want to consider whether its application process or risk assessment criteria and selection criteria are resulting in the SFF playing it too safe and excluding some promising but more risky projects.

157. MPI might also consider:

- continuing the recent emphasis on Māori agribusiness as a sector with significant potential to benefit from SFF but one that has been under-served by SFF in the past. It may be necessary to provide additional project management support to some of the applicants to support their access to the Fund
- including projects that scale out to other regions rather than discounting them as “same approach to another region”
- extending the timeframes for specific stages of some projects, particularly those which require negotiations at the start to establish necessary relationships – particularly projects with Māori.

In summary

158. The SFF remains fit for purpose and makes a worthwhile and valuable contribution to primary industries and rural communities. It supports the interests of science, the environment, agribusiness and the community in ways that are not replicated by other funding programmes.

159. Available evidence indicates that SFF funds are being allocated and used in accordance with the intended purpose and strategic priorities of the SFF, and that the SFF has a track record of investing in worthwhile and successful projects. Furthermore, the SFF has contributed to encouraging significant partner co-investment in these projects.

The government should put higher levels of funding into SFF because we think that research directly initiated by farmers... has the capacity to make a large impact on the agricultural economy. These are not blue skies research topics; they are generated by important problems on the ground that often are not readily understood or noticed by most people. [Project manager]

160. Key benefits of the SFF include contributions to increased capability, enhanced relationships, behaviour change, and development and adoption of new technology. SFF projects often contribute to protecting and growing the economic value of primary industries.
161. To gain further value for money from the SFF, opportunities for consideration include investment in MPI Advisers, administrative support for grantees, harnessing the capacity of SFF Project Managers, developing a communications and extension strategy and re-framing eligibility criteria.

6 Appendix A: Context to the SFF

162. The Sustainable Farming Fund (SFF) was created in 2000, based on a 1989/1990 proposal by the then Labour-led Government. Its purpose was to develop a “farm partnership” fund to help link farmers and science. Its objectives included improving the economic performance of land-based sectors, improving the environmental outcomes associated with the sustainable use of land-based resources, and supporting rural communities (as part of *Closing the Gap*).
163. A Ministry team (from the predecessor agency, the Ministry of Agriculture and Fisheries) ran a series of focus groups around the country to develop the principles of the new Fund, which was named the Sustainable Farming Fund. To date \$122.8 million has been spent on funding nearly 1,000 SFF projects (250 being in progress at any one time). It includes clusters of 20–40-plus projects in common topic areas such as new crops, integrated pest management, biological controls and nutrient management.
164. The first SFF evaluation was carried out in 2002. As a result of that evaluation, the Fund was given three further years’ funds for allocation and a reasonable operational budget. The SFF team was increased and a growth phase followed. A second economic-focused evaluation in 2004 led to the Fund being base-lined in 2005. Since then the SFF has invested an average of approximately \$8 million per annum (between \$5 and \$12 million), depending on the number, length and size of projects (see figures 6 and 11 above).
165. The SFF was set up to fill a gap by linking the farming and science communities. Twelve years on, there have been a number of changes in the political and operating environment that need to be taken into account. The following table provided by MPI summarises key changes that occurred between 2000 and 2012.

Table 4: Changes in political and operating environment for SFF

2000	Perception of change by 2012
Vacuum of this type of funding; little cross-agency alignment	More programmes are operating in this space – offered by government and industry – focus on strategic alignment
Focus group emphasised broad operating rules and a competitive process	The Primary Growth Partnership (PGP) provides an alternative funding stream for larger SFF programmes
Broad approach to sustainability interface	More emphasis on technology transfer
Industry organisations not so well-developed	Industry and government priorities have evolved
	Much tighter controls on Government expenditure due to the current fiscal situation

7 Appendix B: Evaluative rubric

Evaluative criteria

166. An evaluation-specific approach according to Michael Scriven (2012), is designed to produce findings that are *valid* (supported by robust evidence and analysis), *credible* (e.g. underpinned by appropriate methods) and *useful* (of practical value to inform future decisions).
167. In order to meet these aims, clear criteria are required in order to provide an explicit basis for determining whether the SFF is worth the resources used. Evaluative criteria were identified for the Fund overall (as distinct from a project level) in collaboration with MPI representatives. A working draft of these criteria is presented in Table 5.

Table 5: Evaluative criteria

Evaluative criteria:	
Economic values	<p>To what extent is there evidence that:</p> <ul style="list-style-type: none"> • New knowledge and or technologies are incorporated into farmer practice • Farmers/farm systems improve on-farm productivity and/or profitability • Clear economic benefit is realised beyond just the community of interest • Greater value created contributes to increased export earnings • There a prospect of some projects being sufficiently successful that the SFF overall breaks even
Environmental values	<ul style="list-style-type: none"> • Better environmental standards are incorporated in farm level, policy level and/or industry-level systems • Greater use of environmentally sustainable practice is evident amongst the farming community • Farmers are able to leverage off environmental credentials to respond to market opportunities
Cultural values	<ul style="list-style-type: none"> • Greater opportunities for Māori involvement as stakeholders in the project • The SFF is flexible enough to accommodate the needs of Māori • Greater opportunities for Māori agribusiness to work towards Māori aspirations in a culturally meaningful way • SFF supports Māori agribusiness contribution in all areas – economic, environmental, social and cultural
Social values (individual, community, sector capacity)	<ul style="list-style-type: none"> • Social and organisational capacity and capability-building occurs at individual, community and sector levels • Knowledge and technologies to address wider farming challenges, and scale out (from an individual level, to regions/sectors to a national level) • Relationships spread within and across sectors and regions, and networks built and cemented • There is improved rural wellbeing and a vibrant rural sector enhances wellbeing, sustainability and resilience.

168. The following evaluative rubric was used to provide an explicit basis for making evaluative judgements. The rubric sets out criteria that were developed in consultation with MPI. These criteria integrate relevant policy expectations and the strategic intent of the SFF, together with the Bennett's Hierarchy (see para 23, footnote 7). Evaluative criteria have been specified for a range of performance levels, from "minimally acceptable" to "excellent" value for money.

Table 6: Evaluative rubric defining “value for money” from the SFF

Level	Criteria
Excellent value for money	<ul style="list-style-type: none"> • Sufficient results from successful projects to provide clear evidence of positive return on investment from SFF investment overall AND • Credible contribution to export opportunities and improved sector productivity; and increased environmentally sustainable practice AND • Evidence of exemplary contributions to enhanced environmental, social and cultural outcomes including significant outcomes at Level 6 of the Bennett’s Hierarchy and emergent outcomes at Level 7.
Very good value for money	<ul style="list-style-type: none"> • Sufficient results from successful projects to demonstrate we have already broken even on the SFF investment overall AND • Emerging contribution to export opportunities, improved sector productivity; and increased environmentally sustainable practice AND • Evidence of significant contribution to enhanced environmental, social, or cultural outcomes including significant outcomes at Level 6 of the Bennett’s Hierarchy.
Good value for money	<ul style="list-style-type: none"> • Sufficient results from successful projects to credibly forecast break-even on the SFF investment overall AND • Credible contribution in encouraging primary sectors partnering, encouraging and co-investing in industry innovation and adoption, partnering innovative approaches to environmental challenges, and engaging with Māori AND • Evidence of emerging contribution to enhanced environmental, social, OR cultural outcomes including significant outcomes at Level 5 of the Bennett’s Hierarchy and emergent outcomes at Level 6.
Minimally acceptable value for money	<ul style="list-style-type: none"> • The SFF is sufficiently well-utilised on a range of sufficiently promising projects to have a credible prospect of breaking even overall²⁴ AND • Funds are being allocated and used in accordance with the intended purpose and strategic priorities of the SFF AND • Emerging contribution in encouraging primary sectors partnering, encouraging and co-investing in industry innovation and adoption, partnering innovative approaches to environmental challenges, and engaging with Māori AND • Evidence of emerging contribution to enhanced environmental, social or cultural outcomes – meets Levels 1–4 (<i>Resourcing, activities, participation and reactions</i>) on Bennetts Hierarchy and there are emerging examples from Level 5 (<i>KASA – Knowledge, Attitudes, Skills and Actions</i>).
Poor value for money	<ul style="list-style-type: none"> • Fund is not sufficiently well-utilised on a range of sufficiently promising projects and has no credible prospect of breaking even OR • No evidence of contribution to enhanced environmental, social, or cultural outcomes at Bennetts Hierarchy Level 5 (<i>KASA – Knowledge, Attitudes, Skills and Actions</i>) or higher.

169. The following table provides examples of possible outcomes from the SFF and how they relate to different levels of the Bennett’s Hierarchy. These

²⁴ For these purposes break-even is explored in terms of broadly defined bands relating to overall value of outcomes, as expressed in the rubric. Although there is insufficient data to calculate a precise return on investment (ROI) figure, there may be sufficient evidence to make a judgment against these four levels. A *credible prospect* of breaking even means the outcome is not guaranteed but neither is it far-fetched – it is within the range of plausible outcomes. *Credibly forecasting* break-even means the outcome is not guaranteed but is highly likely – the range of projected outcomes is predominantly positive. *Already breaks even* means that there is good evidence to suggest the SFF investment has already been recouped through the outcomes of SFF projects. *Positive ROI* means there is good evidence to suggest the SFF has already exceeded break-even.

examples were used as an interpretive guide to inform judgments about which levels of the rubric best describe current outcomes of the SFF.

170. These are examples of the kinds of outcomes that were anticipated. These examples were not intended to limit the scope of contributions that contributed to the evaluative judgment.

Table 7: Examples of possible SFF outcomes by Bennetts Hierarchy level

Level	Criteria
Level 7	<p>There is credible evidence of:</p> <ul style="list-style-type: none"> • Clear economic benefit being realised beyond the communities of interest • Farmers using holistic on-farm systems to build resilient, adaptable and profitable businesses that minimise environmental damage • Well-established networks across sectors support clusters of projects to leverage off one another at a national level • Strong, established cross-sector relationships enabling highly effective technology transfer and innovation • Rural wellbeing, sustainability and resilience • Significant clusters of Māori agribusiness flourishing and supporting Māori communities whilst minimising environmental damage. In some areas, Māori leading the way for non-Māori.
Level 6	<ul style="list-style-type: none"> • Farmers developing on-farm systems to build resilient, adaptable and profitable businesses • Farm systems incorporating known environmental standards • Well-established networks within sectors supporting clusters of projects to leverage off one another at a regional level • Cross-sector relationships enabling effective technology transfer and innovation • Effective communication of success to other farmers spreading across sectors to build broader confidence to engage in new practice • Farmers being able to leverage off innovation and/or environmental credentials to respond to market opportunities • Human capacity-building and improved wellbeing extending into the region • Māori agribusiness proactively seeking funding from SFF to support agribusiness aspirations of Māori in culturally meaningful ways.
Level 5	<ul style="list-style-type: none"> • Increased awareness of SFF and more applications, especially from Māori • Farmer practice change, skill development and/or human capability development at an individual or community level • Farm systems incorporating new knowledge, technologies and/or better environmental standards • SFF contributing to development of cross-sector relationships between farmers and the science community, SFF Project Managers, industry sectors and other stakeholders – which facilitates some technology transfer • New market opportunities being identified and under investigation • Human capability building and improved wellbeing extending beyond the initial projects into the community • SFF specifically fostering opportunities for Māori agribusiness – Māori agribusiness proactively seeking out funding from SFF to support agribusiness aspirations of Māori in culturally meaningful ways that increase productivity and profitability.

8 Appendix C: Evaluation methodology

171. This evaluation specific methodology²⁵ used mixed methods to provide a robust approach to building layers of credible evidence²⁶ from which to make an assessment of value, merit and worth of the SFF.
172. The following sections outline specific details of our approach.

Phase One – Scoping

173. The scoping phase included:
- Reading existing documentation provided by the Ministry
 - Several meetings with Ministry staff to discuss the SFF and the initiation of the evaluation project, evaluation scope and questions (e.g, excluding a cost-benefit analysis and focusing on funded not unsuccessful SFF applications), and the logic that underpins its focus, and to learn of more recent developments that inform the evaluation
 - Two half-day workshops with Ministry staff to gain input into the development of an outcomes framework, evaluative rubrics and the evaluation design.
174. This resulted in an agreed evaluation plan, with the evaluation criteria in Appendix B. Judy Oakden, Dr Will Allen, Julian King and Kate McKegg undertook these activities between 27 March and 29 April 2013.

Phase Two – Data collection and analysis

175. In addition to existing data obtained during phase one of the project, the evaluation team collected new data for this evaluation. The data collected is summarised in the following table:

²⁵ For further information on what constitutes an 'evaluation specific methodology' see the following publications:

Davidson, E.J (2013) Evaluation-Specific Methodology: the methodologies that are distinctive to evaluation. GenuineEvaluation. Retrieved 20 December 2013 from <http://genuineevaluation.com/evaluation-specific-methodology-the-methodologies-that-are-distinctive-to-evaluation/>

King, J., McKegg, K., Oakden, J. & Wehipeihana, N. (2013) Rubrics: A Method for Surfacing Values and Improving the Credibility of Evaluation. *Journal of Multidisciplinary Evaluation*, 9: 21, 11-20.

Scriven, M. (2008). A summative evaluation of RCT methodology: & an alternative approach to causal research. *Journal of Multidisciplinary Evaluation*, 5, 11-24.

²⁶ Scriven, M. (2008). A summative evaluation of RCT methodology: & an alternative approach to causal research. *Journal of Multidisciplinary Evaluation*, 5, 11-24.

Table 8: Summary of data collected for SFF evaluation

Stakeholder group	Number of interviews	Data collection approach
Self-completion survey of SFF Project Managers	All 480 SFF Project Managers received the survey, 380 were eligible for this study and 136 useable responses were received giving a 36% response rate.	Self-completion online survey.
Key stakeholders		
MPI staff including project sponsors, past and previous Fund Managers, MPI Advisers (4), Administrator, Māori Agribusiness representatives	Ten participants (plus input from two MPI staff from the Assurance and Evaluation team)	Face-to-face meetings with MPI staff and evaluators in Wellington and Christchurch
Fund Managers from MPI, MBIE, Callaghan Institute & MfE	Six participants	Two-hour focus group
Two pilot interviews for the case study and three pilot interviews for the on-line survey with Project Managers	Six stakeholders	Forty to ninety minute interviews by phone

Other stakeholders	Number of interviews	Data collection approach
Top of the South Case Study	6	Face-to-face meeting with one stakeholder in Christchurch. Other contact with stakeholders by telephone and email
Winegrowers Case Study	5	Meeting with two key stakeholders face to face in Auckland Other contact with these stakeholders including subsequent by telephone and email
Tuhoe Case Study	8	Meeting face to face with key stakeholders in Murupara Other contact including subsequent by telephone and email

Self-completion questionnaire for SFF Project Managers

176. A self-completion questionnaire was developed to cover the key evaluative criteria identified via the outcomes framework. It was piloted with three SFF Project Managers between 8 and 12 July 2013 and the survey itself administered by MPI’s Research and Evaluation team using Vovici (on-line) software.
177. Process for self-completion survey for SFF Project Managers:
- A pre-notification email was sent on 12 July 2013 to a total of 480 SFF Project Managers representing 806 projects (2000–2011) – some of whom had managed multiple SFF projects
 - Self-completion surveys were emailed to 380 SFF Project Managers on 16 July 2013 (having removed bounce-back email addresses)

- All SFF Project Managers received a reminder email on 23 July 2013
 - On 31 July 2013 a second copy of the survey was emailed out to the SFF Project Managers who had not yet responded
 - On 7 August 2013 all SFF Project Managers who had not responded were sent a final reminder email.
178. To ensure we met reporting requirements, we closed the survey off on 20 August 2013 so we could commence data analysis. We achieved 136 responses. Thus our response rate for the survey was $136/380 = 36\%$.

Key stakeholders

179. Key Ministry stakeholders were interviewed by either Judy Oakden or Dr Will Allen between mid-March and mid-July 2013. Interviews were undertaken using topic guides to guide unstructured interviews. Interviews ranged from 35 to 90 minutes duration. Some interviews were conducted face to face, others were conducted by telephone. Most interviews were digitally recorded so that key points could be reviewed where necessary.

Focus group with Fund Managers

180. The focus group of Fund Managers included those from:
- MPI with a good working knowledge of the Sustainable Farming Fund, Primary Growth Partnership Fund and Sustainable Land Management and Climate Change Programme;
 - from Ministry for the Environment with good knowledge of the Waste Minimisation Fund and the Community Environment Fund;
 - other funds administered by the Ministry of Business, Innovation and Enterprise (MBIE), including the Fund Manager of the Biological Industries Research Fund, with a good knowledge of other MBIE Funds
 - the Callaghan Institute.
181. A limitation of the focus group is there was no representation from New Zealand Trade and Enterprise (NZTE), Department of Conservation or Te Puni Kokiri (Ministry of Maori Development).

Case Studies

182. In order to help determine the value of outcomes, the case studies were developed as performance stories. They were designed to provide sufficient depth to explore the extent to which projects can build on each other and the ways in which (for these clusters) SFF is worth the investment. The literature reviews and related interviews were designed

to show how cumulative impacts from a number of related SFF projects developed over time, with later projects building on learnings from earlier ones.

183. The evaluators drew on the expertise of MPI staff with considerable experience of SFF to select the cases. These were selected as providing a good, representative sample of the breadth and variety of SFF projects. They were intended to be able to highlight cumulative impacts that had developed within and across projects. They represent a range of projects – across different types of production, regions, SFF staff and the 12-year timeframe of the SFF portfolio, and types and sizes of SFF funding; and they included a project that benefits Māori.

Table 9: Cases for performance stories

Case	Rationale
Industry: Viticulture Sustainability	<ul style="list-style-type: none"> • This case illustrates strengthening production. • There have been many projects over the past 10 years in this industry. There are multiple outcomes in economic and environmental terms and good examples of industry development and expanding markets and this is an example of project that has national coverage. • Projects included were: <ul style="list-style-type: none"> ○ 01/131 <i>Sustainable Winegrowing NZ</i>: Implementation of systems to benchmark and improve the sustainability of NZ winegrape production practices under Sustainable Winegrowing NZ ○ 01/135 <i>NZ Pipfruit Ltd and the Hawkes Bay Grape Growers Assn</i>: Research to practice: technology implementation by growers ○ 01/221 <i>New Zealand Winegrowers</i>: The grape calculator: must pH ○ 03/141 <i>New Zealand Winegrowers</i>: GIS mapping of the national vineyards for the wine industry ○ 03/143 <i>New Zealand Winegrowers</i>: Focus vineyards: what is the best practice and how to improve adoption of this best practice? ○ 06/096 <i>NZ Winegrowers: Sustainable Winegrowing New Zealand</i>: Strategy for improving energy use in the Wine Industry ○ L03/024 <i>SWNZ workshop series</i> to increase awareness of the implication of Resource Management legislation the wine industry ○ 07/123 <i>Sustainable Winegrowing New Zealand</i>: Implementing Ultra Low Residue Wine Grape Production (GrapeSafe) ○ 09/144 <i>Leafroll Virus control in NZ Vineyards</i> ○ 11/111 <i>Organic Focus Vineyard Project</i> ○ 11/110 <i>New opportunities for sustainable grape thinning</i> ○ 12/073 <i>Sustainable virus-free vineyards replants and beyond</i>
Catchment: Top of the South Water Quality	<ul style="list-style-type: none"> • This case illustrated enabling ongoing production. This project demonstrated regional coverage • There were three main projects which clustered for this case: <ul style="list-style-type: none"> ○ 06/005 <i>Aorere Catchment Group</i>: A community approach to improving catchment wellbeing ○ 07/113 <i>Sherry River Catchment Group</i>: Improving water quality through farm environment planning across the Sherry catchment – this project links the LCR Motueka ICM project ○ 09/160 <i>Aorere and Rai Catchment Management Groups</i>: Farmers as leaders in water quality action

Local development: Tūhoe Forestry	<ul style="list-style-type: none"> • This case illustrated growing new production • This project demonstrated supporting a community capability and capacity building • There was one main project for this case, plus two projects that were funded from the 2012 funding round. <ul style="list-style-type: none"> ○ 08/060 <i>Tūhoe Tuawhenua Trust</i>: Podocarp restoration on Tuawhenua lands ○ M12/144 <i>Tūhoe Tuawhenua Trust</i>: Ensuring sustainable productivity of steepland tawa-podocarp forests ○ M12/145 <i>Tūhoe Tuawhenua Trust</i>: Expanding economic viability for sustainably managed tawa forests
--------------------------------------	--

184. The following steps occurred in developing the performance stories:

- Confirmed the selected cases with MPI
- Identified key useful documentation in the files that would be references for these stories
- Reviewed the documents and determined the additional information needed from each cluster by way of interview.

185. Dr Will Allen was responsible for the additional data collection for the three cases, as he had a good working knowledge of the Top of the South clusters and a working relationship with the Chairman of the Tūhoe Tuawhenua Trust.

186. Interview tools and data analysis templates were built on the outcomes framework and rubrics introduced earlier. Specific topic guides were developed for the different cases. The broad topic guides are shown in the following table.

Table 10: Outline of topic guides

Area	Types of questions we might ask
Context	<ul style="list-style-type: none"> • Who was involved? Why? What was the situation at the start of this cluster of projects that needed to be solved? • What was the long-term change the initiatives sought to support, and who was intended to benefit? To what extent was this intended to benefit Māori?
Activities, Outputs Outcomes	<ul style="list-style-type: none"> • The sequence of events that occurred – what happened, who was involved? • What did you expect to happen and what actually happened? • How might that be explained?
Reflection	<ul style="list-style-type: none"> • What were the barriers and enablers to this cluster of projects? • What unanticipated effects have there been – what went right and what went wrong? Explore some of the more disappointing outcomes and what they learned from that. • Going forward, how sustainable is the work arising from this project? • How might this initiative be scaled up and out?
Questions of value and worth	<ul style="list-style-type: none"> • To what extent was this cluster of projects worth implementing? • What is different now compared with at the start? • What have been the most valuable outcomes to stakeholders? How can we prove this?

	<ul style="list-style-type: none"> • How does the cluster create economic value? (I.e., what are the productivity, sustainability, growth in production, growth in exports or other outcomes that represent an economic return to individuals, the sector, and the NZ economy?) • What do these economic gains look like in context (or how might we place them in context)? E.g. as a percentage of estimated market size, opportunity cost of pre-existing inefficiencies in the sector. • If SFF did not exist, what would we lose (with explanation that this is not the focus of the evaluation)?
--	---

All case study interviews were undertaken by Dr Will Allen between 20 May 2013 and 15 October 2013. See the full case studies in a companion document to this main evaluation report.

Workshop with Ministry staff

187. A workshop was held on 26 August 2013 with MPI management and operational staff to discuss the findings of the SFF Project Managers' self-completion survey. This took two hours and examined generalisations, contradictions in the data and surprises in the data. It allowed staff to provide feedback on the data from the SFF Project Managers' self-completion findings and to determine areas for further investigation while developing reporting of the review.

Other data sources included in the review

188. There were several other sources of data included in the evaluation.

Table 11: Other data sources included in the evaluation

Other data sources
Natural Resource Sector Review Documentation : Documents related to the Review included: <ul style="list-style-type: none"> • NRS Non-Departmental Funds Duplication and Overlap: A report completed for Stage II of the NRS Non-Departmental Funds Review (Ministry for the Environment and Ministry for Primary Industries, 2013), • Natural Resources Sector: Stage 2 Funds Analysis Review: Opportunities for efficiency and effectiveness and reprioritisation of NRS Non-Departmental Funds (Deloitte, 2013)
Documentation from all the projects related to the case studies
Background material provided as part of the Request For Proposal (RFP) for this project, which has been documented in the original evaluation plan for this project

189. In summary, there were several sources of data and the various data was used in conjunction to arrive at the evaluative conclusions for this evaluation.

Limitations

190. Cost benefit analysis was agreed to be out of scope for this evaluation. Available data did not support economic valuation of impacts of the SFF.

However, triangulation of evidence from case studies, survey feedback and past evaluations supported evaluative judgments against the value for money criteria defined in the rubric.

191. While future evaluations could include cost benefit studies on selected projects, it would be infeasible to conduct such a study for the SFF as a whole due to a lack of comprehensive outcome data as well as the lack of a strong basis for determining additionality and monetising some outcomes.
192. A key limitation of the project was the lack of outcome data in the main SFF database. Accordingly, project managers were surveyed to better understand their perceptions of the value of the projects. Their feedback, in triangulation with feedback from MPI Advisors, other Fund Managers, and other stakeholders as well as other independent data sources outlined above provided sufficient data from which to make evaluative judgements.
193. The database also contained incomplete information on in-kind contributions from partners.
194. Applicants who missed out on SFF funding were agreed to be out of scope for the survey, because the evaluation questions focused on the value obtained from completed SFF projects. While those who missed out on funding might have provided an additional perspective on the SFF, the challenges of obtaining funding were addressed in this evaluation from other sources.

9 Appendix D: Challenges to evaluating and attributing impacts

195. Mayne and Stern (2013, p.51) identify a number of attributes which the evaluators consider to be applicable to SFF investments, that provide challenges to evaluating and attributing impacts. These include:
- *Complex system.* Complex ecosystem interactions mediating social and ecological systems relationships.
 - *Market failures.* Frequent absence of market-based coordination of activities around the use (and conflict resolution in that use) of natural resources.
 - *Multiple stakeholders.* Multi-stakeholder participation and coordinated action in socio-ecological systems.
 - *Multi-level.* Operating at several levels (farm, landscape, regional, national) – often quite localised interventions are seen as contributing to more ambitious goals at a higher system level.
 - *Uncertain, multi-level and lengthy trajectories for impact.* A long and uncertain developmental trajectory, as well as market variables that can change rapidly while landscape variables usually change over decades.
 - *Systems integration.* Interconnectedness and integration among different fields of knowledge such as farm productivity, institutional innovation and environmental concerns – between which there is often a trade-off.
 - *Contextualised knowledge.* A high level of contextualisation – the specific context and history matter.
 - *Emerging outcomes.* Outcomes that are unpredictable and subject to change.
 - *Uncertain knowledge.* Operating in areas of limited/little previous or reliable knowledge.
 - *Institutional concerns.* Impacts that are often institutional – such as governance and markets.

10 References

- Allen, W., Kilvington, M., Nixon, C., & Yeabsley, J. (2002). *Sustainable development extension. Technical Paper: 2002/03*. Wellington : Ministry of Agriculture.
- Barton, C., & Sutherland, R. (2002). *Evaluation of the Sustainable Farming Fund (SFF) Programme - summary report*. Palmerston North: Environments by Design Limited.
- Bennett, C., & Rockwell, K. (1995). *Targeting Program Outcomes*.
<http://citnews.unl.edu/TOP/english/overview>.
- Bergin, D., & Kimberley, M. (2009). *Silvercultural trials and wood quality studies with naturally-regenerating Totara, Northland, New Zealand*. Rotorua: Scion.
- Britt, H., & Coffman, J. (2012). Evaluation for models and adaptive initiatives. *The Foundation Review*, 4(2), 44-58.
- Davidson, E. (2005). *Evaluation methodology basics: the nuts and bolts of sound evaluation*. Thousand Oaks: Sage.
- Davidson, E.J (2013) *Evaluation-Specific Methodology: the methodologies that are distinctive to evaluation*. Genuine Evaluation. Retrieved 20 December 2013 from <http://genuineevaluation.com/evaluation-specific-methodology-the-methodologies-that-are-distinctive-to-evaluation/>
- Deloitte. (2013). *Natural Resources Sector: Stage 2 Funds Analysis Review: Opportunities for efficiency and effectiveness and reprioritisation of NRS Non-Departmental Funds*. Wellington: Enterprise Risk Services, Deloitte.
- Giera, N. (2009). *Cost-benefit analysis of SFF projects: Focus on deer: Otago and Southland deer focus farms*. Wellington: Nimmo-Bell.
- Journeaux, P. (2009). *Developing an institutional model for the extension and adoption of environmental best management practices by pastoral farmers in New Zealand*. Paper presented at the 2009 NZARES Conference Tahuna Conference Centre – Nelson, New Zealand. August 27-28, 2009.
- King, J., McKegg, K., Oakden, J. & Wehipeihana, N. (2013) Rubrics: A Method for Surfacing Values and Improving the Credibility of Evaluation. *Journal of Multidisciplinary Evaluation*, 9:21, 11-20.
- Mayne, J. (2008). *Contribution analysis: An approach to exploring cause and effect*. n.a.: Institutional Learning and Change (ILAC).
- Mayne, J., & Stern, E. (2013). *Impact evaluation of natural resource management research programs: a broader view*. Canberra: Australian Centre for International Agricultural Research.
- Ministry for Primary Industries. (2011). *Sustainable Farming Fund satisfaction survey*. Wellington: Ministry for Primary Industries.
- Ministry for Primary Industries. (2012). *SFF Project Adviser Responsibilities as at April 2012*. Wellington: Ministry for Primary Industries.
- Ministry for Primary Industries. (2012). *Statement of intent 2012-2015*. Wellington: Ministry for Primary Industries.
- Ministry for Primary Industries. (2013). *Prototype of new data base (inhouse document - excell spreadsheet)*. Wellington: Ministry for Primary Industries.

- Ministry for Primary Industries. (2013). Sample of the current SFF database. Wellington: Ministry for Primary Industries.
- Ministry for Primary Industries. (2013, September 18). *Sustainable Farming Fund*. Retrieved September 30, 2013, from Ministry for Primary Industries: <http://www.mpi.govt.nz/Portals/0/Documents/agriculture/assist-funding/sff/sff-2014-15-applicant-guidelines.pdf>
- Ministry for Primary Industries. (2013). Sustainable Farming Fund Application Guidelines. Wellington: Ministry for Primary Industries.
- Ministry for Primary Industries. (n.d.). Other Funders Relevant to SFF. Unknown: Unknown.
- Ministry for Primary Industries. (n.d.). SFF project adviser desk file. Wellington: Ministry of Primary Industries.
- Ministry for the Environment and Ministry for Primary Industries. (2013). *NRS Non-Departmental Funds Duplication and Overlap: A report completed for Stage II of the NRS Non-Departmental Funds Review*. Wellington : Ministry for the Environment and Ministry for Primary Industries.
- Ministry of Agriculture and Forestry. (2007). Sustainable Farming Fund: Progress Report Template: Sustainable management options for wood production from regenerating Totara. Wellington: Ministry of Agriculture and Forestry.
- Ministry of Agriculture and Forestry. (2009). Final report template: Sustainable management options for wood production from regenerating Totara. Wellington: Ministry of Agriculture and Forestry.
- Ministry of Agriculture and Forestry. (2010). Agreement for project grant and delivery. Sustainable Farming Fund, Ministry of Agriculture and Forestry.
- Ministry of Agriculture and Forestry. (2011). *Annual Report 2010-11*. Wellington : Ministry of Agriculture and Forestry.
- Ministry of Agriculture and Forestry. (2011). Progress Report: Biological control of Gum Leaf Skeletoniser. Wellington : Ministry of Agriculture and Forestry.
- Ministry of Agriculture and Forestry. (n.d.). Guidelines to help Sustainable Farming Fund panellists at the Phase 2 assessment panel. Wellington: Ministry of Agriculture and Forestry.
- Ministry of Agriculture and Forestry: Sustainable Farming Fund. (2010). *Ten years of grassroots action 2010*. Wellington: Ministry of Agriculture and Forestry.
- Ministry of Business, Innovation and Employment (MBIE). (2013, September 2). *Biological Industries Research Fund Results*. Retrieved September 30, 2013, from <http://www.msi.govt.nz/>: <http://www.msi.govt.nz/get-funded/research-organisations/2013-science-investment-round/biological-industries-research-fund-results/>
- Ministry of Primary Industries. (2013). *Request for proposal 16291*. Wellington: Ministry of Primary Industries.
- Moodie, H. (2006). *Application for project grant 2006/2007*. Whangarei: Sustainable Farming Fund.
- Nimmo-Bell. (2011). *Sustainable Farming Fund - Direction Document 2010 - 2013 August 2011 Update to part B (Internal unpublished document)*. Wellington : Ministry for Primary Industries.

- Nimmo-Bell Company Ltd. (2008). *Optimising Evaluation Methodologies: A framework for the evaluation of the MAF Sustainable Farming Fund and the Organic Sector Advisory Programme*. Nimmo-Bell Company Ltd.
- Office of the Minister of Agriculture. (2000). *CAB Sustainable Resource Development Fund: Operation in 2000/01: FIN (00) 167*. Wellington: Office of the Minister of Agriculture.
- Percy, H. (2009). Final report verification form: Sustainable management options for wood production from regenerating Totara. Wellington: Sustainable Farming Fund.
- PWC (February 2013) *Growing the Productive Base of Māori Freehold Land: report for Ministry for Primary Industries*. Available at www.mpi.govt.nz.
- Rogers, P. J. (2012, March). *Introduction to impact evaluation*. Retrieved March 11, 2013, from Better Evaluation: <http://www.interaction.org/document/introduction-impact-evaluation>
- Sanderson, K., Goodchild, M., & Leung-Wai, J. (2004). *Evaluation of the Sustainable Farming Fund*. Wellington: BERL.
- Scriven, M. (2012). The Logic of Valuing. *New Directions for Evaluation*, 133, 17-28.
- Scriven, M. (2008). A summative evaluation of RCT methodology: & an alternative approach to causal research. *Journal of Multidisciplinary Evaluation*, 5, 11-24.
- Sustainable Dairy Action Group. (2007). *Final project report July 2007*. Sustainable Dairy Action Group.
- Sustainable Farming Fund, Ministry of Agriculture and Forestry. (2011). *Index of SFF-funded projects 2000-2012*. Wellington: Ministry of Agriculture and Forestry.
- Yates, B. (2012). Step arounds for common pitfalls when valuing resources used versus resources reduced. *New Directions for Evaluation*, 43-52.