

Evaluation of the Sector Projects Programme

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August 2006



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Executive Summary

Introduction

1. The Sector Projects programme is delivered by New Zealand Trade and Enterprise (NZTE) with a budget allocation of \$21.995m¹ in 2005/06. This is funded from within the total appropriation of \$40.192 million for 'Enabling Services – Facilitating the development and implementation of sector and regional sector strategies.' Under this programme, NZTE is to undertake a variety of projects to identify and respond to strategic issues for sectors where significant net economic benefits are available and where the market itself lacks the scale, specialisation and/or capability to deliver. This programme is funded from the following Cabinet-mandated mechanisms for sector facilitation:
 - a. Coordination and facilitation of sector strategies– conducting sector related research, assisting with partnership building through taskforces, assisting the development and coordination of government action in response to the taskforces, and improving the alignment of existing government activity to support sectors;
 - b. International sector specialists – providing sectors with strategic “in-market and inside industry” information and knowledge from experienced international advisors or experts in the sector.
 - c. Sector-focused international market development – supporting major projects aimed at enabling groups of New Zealand based businesses to take advantage of significant market opportunities.

Evaluation purpose and method

2. The purpose of this evaluation was to assess the effectiveness and efficiency of the Sector Projects programme in achieving the intended outcomes. Based on the evaluation findings, recommendations are provided for improving policy and service delivery.
3. This evaluation assessed the extent to which Sector Projects achieved the intended intermediate and final outcomes of the programme. This first time evaluation used a combination of quantitative and qualitative methods including file reviews and interviews with Sector Directors, case studies, online survey of firms participating in the sector projects, and analysis of NZTE administrative data. This evaluation focuses on the period from the programme's establishment in July 2003 to 30 June 2006.

¹ Output class 1.1. in NZTE's 2005/06 Output Plan.

Findings and conclusions

Programme implementation

4. NZTE has had a lot of discretion in the implementation of the Sector Projects programme. The underpinning policy has not provided a sufficiently clear framework to guide programme implementation in terms of direction and objectives. NZTE's execution of this programme has evolved since its inception in July 2003 in response to its organisational learning, changes in the policy environment and economic conditions.
5. The evolution in NZTE's implementation of the programme has resulted in rather different approaches across NZTE sector teams in terms of the nature and extent of partnership with industry on specific projects, the extent to which the projects address systemic issues for the sector or sub-sectors, and extent to which projects are aimed at demonstrating the value of new business models, or increasing the uptake of enabling technologies.
6. NZTE has used the 'Coordination and facilitation of sector strategies' and 'Sector-focused International Market Development' components of Sector Project funding to implement two core categories of sector projects with different hurdles to reach to receive funding approval and different objectives: a) sector implementation projects; and b) sector-based foundation activities. The 'International Sector Specialists' component of this programme was intended to be used by NZTE to pay for the input of external experts into the development of sector projects.
7. In late 2005, as preparation for this evaluation, NZTE and the Ministry of Economic Development (MED) started to articulate the intervention logic for this programme along with the specific intended outcomes. This is outlined in the Programme Logic Model in Section 1.2 of this report. The findings from this evaluation identified opportunities to refine this Programme Logic Model to provide better direction and guidance for programme implementation (described further in the Recommendations section).
8. The findings of this evaluation on the number and types of projects initiated by NZTE and the impacts on the participating firms can be used by NZTE to review and further improve the effectiveness of its operational strategies and approaches in each sector.

Outputs: Quantity and quality of projects

Quantity of projects

9. The total number of sector projects developed by NZTE in the three year period between July 2003 and June 2006 is 297 (112 of those projects were in the 2005/06 year). The average direct budget allocation for a project is in the \$20,000 to \$49,000 range. Over that period, the largest number of projects is in the Specialised Manufacturing and Creative sectors, followed by the ICT sector. There is a risk that the high number of projects approved in a year may dilute strategic direction. There is also a risk that some projects may be too limited in scope and budget to have a significant impact on the targeted outcomes. However, NZTE's latest output plan contains fewer and larger projects for 2006/07, which is an indication of more strategic focus. NZTE is continuing to improve its process for approving projects.

This evaluation identified opportunities to clarify and tighten the criteria for project approval (listed in Recommendations section).

GIF vs. non-GIF sectors

10. Due to lack of policy clarity and definition, there is divergence between MED and NZTE in the interpretation of the priority of the GIF (Growth and Innovation Framework) sectors (i.e. ICT, Biotech, Creative and Services) over non-GIF sectors (i.e. Specialised Manufacturing, Food & Beverage, International Education, Tourism, and Wood Processing) in terms of development and/or application of enabling technologies to raise productivity across a range of sectors. This is reflected in NZTE's resource allocation for projects across the sectors. The Food & Beverage sector followed by ICT and Manufacturing received the highest sector project budget allocation in 2005/06. Thus apart from the ICT sector, the other two sectors which received the highest budget allocation are not the GIF sectors, which the original policy expected to be given priority due to the importance of enabling technologies and cross-sector spillover impacts.
11. This divergence in interpretation of the policy objective raises a question of the balance between the GIF sectors driving the supply of enabling technologies and the user sectors promoting possible applications of these technologies. This needs to be resolved through further policy development by MED, in conjunction with NZTE, on sector facilitation. NZTE has begun a process to improve decisions about allocating resources between sectors. It is developing a "*Sector Resource Allocation Framework*" to identify and weigh criteria to be used to determine sector resource allocation, for example sector size, market size (global), the existence of growth drivers (labour and capital) in a sector and the existence of visible lead firms in a sector.
12. Traditionally most projects have been positioned within one of the eight NZTE sectors rather than cross-sector. However in 2006/07, NZTE is intent on cross-sector projects playing an increasing role in sector engagement strategies by establishing a contestable fund of \$0.500m for such projects.

Foundation (Scoping and research) vs. implementation projects

13. Up to 2005/06, many of the sector projects undertaken appear to be scoping and research-based. This is understandable for less 'mature' sectors where NZTE's involvement is recent, such as International Education and for more 'mature' sectors where major changes in strategy are contemplated, such as Specialised Manufacturing. MED acknowledge the need for NZTE to continue with scoping and research-based projects but expect that the focus going forward should be on implementation projects that carry out strategic activity for which there is clear industry participation. There are signs of this shift occurring in 2005/06 and 2006/07 with more strategic and focused sector engagement strategies and sector projects, aimed at implementing solutions to assist the sector in addressing systemic issues.

Partnership with industry

14. The development of a genuine partnership approach between NZTE and groups of firms and/or industry bodies should be an explicit part of the sector project model. Survey results from this evaluation indicate that firms which had greater involvement in setting the direction and scope of NZTE-led sector projects were more likely to

expect that benefits from the project would outweigh the cost of their participation. These firms were also more likely to attribute improvements in their innovation capability to NZTE-led sector projects. Interviews with representatives of industry bodies suggested that there was in all sectors a reasonable degree of agreement with the NZTE sector teams on the sector engagement strategies which identify the high-level critical issues relating to barriers and opportunities. However, case studies and firm surveys conducted in this evaluation indicated varying levels of industry contribution or buy-in to the specific sector projects.

Participant firm satisfaction with NZTE project leadership

15. The evaluation survey examined firm's satisfaction with NZTE's ability in leading the sector projects. The majority of firms in all sectors indicated a high level of satisfaction with NZTE's ability to facilitate the sector projects. Satisfaction was highest among firms in Food & Beverage (88%) and ICT (85%) projects, and the one Wood project covered by the survey (100%).
16. In terms of NZTE's ability to understand key issues facing the firms' sector, the majority of firms in all sectors, with the exception of firms involved in the one Creative project covered by the survey, indicated high levels of satisfaction. Satisfaction was highest among firms involved in ICT (81%) and Biotech (78%) projects, and the one Wood project covered by the survey (100%). In contrast, none of the firms involved in the one Creative project covered by the survey indicated high levels of satisfaction with this aspect of NZTE's project leadership.

Outcomes

Targeting of outcomes

17. Discussions between MED and NZTE during late 2005 identified the following key intended outcomes for the Sector Projects programme:
 - a. *intermediate outcomes*: improve firms' overseas market knowledge and development, business practices, innovation capability, increase collaboration between firms, and increase firms' ability to access finance; and
 - b. *ultimate outcomes*: increase the rate of sustainable economic growth particularly through improvements in productivity, profitability, export and turnover growth.
18. This evaluation could not obtain sufficient information on all the sector projects to assess the extent to which the projects are targeted at all the intended policy outcomes (identified in the Programme Logic Model). However the programme appears to be highly focussed on developing international markets. The majority (83%) of the surveyed firms that participate in these NZTE sector projects are current exporters.
19. NZTE categorised 57% of its 297 sector projects as focusing on developing international connections, with only a third focused on building business capability and 11% focusing on creating the environment for growth. Looking ahead, the draft NZTE Statement of Intent 2006/07-2008/09 indicated plans for 17 out of the 20 major sector projects during that period to focus on increasing the international connections of New Zealand businesses (e.g. improving the understanding of offshore markets

and players) and the remaining three projects to focus on building onshore business capability (e.g. facilitate access to and use of the best practice ideas and technologies).

Achievement of outcomes

20. The survey of firm participants examined the extent to which firms involved in the various sector projects experienced improvements in the intended outcomes and the extent to which they attributed the improvements to NZTE-led sector projects.
21. In total 138 firms responded to the survey, yielding a good response rate of 51%. The survey responses consisted of firms which participated in 34 sector projects, which is 78% of the projects that could be assessed in terms of impact on firms, i.e. the projects were at the implementation or completion phase and had individual firm participants. However, responses were received on only one Creative and one Wood project. Thus survey results for these two sectors should be treated as indicative.
22. Survey responses from firms suggested that on the whole, sector projects have the greatest impact on firms' ability to understand and develop overseas market opportunities, business practices, and collaborative activities. Over a third of the surveyed firms indicated they experienced these improvements and attributed the improvements at least partly to the NZTE-led sector projects they were involved in. Sector projects appear to have less impact on innovation capability (only 27% of firms reported improvements attributable to sector projects) and least impact on ability to raise additional finance (only 7% of firms indicated they applied for additional finance and were successful).
23. Projects in different sectors appeared to differ widely in extent of reported impact on intended programme outcomes. Projects in the Manufacturing sector are assessed by firm participants as having the greatest impact and projects in the International Education sector appear to be having the least impact on these outcomes. It needs to be noted that the International Education sector results reflect projects undertaken under its current sector engagement strategy. NZTE is seeking to change its current focus from attracting undergraduate students to attracting more businesses to provide professional training for their employees at New Zealand universities and polytechnics. However, further discussions with key stakeholders such as Education New Zealand and the Ministry of Education is required for NZTE to receive the necessary support for this change in strategy.
24. In terms of impacts on specific policy outcomes, the survey results indicated the following:
 - improvements in overseas market development capability appear to be most impacted by Food & Beverage sector projects and least impacted by International Education sector projects.
 - increases in collaborative activities are most impacted by Manufacturing, Biotech, ICT, and Wood projects.
 - improvements in business practices are most impacted by Wood, ICT and Manufacturing sector projects.

- improvements in innovation capability are most impacted by projects in the Wood and Manufacturing sector and least impacted by Food & Beverage projects.
- improvements in ability to raise additional finance are most impacted by ICT projects and the one Creative and one Wood project covered by the survey.
- increases in overseas sales (including expected future sales) are most impacted by projects in the Manufacturing sector and least impacted by projects in the International Education and Wood sectors.

Programme cost and efficiency

25. The total budget for Sector projects in 2005/06 of \$21.995m is broken down into two categories:

- \$8.872m (40%) is for direct allocation to sector projects (both foundation and implementation projects) and consists of all onshore and offshore direct costs related to the project including travel, external work, etc.
- \$13.123m (60%) is for onshore operational expenditure. This includes the cost of time spent by NZTE staff (e.g. Sector Directors, Sector Managers) on sector projects and sector engagement activities.

An additional \$13.079m has been estimated for offshore Operational Expenditure on sector projects.

26. This evaluation was not able to assess the efficiency of the Sector Projects programme because the NZTE data on staff costs could not be broken down into time spent on sector projects, more general sector engagement, or other activities. NZTE has acknowledged this problem as a major issue and has made a commitment to address it by completing a baseline costing project to improve tracking of costs associated with sector engagement and projects, particularly with regard to time of onshore and offshore staff.

Cost-benefit to firms

27. In all sectors, except International Education and Creative, the majority of firms indicated that the benefits they expect from participating in the NZTE-led sector project is greater than the costs of involvement. Expectations of the net benefit of sector project participation (i.e. benefits exceeding cost) appeared highest among firms which participated in Manufacturing and Biotech projects and lowest among firms in Wood, Creative, and International Education projects.

Additionality

28. Projects in the Wood and Biotech sectors seem to have the highest additionality. None of the firms in Wood projects and only 17% of firms in Biotech projects indicated they would have achieved similar results if their firm had not participated in the Sector Projects. In contrast, projects in International Education and Creative sectors seem to have the lowest additionality with 37% of firms in International Education projects and 33% of firms in Creative projects indicating they would have achieved similar results anyway.

Linkage with other NZTE programmes

29. NZTE's sector project activities appear to be highly connected with its other programmes particularly the Growth Services client management and grants. High growth potential firms that are receiving intensive client management from NZTE sector teams are typically the first to be invited to participate in the sector projects.
30. The Sector Projects programme is designed to be used by NZTE to proactively address more systemic and strategic sector-wide issues. NZTE emphasised that its client management services for individual firms complement the work of Sector Managers in leading sector projects by helping identify the needs and opportunities facing firms in that sector.
31. It is important that NZTE continues to ensure that resources within the Sector Projects programme are not diverted away from more strategic sector-wide issues, and that the programme complements, rather than duplicates its grants and other programmes designed to address the specific needs of individual firms. Sector projects could be used to disseminate best practices or spillover impacts from single successful GSF projects across the sector or to other sectors.

Recommendations

Lessons from the way the Sector Projects programme has been implemented require improvements in the current articulation of sector facilitation policy and in NZTE's approach and operations. Specifically this evaluation recommends the following:

32. MED should play a more active leadership role in the interpretation and implementation of sector policy, and in particular:
 - clearly articulate the specific policy direction and objectives of the sector projects programme. A proposed revised Programme Logic Model is presented at the end of this report; and
 - act as a conduit across government agencies and NZTE to ensure that sector policies are well-aligned and impacting firms and sectors in a consistent manner.
33. There should be a more explicit role within government for NZTE expertise on sector-specific business strategies and constraints to firm performance which other agencies need to be aware of, and if necessary, act upon.
34. NZTE should continue to improve its process for approving sector projects, and report back to Ministers on changes made in light of this evaluation. Specifically this evaluation recommends that clearer criteria be introduced, including the following:
 - i. explicit linkage to agreed sector engagement strategies;
 - ii. restriction to activities leading to:
 - a. the development, or more likely, the application of enabling technology with significant potential to improve productivity, or

- b. a step change in the form of engagement of the sector with the international marketplace or in its ability to compete on value through greater innovation, or
 - c. the creation of overseas infrastructure to overcome a coordination failure;
- iii. demonstrated industry buy-in through private sector contributions (financial and/or in-kind) where significant private benefits are expected to accrue to stakeholders;
 - iv. complementarity with support offered through other NZTE programmes without duplication;
 - v. detailed specification of project objectives and impacts on firms with the collection of information to judge whether these have been achieved;
 - vi. clear exit strategy for NZTE; and
 - vii. consideration of the greater use of external advisory Boards with relevant expertise and experience.
35. NZTE, working with MED, should develop clear measures and targets to improve the performance of the Sector Projects programme. These should be consistent with the revised Programme Logic Model agreed following this review.
36. NZTE should continue to improve the recording of sector project data to enable better monitoring of the programme's costs and performance, particularly:
- project objectives - to enable tracking of the number of projects which target particular programme outcomes
 - project outcomes
 - operational expenditure items for each project e.g. FTE costs (specifying the proportion of time spent directly in support of sector projects) , discretionary, overheads, travel etc. - to identify areas for efficiency improvements.
 - project start and completion dates
 - financial contribution from other NZTE programmes/budgets and external sources (e.g. firms, industry organisations, other government agencies etc.)
37. Upon the completion of each project, there should be a process for assessing/evaluating the performance of each project against the achievement of stated outcomes and project budget.

1. Introduction

The Sector Projects programme is delivered by New Zealand Trade and Enterprise (NZTE) with a budget allocation of \$21.995m in 2005/06 (Output Class 1.1 in NZTE's Output Plan). This is funded from within the total appropriation of \$40.192 million for 'Enabling Services – Facilitating the development and implementation of sector and regional sector strategies.'

1.1 Programme policy

The policy for the Sector Projects programme is derived from the overall policy for Sector Facilitation Activities set out in June 2003 with the establishment of NZTE. The paper, New Zealand Trade and Enterprise: Paper 2: Enabling Services [EDC (03) 53 refers] set out the rationale for and objectives for the delivery of sector facilitation by NZTE:

“...to exploit opportunities for growth and to minimise barriers to growth for groups of complementary firms. Targeted sector support may include the facilitation of sector strategies and a process for streamlining regulatory requirements. The services may also encourage sectors to identify the benefits of collaboration on matters of common interest, such as international market access.”

Under this programme, NZTE is to undertake a variety of projects to identify and respond to strategic issues for sectors where significant net economic benefits are available and where the market itself lacks the scale, specialisation and/or capability to deliver. This programme is funded from the following Cabinet-mandated mechanisms for sector facilitation:

- a. Coordination and facilitation of sector strategies– conducting sector related research, assisting with partnership building through taskforces, assisting the development and coordination of government action in response to the taskforces, and improving the alignment of existing government activity to support sectors;
- b. International sector specialists – providing sectors with strategic “in-market and inside industry” information and knowledge from experienced international advisors or experts in the sector.
- c. Sector-focused international market development – supporting major projects aimed at enabling groups of New Zealand based businesses to take advantage of significant market opportunities.

1.2 Intended programme outcomes

The underpinning policy did not provide a sufficiently clear framework to guide programme implementation in terms of direction and objectives. NZTE's execution of this programme has evolved since its inception in July 2003 in response to its organisational learning, changes in the policy environment and economic conditions.

In late 2005, as preparation for this evaluation, NZTE and MED started to articulate the intervention logic for this programme along with the specific intended outcomes. This is outlined in the Programme Logic Model (shown on the following page).

Figure 1



1.3 Evaluation purpose and scope

Purpose

The purpose of this evaluation is to assess the effectiveness and efficiency of the Sector Projects programme in achieving the intended outcomes. Based on the evaluation findings, recommendations are provided for improving policy and service delivery.

Scope

This evaluation examined the following questions:

- a. Implementation:
 - i. How has NZTE implemented the Sector Projects programme? Is the implementation consistent with policy intention? What improvements are needed?
- b. Outputs:
 - ii. What is the total cost of delivering the Sector Projects programme?
 - iii. What key outputs has NZTE delivered from the Sector Projects programme? What quantity and type of projects have been delivered?
 - iv. To what extent are sector projects targeted at the intended policy outcomes?
- c. Intermediate outcomes:
 - v. To what extent do sector projects improve firms' overseas market knowledge and development, business practices, innovation capability, increase collaboration between firms, and increase firms' ability to access finance
- d. Ultimate outcomes
 - vi. To what extent do sector projects increase sustainable economic growth particularly through improvements in productivity, profitability, export and turnover growth.

Reference period

This evaluation focuses on the period from the programme's establishment in July 2003 to 30 June 2006.

2. Method

2.1 Overview

This evaluation assessed the extent to which Sector Projects achieved the intended intermediate and final outcomes of the programme. The ultimate criterion for assessing the success of the programme is that the total benefits to New Zealand outweigh the total costs. However, the data needed for this kind of detailed cost-benefit analysis (including the programme's additionality) are currently not available. This first-time evaluation used a combination of quantitative and qualitative methods including file reviews and interviews with Sector Directors, case studies, an online survey, and analysis of NZTE administrative data.

2.2 File reviews

The file reviews covered NZTE's output plan, quarterly and annual reports, Statement of Intent, sector engagement plans (strategic plans) for each of the eight sectors.

2.3 Interviews with NZTE Sector Directors

Interviews were conducted with the eight directors overseeing each NZTE sector team. The purpose was to get the Sector Director's overview and perspective on the strategy and direction for each sector and the objectives of the projects.

2.4 Case studies

A sample of eight sector projects were selected for case studies in order to gather richer information regarding how the Sector Projects were developed, the nature of firm's involvement, how they are impacting firms, what factors contribute to the project's effectiveness, what are important issues and challenges affecting the project's effectiveness. The case studies involved multiple information sources –review of the NZTE file (both electronic and paper), interview with the project manager and interviews with a few of the participating firms. One project was selected from each of the eight sectors, and the focus was on larger projects which are more advanced in implementation or have been completed. A total of 15 firms were interviewed.

2.5 Online survey

A larger-scale online survey was conducted to assess the generalisability of the case study findings. The survey questions were developed in consultation with NZTE. Two versions of the survey were administered- one for the International Education sector with particular wording replaced for that sector e.g. 'firm' replaced with 'institution'. The questions were essentially the same as the version used with the other sectors.

2.5.1 Participants

The survey participants were selected based on the following criteria:

- i. involvement in sector projects which met all of the following criteria -
 - the project has individual firm participants identified in the sector projects list provided by NZTE Sector Directors

- the project is in the completed or implementation phase (however, 4 projects in the engagement phase were included consisting of 1 from the Food & Beverage sector and 3 from the ICT sector because there were too few completed/implementation projects in these two sectors).
 - The project has a direct budget allocation of \$30,000 or greater. We also combined some sub-projects which were phases of a larger project.
- ii. Once projects which met the above criteria were identified, firms involved in these projects were selected for the survey sample provided they had not been recently interviewed (in last 6 months) for another evaluation (to avoid survey fatigue) and the firm had an email address.

Application of the above selection criteria resulted in 268 firms being invited to complete the survey. These firms participated in a total of 44 projects. This covers only 15% of all sector projects that NZTE has initiated between July 2003 and June 2005 as the remaining 85% of these projects were either at an early phase of development and have not yet been implemented and/or did not have individual firm participants identified on the list provided by NZTE. Only two projects in Wood processing and no projects in Tourism met the selection criteria.

In total 138 firms responded to the survey, yielding a good response rate of 51% consisting of firms which participated in 34 sector projects. Thus the survey responses covered 78% of the projects that were at the implementation or completion phase and had individual firm participants. However, responses were received on only one Creative and one Wood project. Thus survey results for these two sectors should be treated as indicative (this limitation is discussed further in the Outcomes chapter of this report).

Table 1

Project Sector	Respondents	Sample	Response rate	Projects in sample	Projects in responses
Biotech	24	56	43%	5	5
Creative	3	11	27%	5	1
Education	30	51	59%	7	6
Food & Beverage	10	11	91%	3	3
ICT	33	55	60%	6	6
Manufacturing	34	77	44%	16	12
Wood	4	7	57%	2	1
Total	138	268	51%	44	34

2.5.2 Procedure

The key contact person on NZTE's Sector Projects list for each sampled firm was sent an email invitation (with a direct link to the questionnaire) to complete the online survey. The firms were given two weeks to complete the survey. Reminder emails were sent out after the survey had been online for one week to increase the participation rate. The survey was self-administered and instructions for completion were included in the email.

2.6 NZTE administrative data

Firm participation in Sector projects are not currently recorded systematically in NZTE's main client database, Pivotal. For the purpose of this evaluation, NZTE Sector Directors manually compiled a spreadsheet listing all the projects in each sector since 2003/04 and listed the participant firms, along with key information on the projects e.g. brief description,

budget, start date, key driver. The spreadsheet received from NZTE on 22 February 2006 was analysed to determine the number and trends in programme outputs and recipients.

2.7 Data analysis

Qualitative data were analysed for recurring themes and patterns. Each interviewee's responses were analysed according to the outcome progression in the programme logic model.

Quantitative data from survey and NZTE's database was analysed on MS Excel and Statistical Package for the Social Sciences (SPSS). Statistical tests were used to examine whether there were significant relationships between independent variables and dependent variables. The specific test used was determined by the type of data (e.g. whether categorical, ordinal or interval level), number of variables and sample size. As the survey data was either at a categorical or ordinal level, the following non-parametric statistical tests were used²:

- Kruskal-Wallis Analysis of Variance – for analysis of ordinal (e.g. rating scale) data where the independent variable (e.g. sector, project size, project lifestage etc.) has three or more groups and each group has at least 5 respondents.
- Chi-square test – for analysis of categorical data (e.g. region, sector) where at least 80% of the cells have expected frequencies of 5 or more.
- Mann-Whitney U test- for analysis of ordinal data where the independent variable has only 2 groups (e.g. project key driver, whether firm is exporter or not).

For all of the above tests, results with a probability value (p) less than or equal to .05 were treated as statistically significant.

2.8 Limitations and constraints

The key constraints of this evaluation include the following:

- This evaluation was not able to obtain data from a suitable control group (i.e. comparable group of firms that did not participate in the programme) and data on participant firm capability and performance prior to participation in the programme. This data is important for more objective assessment of programme impact. Current development of an improved Performance Management System within NZTE and possible future use of Statistics NZ databases for statistical analyses should enable improved assessment of programme impact over time.
- This evaluation was not able to assess the efficiency of the programme due to limitations in NZTE's current system for tracking cost. As noted later in this report, NZTE is aware of this problem and has started processes to improve its tracking of programme cost.

² SPSS Survival Manual (2001)

3. Findings: Implementation and expenditure

As the policy framework did not provide clear guidance on programme direction and objectives, NZTE has had a lot of discretion in the implementation of the Sector Projects programme and there has been considerable evolution in its approach since the inception of the programme in July 2003.

Sector projects are delivered onshore and offshore by NZTE staff operating within one of the eight NZTE sector business units (Biotech, ICT, Creative and Services, Manufacturing, Food and Beverage, Tourism, Wood Processing, and International Education). Each unit prepares an annual sector engagement plan in consultation with industry partners which describe what sectors will be engaged with and how, and the major areas of focus and related projects. This plan is reflected in NZTE's annual Statement of Intent.

This section examines how NZTE has implemented this programme and applied the budget allocation for the programme.

3.1 Programme expenditure

3.1.1 Total programme budget

Outlined below is the allocated budget spend for sector facilitation activities since 2003/04:

Table 2

Financial Year	Total Budget (GST exclusive)
2003/04	\$13.224m
2004/05	\$20.726m
2005/06	\$21.995m

3.1.2 Direct project allocation vs. operational expenditure

The total budget for Sector projects in 2005/06 of \$21.995m is broken down into two categories:

- \$8.872m (40%) is for direct project allocation which consists of all onshore and offshore direct costs related to the project including travel, external work, etc. It does not include the cost of time spent by NZTE staff on the project.
- \$13.123m (60%) is for onshore operational expenditure. This includes the cost of time spent by NZTE staff (e.g. Sector Directors, Sector Managers) on sector projects and sector engagement activities.

An additional \$13.079m has been estimated for offshore operational expenditure on sector projects. This estimate is derived from a 2004/05 NZTE questionnaire to NZTE offshore

staff asking them to estimate the amount of time spent on activities within each output class. The 2004/05 output classes covering sector project spend were 1.1, 1.2 and 1.3 and the respective percentage of time was 4%, 2% and 23%³. The actual offshore budget for 2004/05 was \$45.100m. Information on the allocation of this spend by region or sector is not available.

Sector projects can also receive additional support funding from other NZTE programmes (e.g. Enterprise Networks, Marketing and Major Events) so the actual direct spend on sector projects is greater than \$8.872m. The total direct spend for 2005/06 cannot be determined at this time because of the current inability of NZTE to track this support funding from other NZTE programmes.

Figure 2

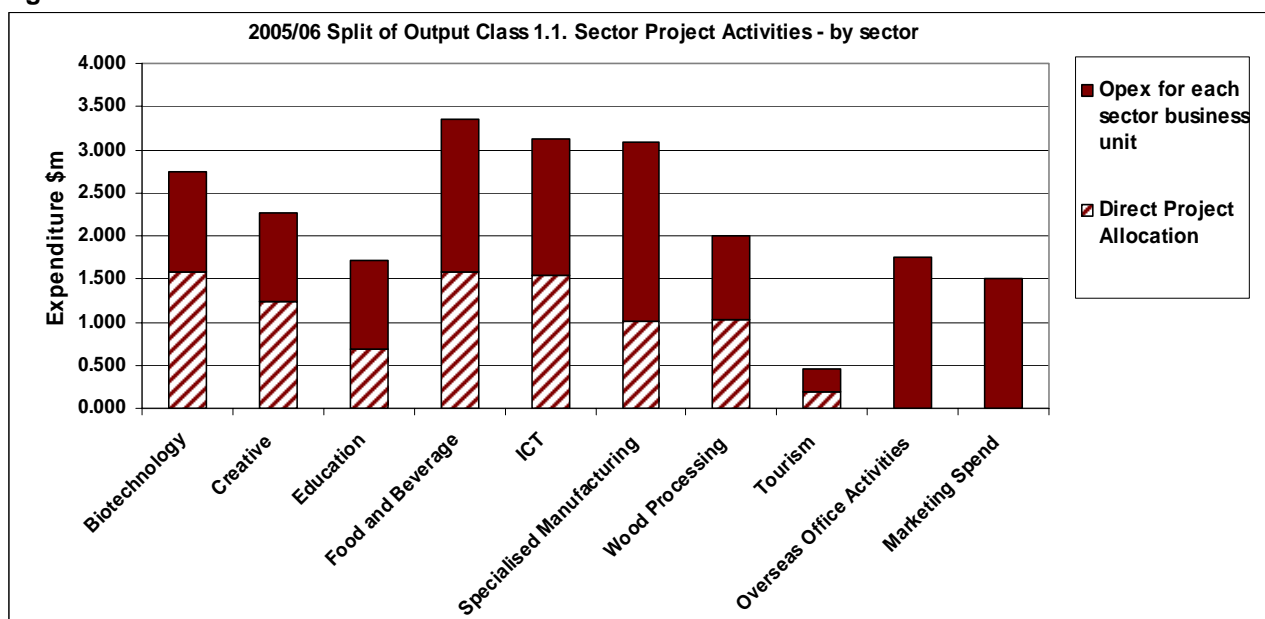


Figure 2 above shows the allocation of sector project budget in the 2005/06 year by sector and broken down by direct costs versus operational expenditure⁴. The percentage of operational expenditure is highest in the Specialised Manufacturing sector (67% of total sector budget) and International Education sector (60% of total sector budget). Operational expenditure is lowest in the Biotech (42% of total sector budget) and Creative (45% of total sector budget) sectors.

Since the direct cost of NZTE staff time currently makes up a significant part of its operational expenditure, the level of this expenditure relative to direct cost could reflect the extent to which the sector projects involve NZTE's internal staff rather than contractors from the private sector. Understanding the cost structure gives insight into the nature of

³ Output Classes 1.1 and 1.2 were only used for sector projects. NZTE offshore time spent on output class 1.3 was estimated at 36% but because this output class included other sector programmes, a pro-rata figure has been calculated of 23% based on the sector project contribution of \$8.418m to the total output class total of \$13.033m.

⁴ Information on the breakdown between operational expenditure versus direct project allocation is not available for years prior to 2005/06.

business relationships. Better information will show how these relationships are evolving over time. For example, if the aim is for private sector input or use of external contractors in developing and implementing sector projects to increase over time, then it is possible that operational expenditure as a percentage of total costs would decrease over time. In contrast, in areas where NZTE staff would play an increasing role in the development and implementation of sector projects, it is likely that operational expenditure as a percentage of total costs would increase over time. These trends are worth quantifying and relating back to the cost structure of NZTE.

This evaluation was not able to assess the efficiency of the Sector Projects programme because the NZTE data on staff costs could not be broken down into time spent on sector projects, more general sector engagement, vs. other activities. NZTE has acknowledged this problem as a major issue and has made a commitment to address it by completing a baseline costing project to improve tracking of costs associated with sector engagement and projects, particularly with regard to time of onshore and offshore staff.

3.2 Programme implementation

3.2.1 Sector Implementation vs. Foundation Projects

NZTE has used the 'Sector-focused international market development' and 'Coordination and facilitation of sector strategies' components of Sector Project funding to implement two core categories of sector projects with different approval criteria and objectives- a) sector implementation projects; and sector-based foundation activities. The 'International sector specialists' component of this programme was used by NZTE to pay for the input of external experts into the development of sector projects.

Implementation projects

NZTE anticipates that these projects will deliver substantial economic benefit through changed industry/sector behaviour (a step-change). An example is the *Farmgate* project to use ICT to improve farm productivity (see case study in Section 6 of this report).

NZTE has established the following criteria for approving implementation projects:

- multiple resources involved for a fixed period;
- significant Net Economic Benefit (NEB). The guidelines are that the project budget requires greater than \$50,000, NZTE staff time of 2 FTE for 3 months, and is expected to generate NEB greater than \$25 million, and that behavioural change in clients can be identified. Although estimations of NEB are being included in project business cases, there does not appear to be consistency in how it is measured. To enable assessment of project potential and benefits, the definition and method of estimating NEB needs to be the same for any sector, however the difficulty of estimating impact is likely to vary, and increase where there are held to be large spillover effects;
- defined start and end point;
- defined objectives; and
- resources allocated full or part time.

Foundation projects

NZTE defines this category as strategically aligned activity that is focused around a clear objective or theme, but does not meet the sector implementation project criteria (usually because the activity is not time-bound or for which the outcomes are evolving). Examples are activities that research and scope future sector implementation projects or develop client relationships, such as research into the food and beverage market in North Asia.

3.2.2 Approval process

NZTE's process for approving sector projects involves the following levels of delegation:

- Project budget under \$100,000: approved by an appropriate NZTE budget manager, according to NZTE delegated authority.
- Project budget greater than \$100,000: approved by NZTE Senior Executive Team with assessment from NZTE project management office.
- Project budget greater than \$200,000: approved by NZTE Senior Executive Team (SET) with assessment from NZTE project management office and NZTE Board.

Once projects are approved, details of their costs are provided to NZTE Finance to enable tracking. The project management office (PMO) is responsible for monitoring the achievement of performance targets (outputs and anticipated outcomes) for selected projects, based on their risk to NZTE, cross-functional impact, budget and profile. The selected projects are chosen by SET.

3.3 Areas for improvement

NZTE is continuing to improve its process for approval of sector projects and tracking project costs and performance. The NZTE Finance and Project Management Office teams have recently implemented guidelines for the project approval process outlined above and project approval templates identifying the objectives, anticipated economic benefits, costs over multiple years and funding sources (NZTE programmes, other government programmes and private sector contributions), risks and exit strategy.

In addition, NZTE has also identified areas needing further improvement:

- NZTE Finance is currently unable to determine the actual spend on projects. New project approval templates identify all likely sources of funding and amounts, but actual amounts of spend from sources of funding, in addition to that provided from the direct sector project allocation, are recorded manually at the discretion of sector staff.
- Some projects stated in NZTE's total approved project list are not currently reflected in either the output plan or quarterly NZTE reports. This has the potential to cause confusion about the number and type of NZTE sector projects. Examples include: a) Dubailand (\$0.020m) and Ocean Park (\$0.025m) – in approved project list but not reported in output plans or NZTE quarterly reports; and b) Projectlink (\$0.025m) – in approved project list but not reported in output plans or NZTE quarterly reports. More efficient re-appropriation of the \$8.872m allocation across sector units is required when sector units are under spending. NZTE Finance is attempting to be more proactive in this area but ultimately this will require sector unit directors to improve

their tracking of spend and a willingness to forgo some of their allocation to other sector units and projects.

This evaluation finds that NZTE's criteria for approval of projects remain too vague, particularly for Sector-based foundation activities. This is a concern as it results in projects being approved which have little clear benefits or are not targeting the intended programme outcomes (set out in the Programme Logic Model). The project approval criteria need to also include identification of clear measures of success and milestones so that assessment can be made of whether the project is successful and on track, or needs to be modified or terminated.

The case study presented in Box 1 is an example of a project that NZTE is closely monitoring and making revisions to the timeline and budget given slower progress than originally anticipated.

Box 1

Case Study: China Agritech Transformation Technology (CATT) Project

The CATT project led by NZTE's Biotech sector team is aimed at facilitating a consortia of New Zealand agritech companies to explore opportunities to service the growing agricultural production base in China. To date NZTE has approved a total budget of \$613,000 for this project consisting of \$363,000 in 2004/05 for the first phase and a ministerial mission to China, and \$250,000 in 2005/06 for the second phase of the project. These budget figures represent direct project costs only and exclude any operational expenditure such as internal staff costs.

The intent underlying this project is to move away from simply selling livestock into China and to establish commercial relationships with Chinese dairying entities by demonstrating New Zealand's ability to provide a total systems solution. To this end, NZTE provides in-market information, funds a loose association of New Zealand companies to which it disseminates information ('Club China') and makes a small amount of funding available to those members of 'Club China' who form a consortium to pursue projects in China (for airfare costs, legal fees etc.).

The objective of this project is laudable - New Zealand companies will be strategically positioned within the rapidly expanding Chinese agricultural industry, while retaining their intellectual property. After significant scoping in 2004/05, the CATT project was launched in 2005/06. However, to date, no consortium has successfully applied to NZTE for funding, although NZTE is aiming to implement one project by the end of 2006/07.

This project is moving much slower than originally envisaged and has not met its ambitious milestones, which appears to be due, in part, to a reluctance from New Zealand companies to commit to long-term involvement in the Chinese market. NZTE explained that it scaled back expenditure for this project in the 2005/06 year by \$100,000 for two reasons. Firstly, the project was not following the intervention path anticipated (although companies involved are deriving value and deal flow). Secondly, one of the key partnership sub-projects with a key China dairy group partner fell through at the last stage.

Both NZTE and the Club China industry group have learned a lot about the evolving China market for dairy production. Part of the learning is the realisation around timescales. According to NZTE, NZ Agritech and the Club China consortia remain committed to opening opportunities in what is unquestionably a rapid and strategically important growth market. For the 2006/07 year, NZTE has planned a project revision with clear check and control points. It will assign a new Sector Manager with extensive experience of the China market to manage this CATT project and drive forward NZTE's intervention with industry against a newly calibrated time line.

4. Findings: Outputs

The evolution in NZTE's implementation of the programme has resulted in rather different approaches across NZTE sector teams in terms of the number, size, type and focus of sector projects. This section examines the nature of the projects initiated by NZTE across its eight sector teams.

4.1 Number of projects

Figure 3

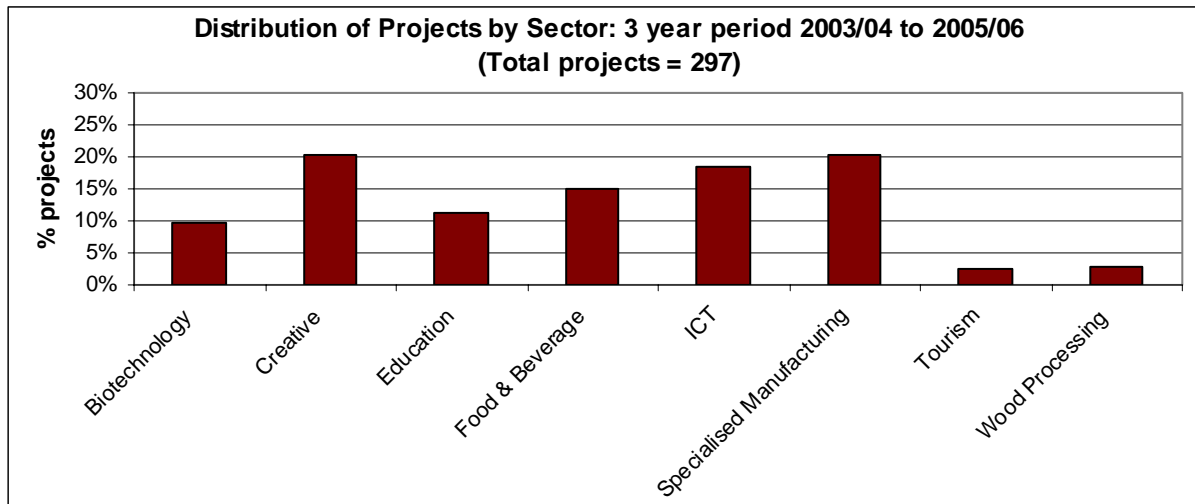


Figure 3 above shows that the total number of sector projects developed by NZTE in the three year period between July 2003 and June 2006 is 297 (112 of those projects were in the 2005/06 year). Over that period, the largest number of projects is in the Specialised Manufacturing and Creative sectors, followed by the ICT sector.

Figure 4

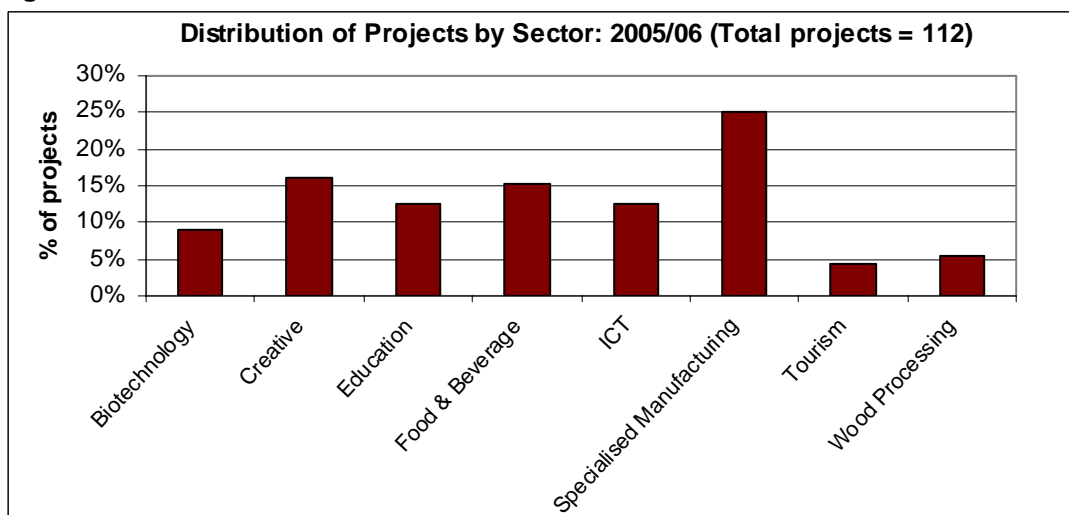


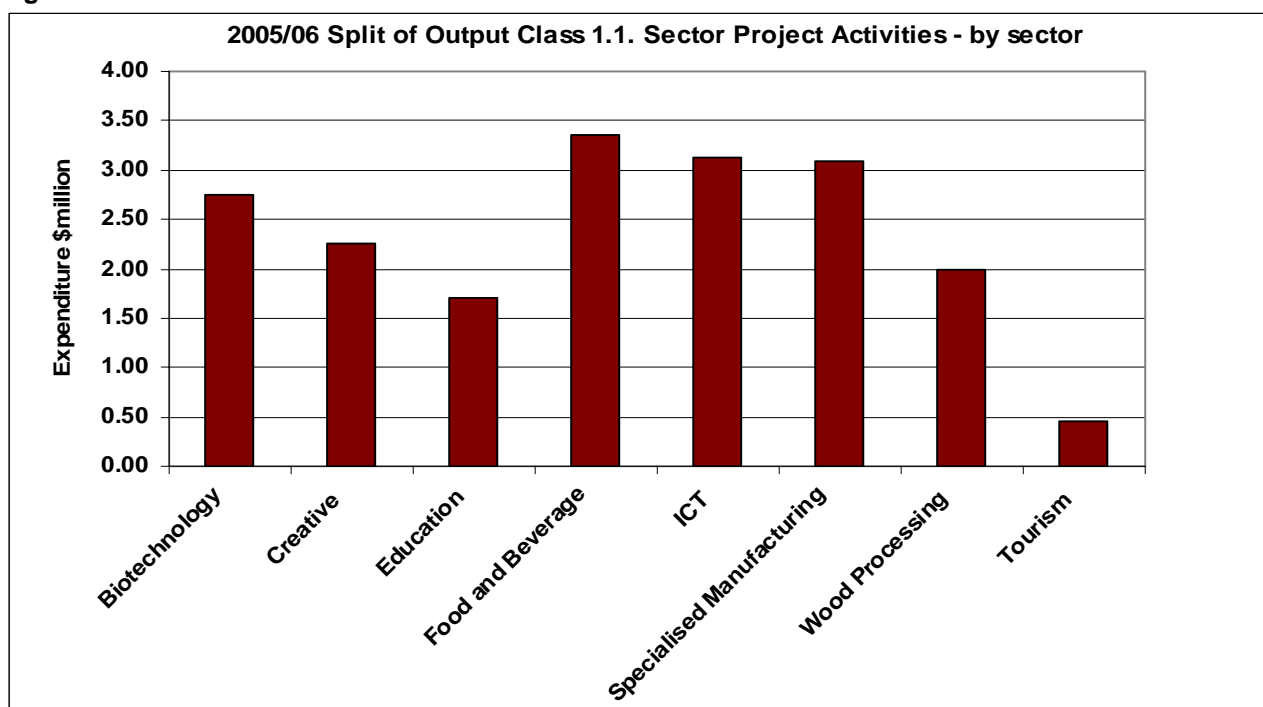
Figure 4 above shows the number of projects in the 2005/06 year. Comparison with the previous figure showing the three year period indicates that the number of projects in Specialised Manufacturing is increasing and the number of projects in ICT is decreasing. The reasons for and implications of these trends should be considered by NZTE in reviewing its strategy.

There is concern that the high number of projects approved in a year may indicate a lack of strategic direction and risks that some may be too limited in scope and budget to have an impact. However, NZTE's latest output plan contains fewer and larger projects for 2006/07 which is an indication of more strategic focus. NZTE is continuing to improve its process for approving projects. This evaluation identified further opportunities to improve this process, particularly with clearer and tighter criteria (listed in Recommendations section).

4.2 GIF vs. non-GIF sectors

Due to lack of policy clarity and definitions, there is divergence between MED and NZTE in the interpretation of the relative priority of the GIF (Growth and Innovation Framework) sectors (i.e. ICT, Biotech, Creative and Services) in terms of development and/or application of enabling technologies to raise productivity across a range of sectors. This is reflected in NZTE's resource allocation for projects across the sectors shown in Figure 5 below (the break down of budget by sector is not available for years prior to 2005/06).

Figure 5



The Food & Beverage sector followed by ICT and Manufacturing received the highest sector project budget allocation in 2005/06. Thus apart from the ICT sector, the other two sectors which received the highest budget allocation are not the GIF sectors which the original policy expected to be given priority due to the importance of enabling technologies and cross-sector spillover impacts.

This divergence in interpretation of the policy objective raises a question as to the balance between the GIF sectors driving the supply of enabling technologies and the user sectors promoting possible applications of these technologies. This needs to be resolved through further policy development by MED, in conjunction with NZTE, on sector facilitation. NZTE has begun a process to improve decisions about allocating resources between sectors. It is developing a "Sector Resource Allocation Framework" to identify and weigh criteria to be used to determine sector resource allocation, for example sector size, market size (global),

the existence of growth drivers (labour and capital) in a sector and the existence of visible lead firms in a sector.

Cross-sector projects

Traditionally most projects have been positioned within one of the eight NZTE sectors rather than cross-sector. Interviews conducted with NZTE project managers and a few participants on the 8 case study projects indicated that 3 of the 8 projects had a high focus on spillover benefits beyond the participating firms and to other sectors (i.e. China Agritech Biotech project, Farmgate ICT project, and Food & Wine tourism project). However in 2006/07, NZTE intends cross-sector projects to play an increasing role in sector engagement strategies by establishing a contestable fund of \$0.500m for such projects.

4.3 Project size

The following analysis of project budgets is based only on direct project allocation as NZTE data on operational expenditure cannot currently be broken down by projects. Therefore, the direct project allocation for each project is used here as an indication of project size but does not reflect the total budget for the project.

Figure 6

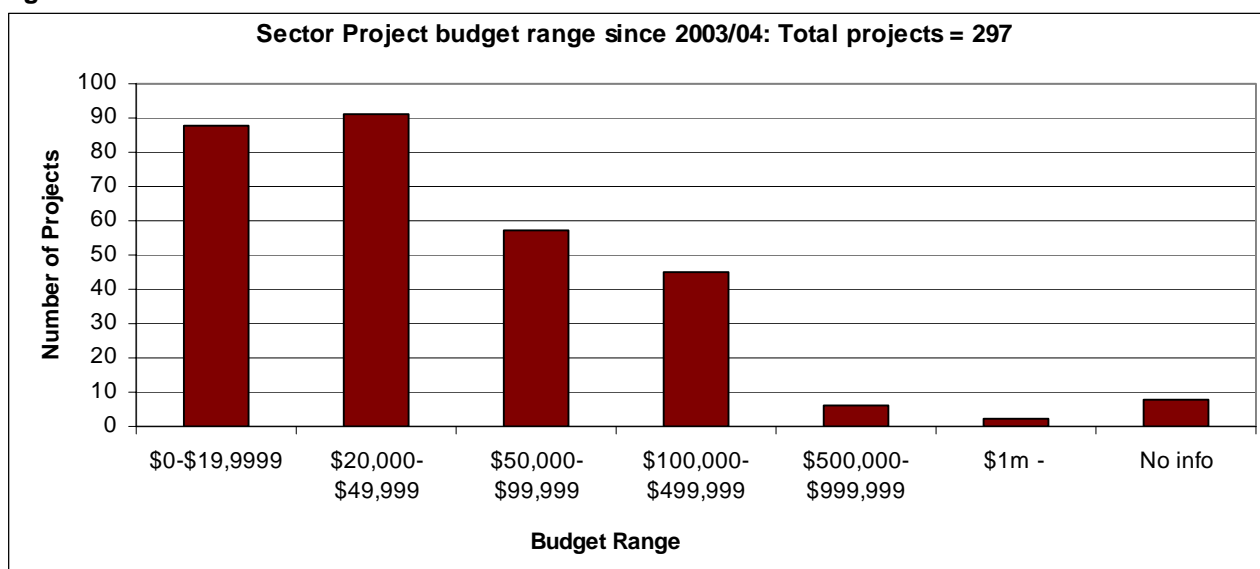


Figure 6 above shows that 61% of the projects have a direct project allocation of less than \$50,000. Only 3% of projects have direct project allocation of over \$500,000 (examples of these large budget projects include the following presented as case studies in this report- China Agritech Transformation Technology project, China Retail Channel Development project, and the Farmgate (Integrated Farm Management Systems) ICT project.

Figure 7

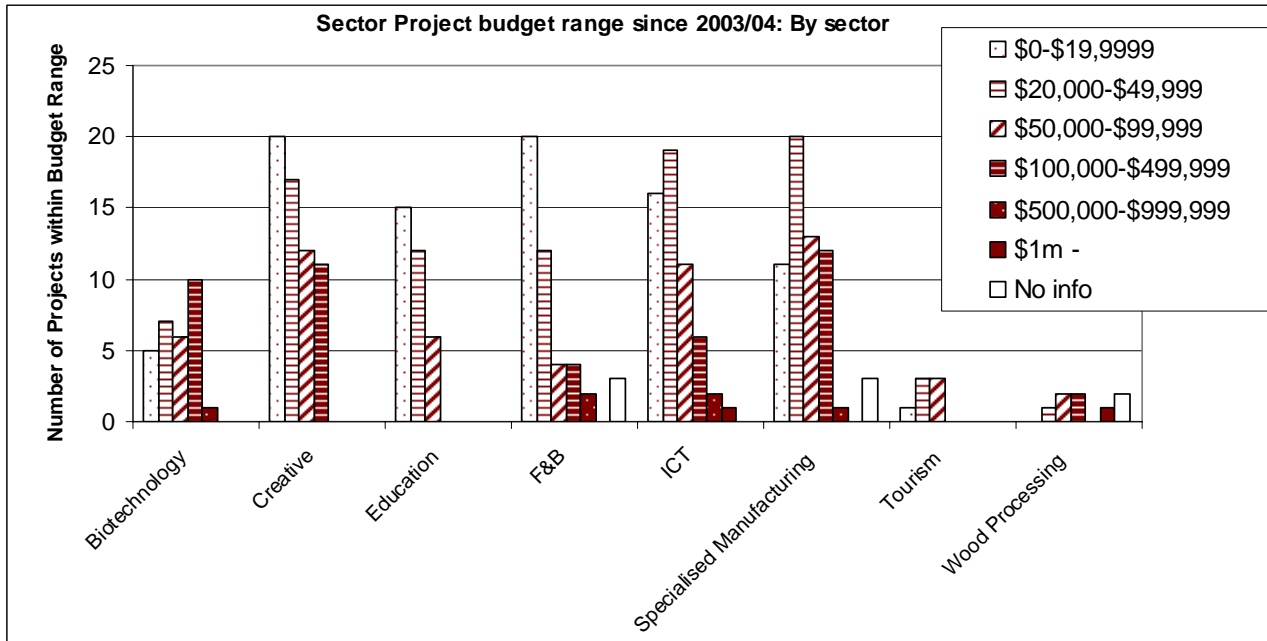


Figure 7 above shows that the International Education and Food & Beverage sectors have predominantly projects with direct project allocation of less than \$50,000 (82% in International Education and 71% in F&B). This could be a reflection of the type of activities the projects involve. Projects in the International Education sector are predominantly coordinating the attendance of institutions at overseas education trade fairs or coordination of visits to New Zealand institutions by overseas delegations of education officials.

4.4 Scoping vs. implementation projects

Figure 8

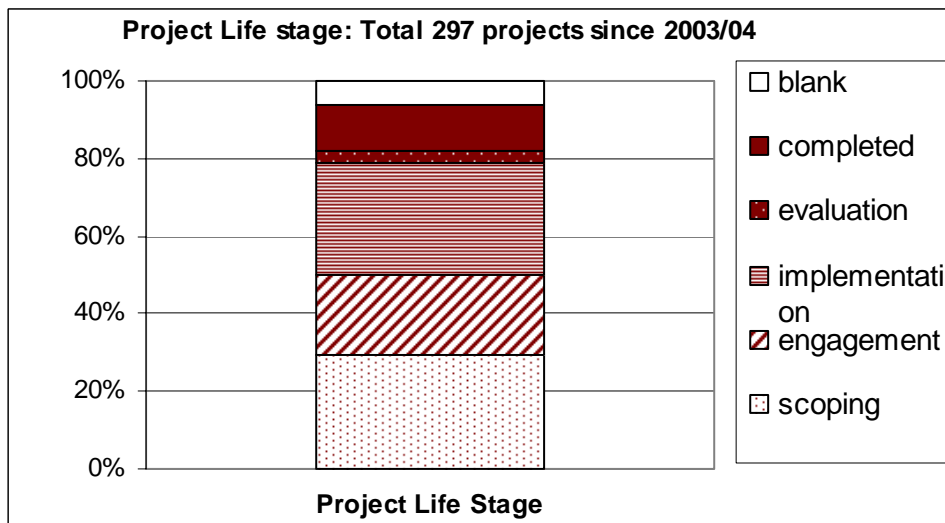


Figure 8 above shows that 50% of the total sector projects are at the engagement or scoping phase, 29% are at the implementation phase and only 15% are at the completed or evaluation phase. Figure 9 below shows that projects in the Creative, Food & Beverage and ICT sectors are predominantly at the scoping or engagement phases.

Figure 9



Up to 2005/06, many of the sector projects undertaken appear to be scoping and research-based. This is understandable for less ‘mature’ sectors where NZTE’s involvement is recent, such as International Education and for more ‘mature’ sectors where major changes in strategy are contemplated, such as Specialised Manufacturing. MED acknowledge the need for NZTE to continue with scoping and research-based projects but expect that the focus going forward should be on implementation projects that carry forward strategic activity for which there is clear industry participation. The Cabinet paper stated “Over time, the emphasis in GIF focus sectors will move from strategy development to implementation...Similarly, NZTE’s engagement with non-GIF sectors will lead to a greater focus on implementation of sector initiatives⁵”. In addition, this intent was reinforced with Cabinet agreeing to continue funding for strategic sector implementation initiatives at an increasing level from 2003/04; \$6.640m in 2003/04 rising to \$9.623m in each of 2005/06 and 2006/07 [EDC (03) 53 refers].

There are signs of this shift occurring in 2005/06 and 2006/07 towards more strategic and focused sector engagement strategies and sector projects, aimed at implementing solutions to assist the sector to address systemic issues.

⁵ New Zealand Trade and Enterprise: Paper 2: Enabling Services [EDC (03) 53 refers]

4.5 Involvement of firms and sector bodies

Figure 10



Figure 10 above shows differences across sectors in the extent to which firms, industry organisations and other stakeholder agencies are involved in the sector projects. This is based on data collected from NZTE Sector Directors and Managers. Projects in the Biotech, Tourism, and International Education sectors appear to have high stakeholder participation. In contrast, projects in the Creative and Food & Beverage sectors appear to have low stakeholder participation. Only 83 (i.e. 28%) of the sector projects appeared to have individual firm participants. However this data does not provide any indication on the nature or extent of stakeholder involvement.

Interviews conducted with NZTE project managers and a few participants on the eight case study projects indicated that three of projects had high involvement of industry bodies or firms in the setting of project direction/scope (i.e. Farmgate ICT project, Whispertech Manufacturing project, Food & Wine tourism project).

Figure 11

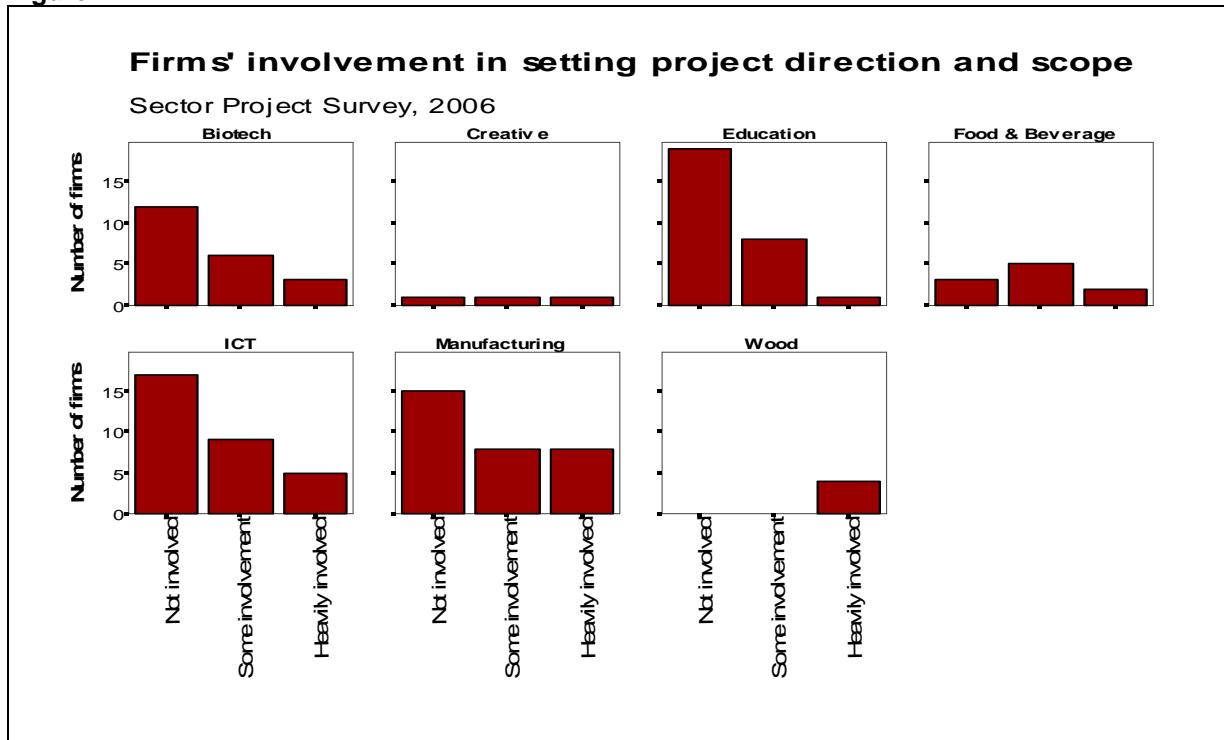


Figure 11 shows the results from the evaluation survey of firms participating in sector projects. Firms in the one Wood sector project covered by the survey (i.e. the Shanghai Innovation Center project) appear to have the highest level of involvement in setting the direction and scope of the project while institutions in International Education projects appear to have the lowest level of involvement. There did not appear to be any statistically significant relationship between the level of firm involvement and firm demographics or project key driver or budget. The level of involvement by individual firms is not expected to be correlated to the level of involvement of industry/sector organisations as it is possible that firms in sectors that have a strong industry body representation may prefer to have their industry body represent them as a collective at engagements with government rather than have individual engagements with government.

Figure 12

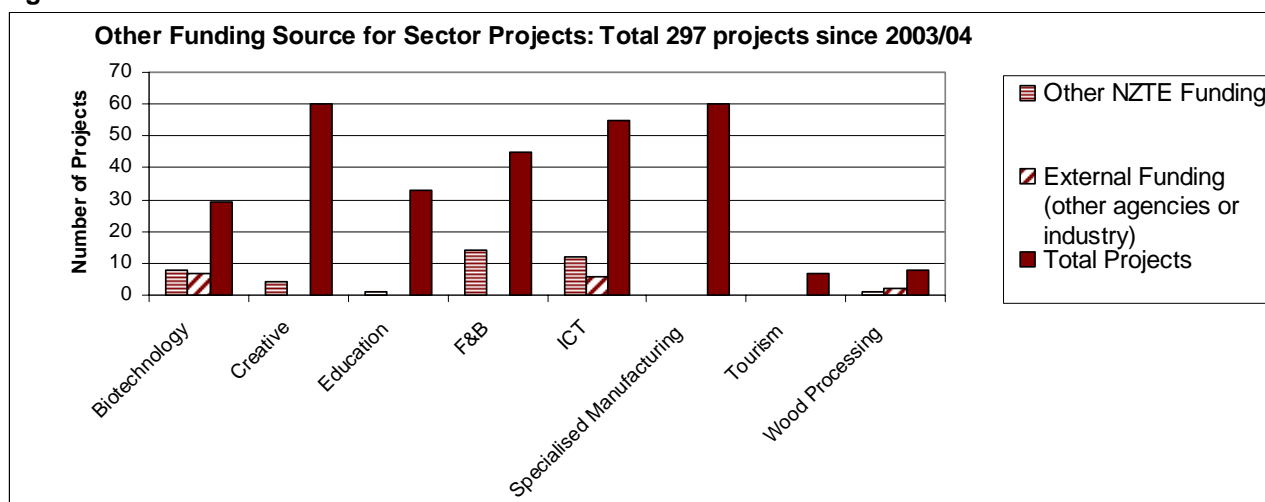


Figure 12 above shows that according to NZTE data, less than a third of the sector projects have funding from other NZTE sources (with the highest being 31% for Food & Beverage and 28% for Biotech projects). Less than a quarter of the projects have funding from external stakeholders (with the highest being 25% for Wood projects and 24% for Biotech projects).

4.6 Firms' satisfaction with NZTE project leadership

The evaluation survey examined firm's satisfaction with NZTE's ability in leading the sector projects. The following figures show survey results on firm's rating of NZTE's ability in leading the project in terms of its understanding of key issues facing the sector, ability to identify appropriate firms to participate in the project and ability to facilitate the project (the ratings are on a scale from 1=poor to 5=excellent).

Figure 13 below shows that the majority of firms in all sectors indicated a high level of satisfaction with NZTE's ability to facilitate the sector projects. Satisfaction was highest among firms in the one Wood project covered by the survey (100%), Food & Beverage (88%) and ICT (85%) projects.

Figure 13

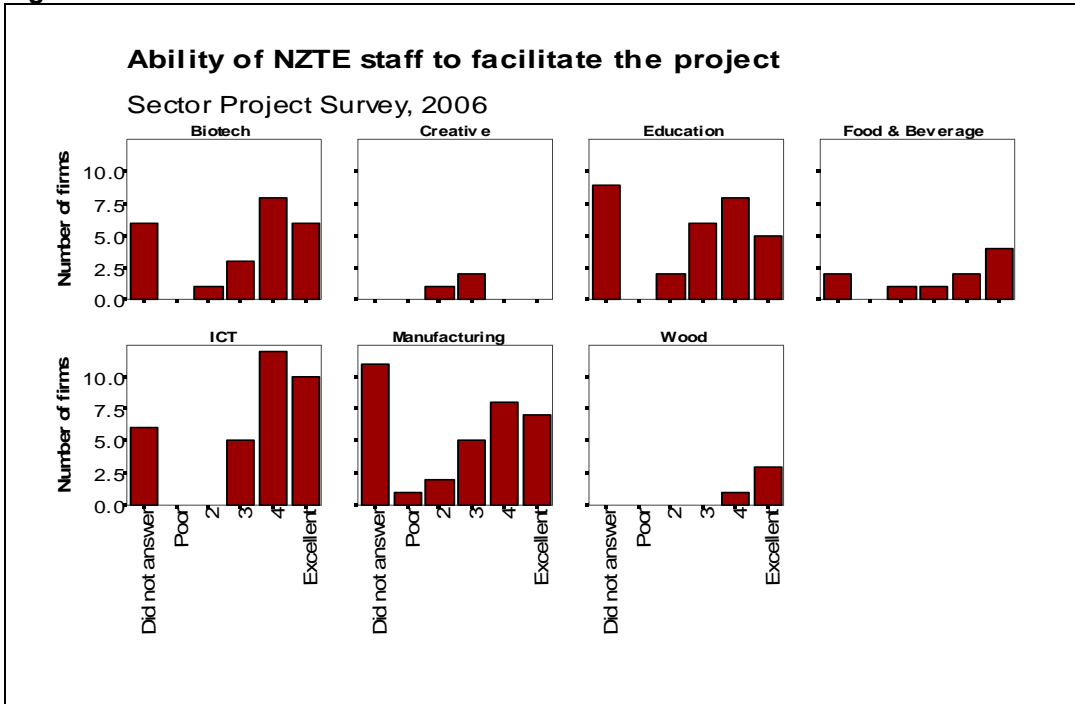


Figure 14 shows that in terms of NZTE’s ability to understand key issues facing the firms’ sector, the majority of firms in all sectors, with the exception of firms involved in the one Creative project covered by the survey, indicated high levels of satisfaction. Satisfaction was highest among firms involved in the one Wood project covered by the survey (100%), and ICT (81%) and Biotech (78%) projects. In contrast, none of the firms involved in the one Creative project covered by the survey indicated high levels of satisfaction with this aspect of NZTE’s project leadership.

Figure 14

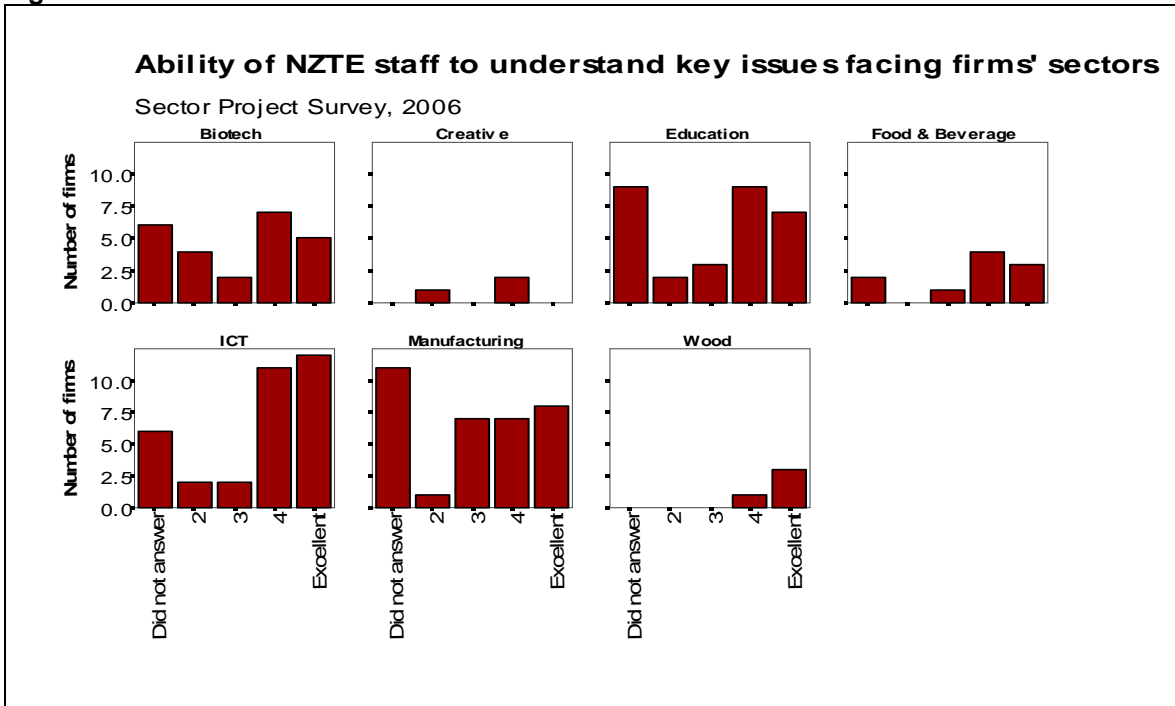
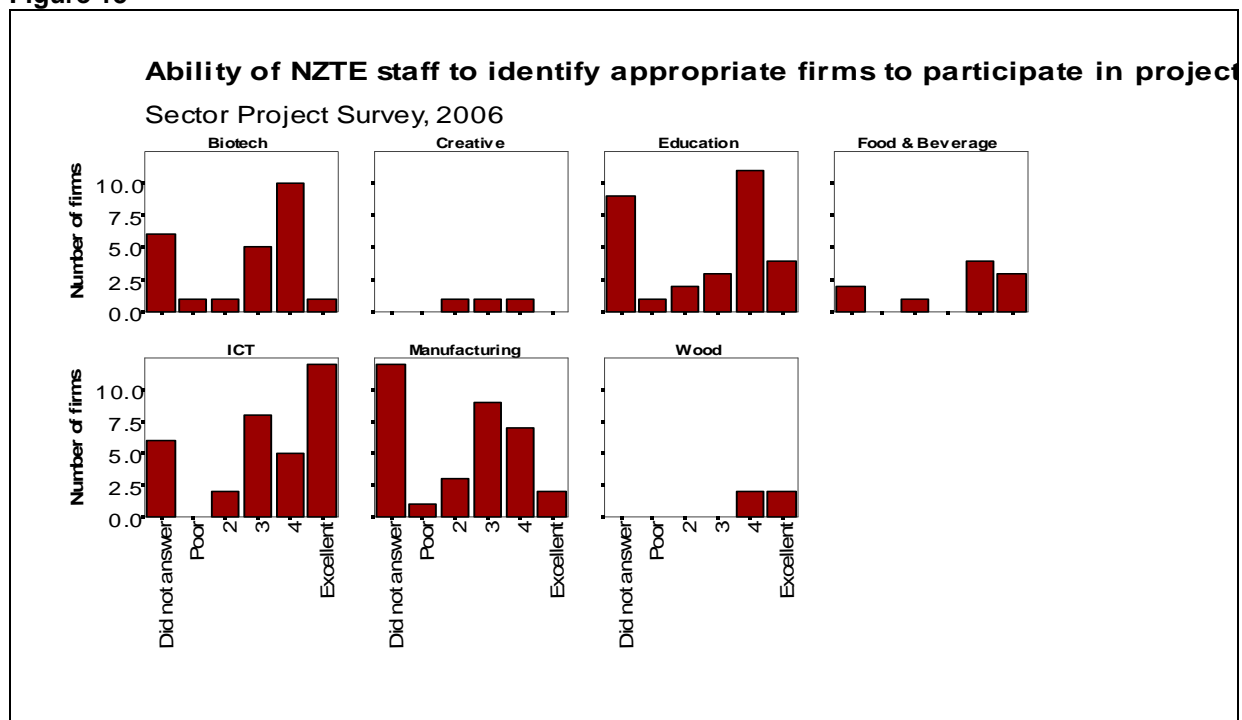


Figure 15 below indicates that in terms of NZTE’s ability to identify appropriate firms to participate in sector projects, the majority of firms in all sectors except the Manufacturing

sector and the Creative project, indicated a high level of satisfaction. Satisfaction was highest among firms involved in the Wood project (100%), Food & Beverage projects (88%) followed by International Education projects (71%), and lowest among firms in the Creative project (33%), and Manufacturing project (41%). It is not clear if this result reflects firms' level of awareness of which other firms are participating in the projects, or whether it reflects their confidence in the capability of other firms, or the ability of NZTE to select appropriate firms. NZTE sector teams could further examine the reasons behind, and implications of this finding.

Figure 15



4.7 Conclusion

The findings from this evaluation indicate that there needs to be increased partnership between NZTE and private sector stakeholders in the development and implementation of sector projects. The important role of NZTE is to facilitate the sector projects by bringing together the stakeholders that are key to identifying and addressing the sector issue or opportunity. NZTE should continue to develop expertise and knowledge on sector specific issues through engagements and partnerships with sector bodies, specific firms, and/or industry experts.

5. Findings: Participant firms

This section examines the number and characteristics of firms that participated in NZTE sector projects.

5.1 How were they selected

Interviews with NZTE Sector Directors and Project Managers revealed that for most sector projects that involve firm participants, participation is not by open invitation but rather highly targeted to particular firms NZTE considers would benefit from the project and willing to participate. The participating firms are often firms that have an existing relationship with NZTE through its growth services client management programme.

5.2 Number of participant firms

5.2.1 By project sector

Figure 16

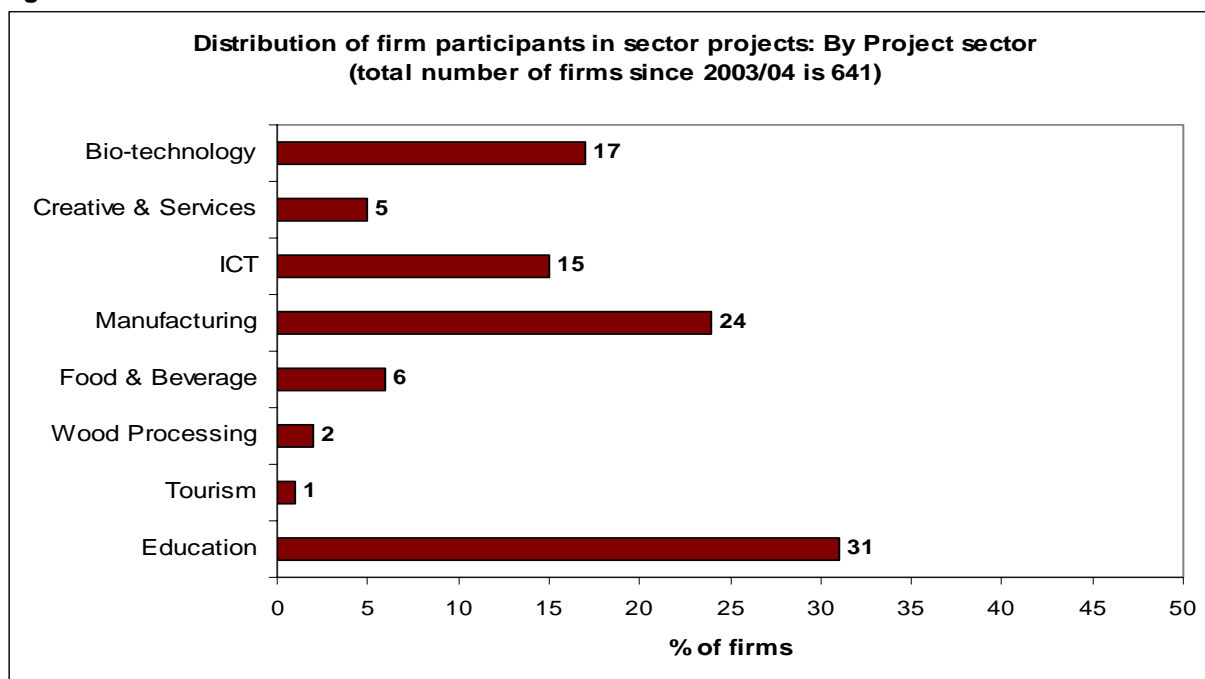


Figure 16 above shows the number of firms participating in NZTE-led sector projects over the three year period since 2003/04. The project sector indicates the NZTE sector team that is leading the project. This analysis is based on data provided by NZTE. It appears that the International Education sector has the largest number of participants (institutions rather than firms), followed by the Manufacturing sector. The Tourism and Wood Processing sector have the smallest number of firm participants.

5.2.2 By firm sector

Figure 17

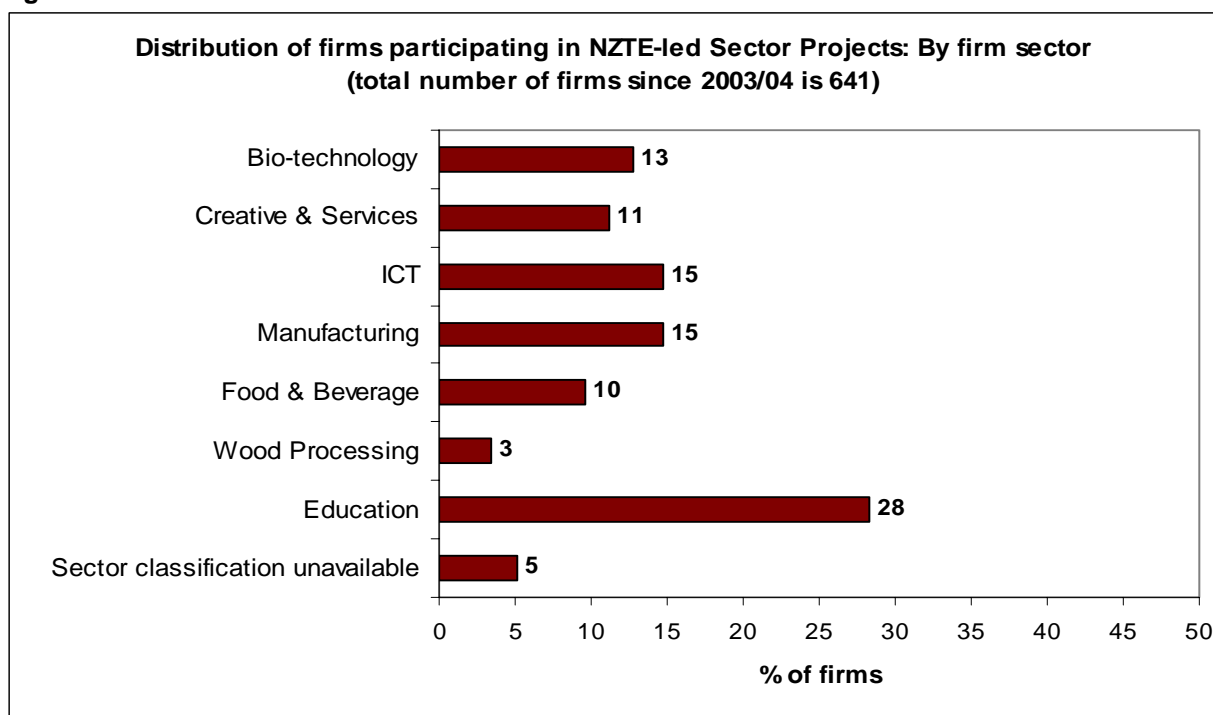


Figure 17 above shows the sectoral distribution of firms participating in NZTE-led Sector Projects since 2003/04. Some of the firms which participated in a sector project are classified by NZTE into a different sector. For example, among the survey respondents, a third of firms in Manufacturing projects are classified as ICT firms, 18% of firms in ICT projects are classified as Creative & Services firms, and 12% of firms in Biotech projects are classified as Manufacturing firms. It is recognised that firms can often be classified into more than one sector and these NZTE classifications used to assign firms into Sector teams for client management purposes.

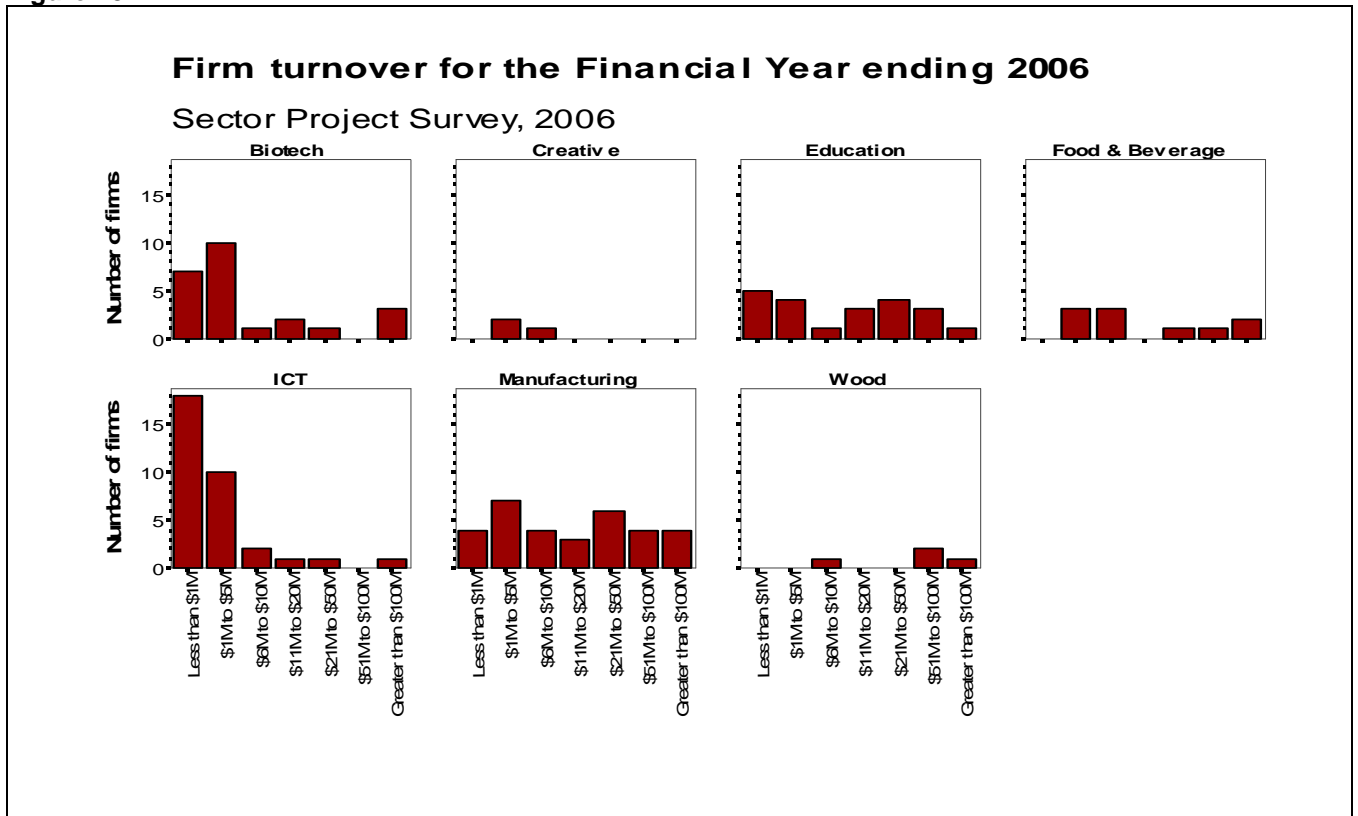
5.3 Demographics of participant firms

This section examines the demographics of firms that participated in the NZTE sector projects. Due to the lack of NZTE data, this analysis relied on information gathered from the evaluation survey of firms. As explained in the Methods section of this report, this survey only covers about 15% of all sector projects as most projects were at a phase of development that was too early for its participants to be surveyed on project impacts. Therefore, although there were a total of 641 firms involved in NZTE sector projects, this analysis of demographics was based on 138 respondents to the survey.

5.3.1 Turnover

Figure 18 below shows the turnover of participant firms for the year ending 2006. The results indicate that firms in Wood sector projects tend to be larger. Firms in Biotech, ICT, or Creative (i.e. GIF) sector projects tend to be smaller, which is consistent with other findings that firms in these sectors tend to be younger than those in other sectors.

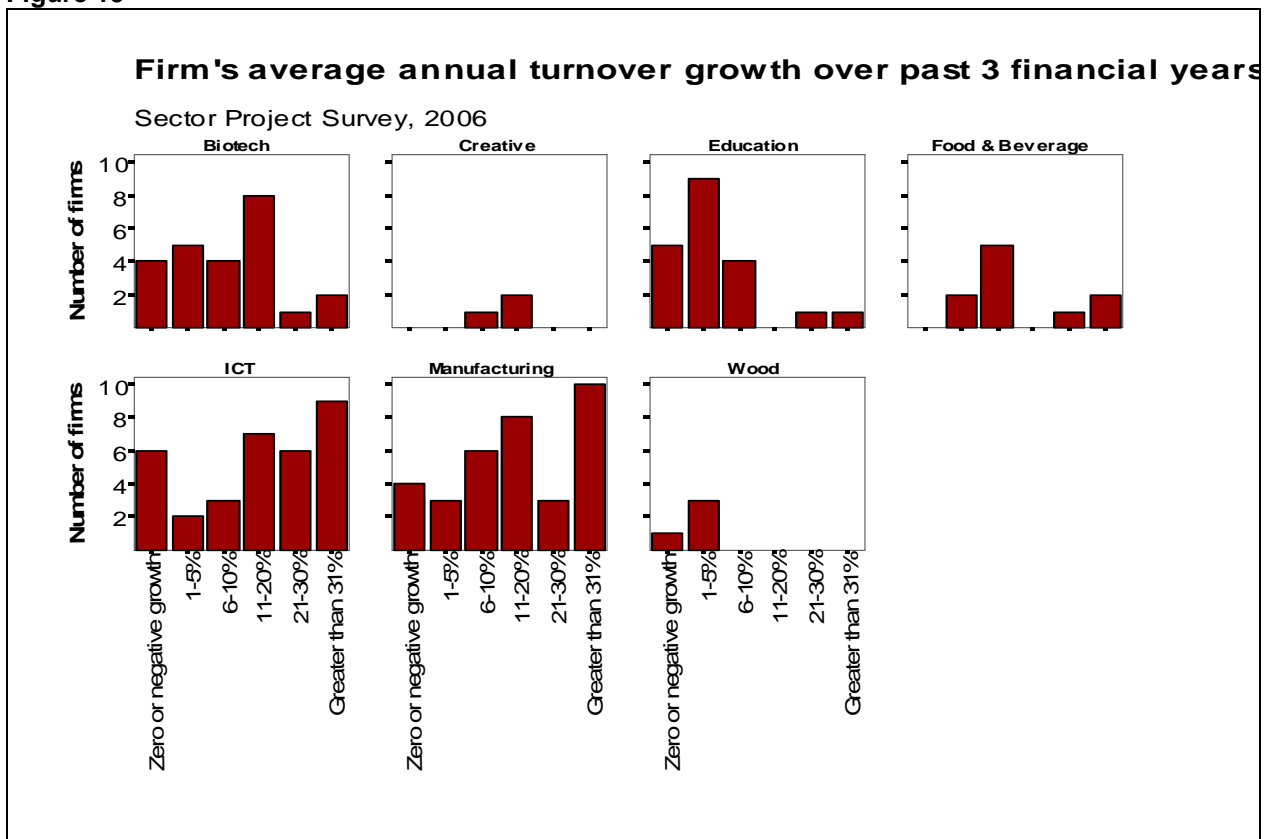
Figure 18



5.3.2 Turnover growth

Figure 19 below shows findings from the survey on the average annual turnover growth experienced by participating firms over the past three financial years.

Figure 19

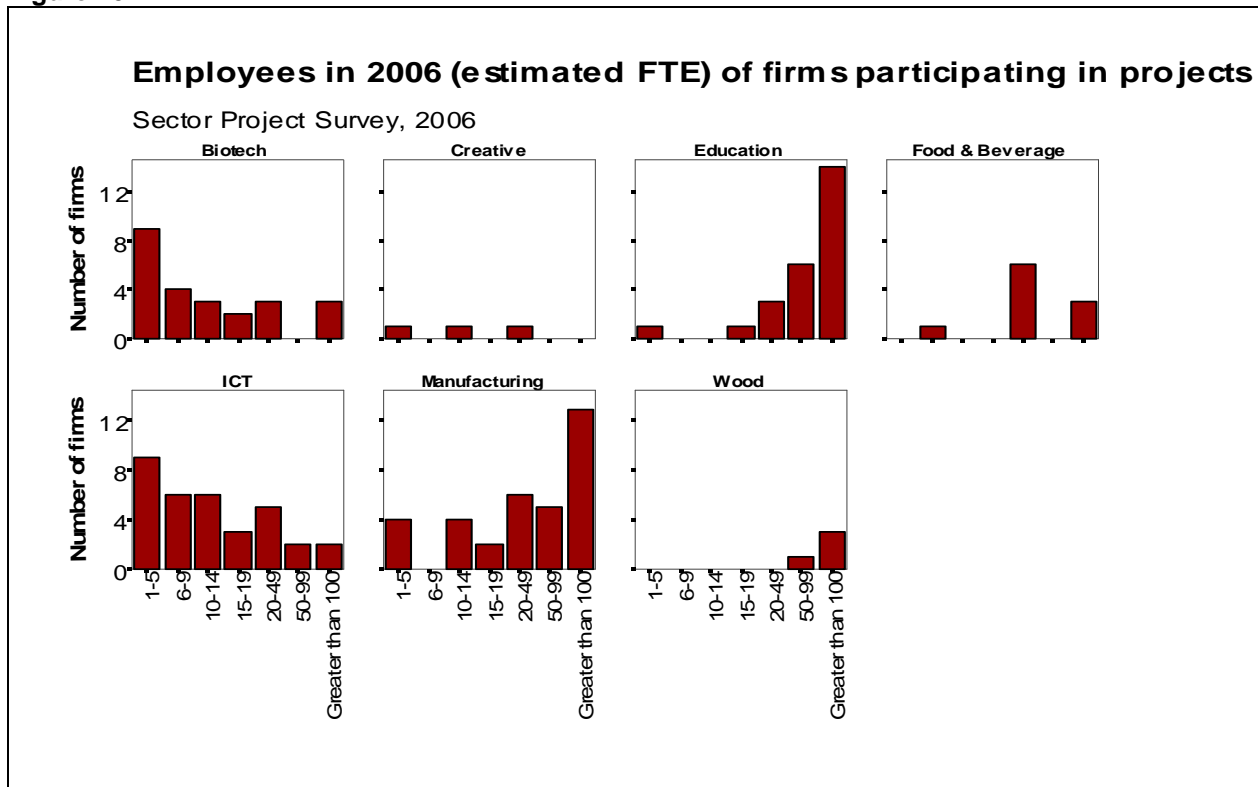


Firms in the Wood sector project tend to have lower growth which could be related to the above finding that these firms have larger turnover than firms in other sectors. Educational institutions also appear to have lower growth than firms in other sectors. Firms in ICT and Manufacturing sector projects tend to have higher growth.

5.3.3 FTE

Figure 20 below shows that firms in Wood, International Education, and Manufacturing sector projects tend to be larger. As with turnover, firms in Biotech and Creative sector projects tend to be smaller in terms of FTE numbers.

Figure 20

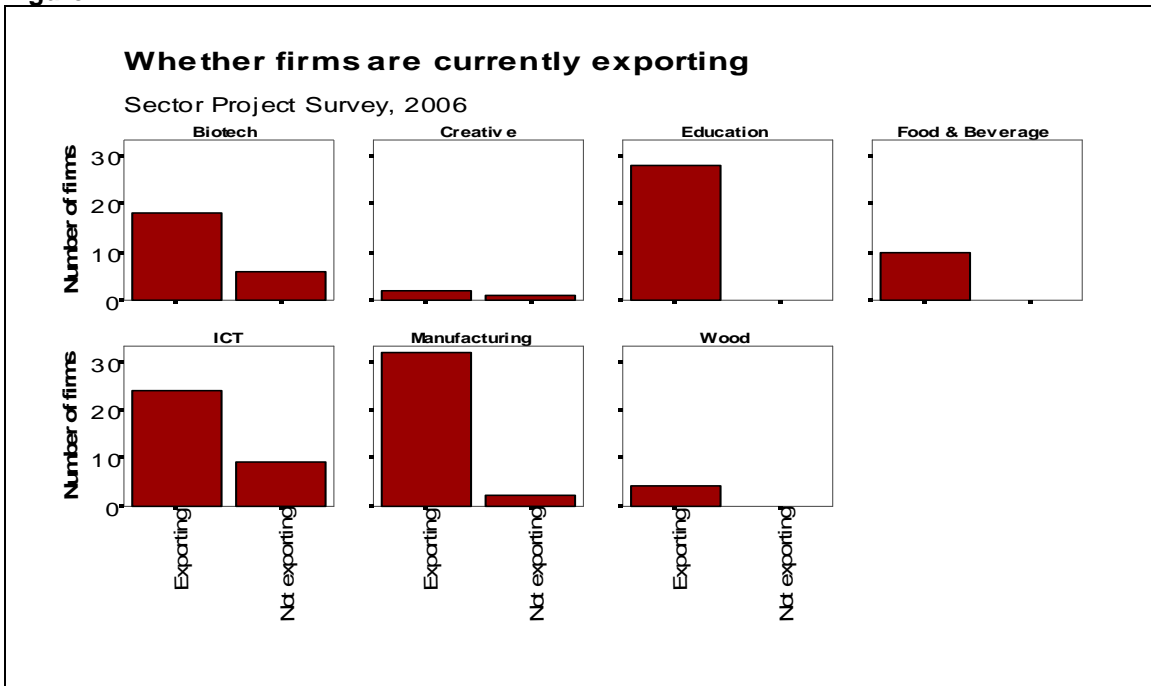


5.3.4 Export

Current export status

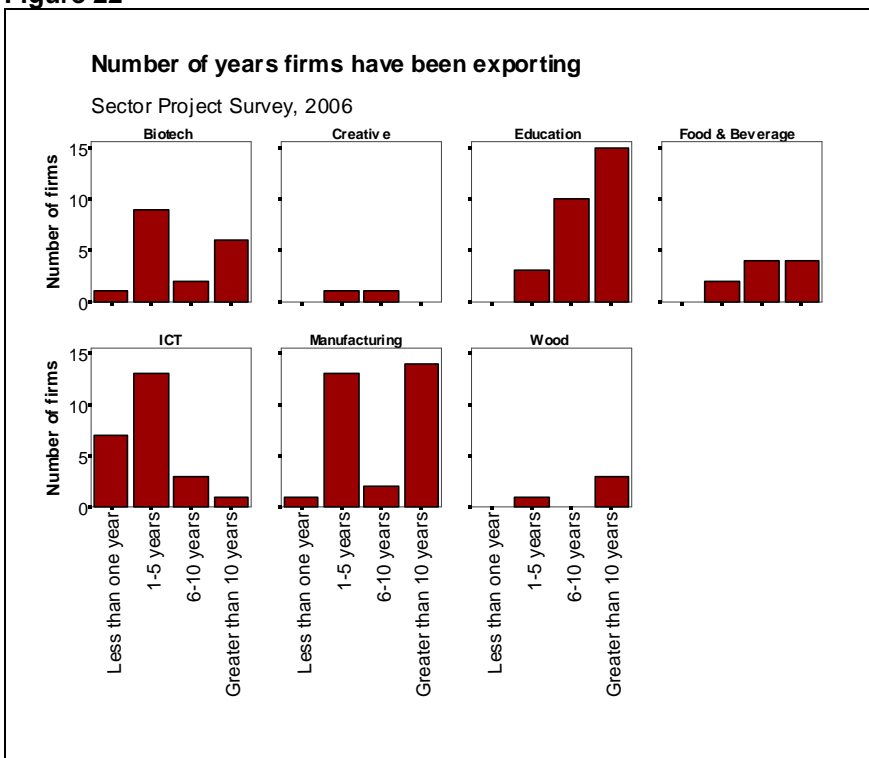
Figure 21 shows that the majority of firms indicated they were currently exporting. All the firms involved in the Food & Beverage, Wood, and International Education sector projects covered by the survey are exporting.

Figure 21



Length of export experience

Figure 22



As shown in Figure 22, among projects in the GIF sectors (Biotech, Creative, ICT), the majority of firms appear to be relatively young exporters (i.e. been exporting for 5 years or less). In contrast, the majority of firms in Manufacturing and Wood sector projects have been exporting for over 10 years.

Export as percentage of turnover for financial year ending 2006

Figure 23

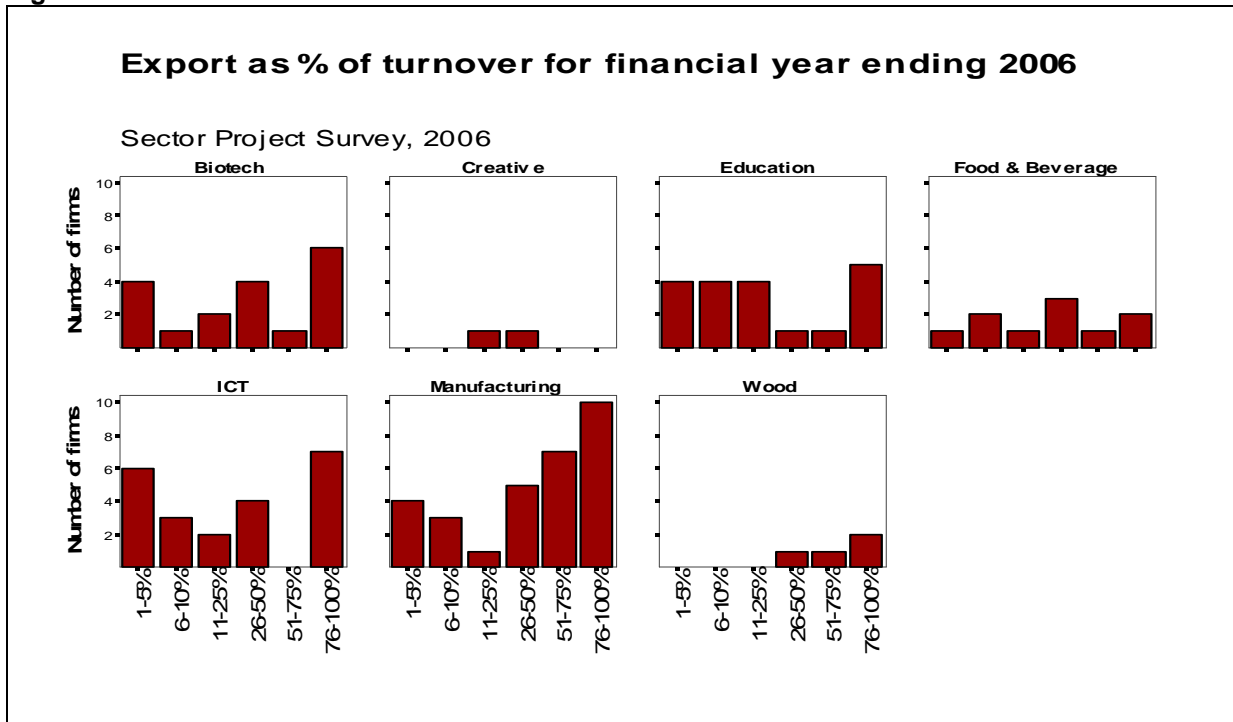


Figure 23 indicates that export is a high proportion of turnover particularly for firms in Manufacturing and Wood sector projects.

Average annual export sales growth over the past 3 financial years

Figure 24

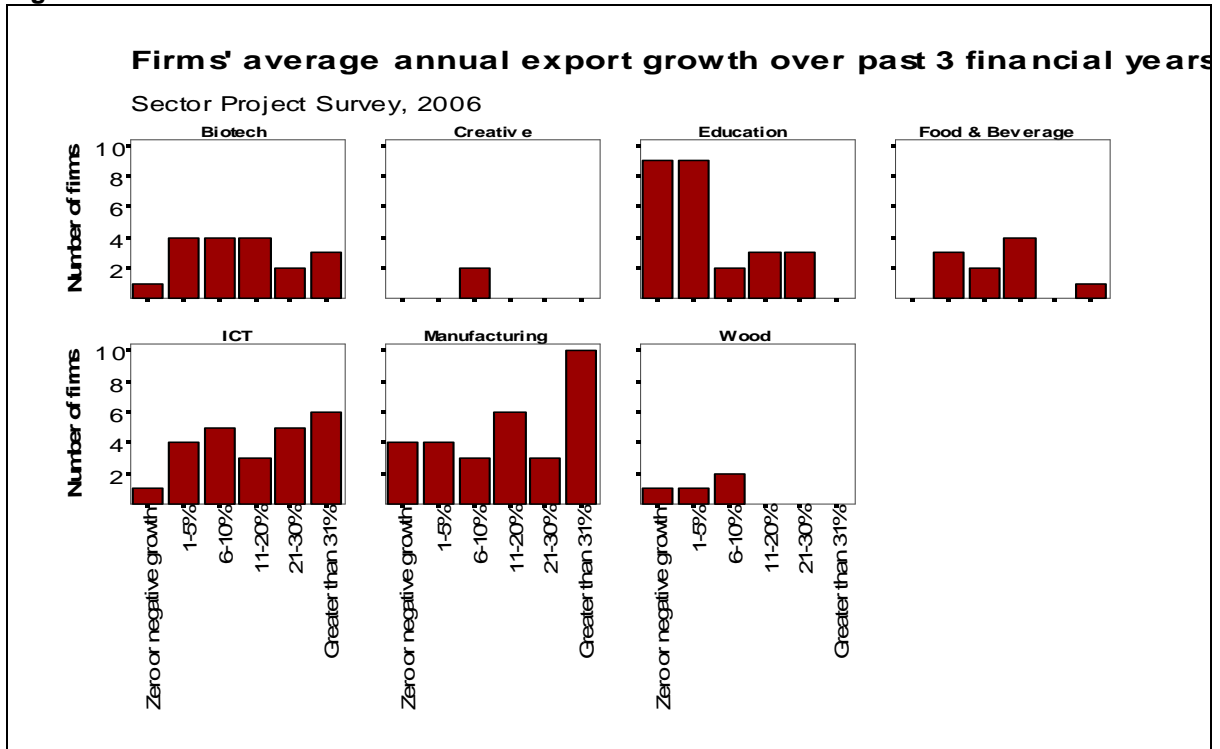


Figure 24 shows that firms in Wood and International Education sector projects tend to have lower export growth while firms in ICT and Manufacturing sector projects tend to have higher export growth.

Focus on existing and new export markets

Figures 25 and 26 below show that firms in Biotech and Manufacturing projects appear to have a strong focus on both existing and new export markets. Firms in ICT and Food & Beverage projects appear to have a stronger focus on new export markets. In contrast, institutions in International Education projects tend to focus more on existing rather than new export markets. This result for International Education is consistent with the above finding that education institutions experienced lower export growth compared to firms in other sectors. The question of whether this result implies a lack of ‘stretch’ or growth ambition among education institutions should be examined further by NZTE.

Figure 25

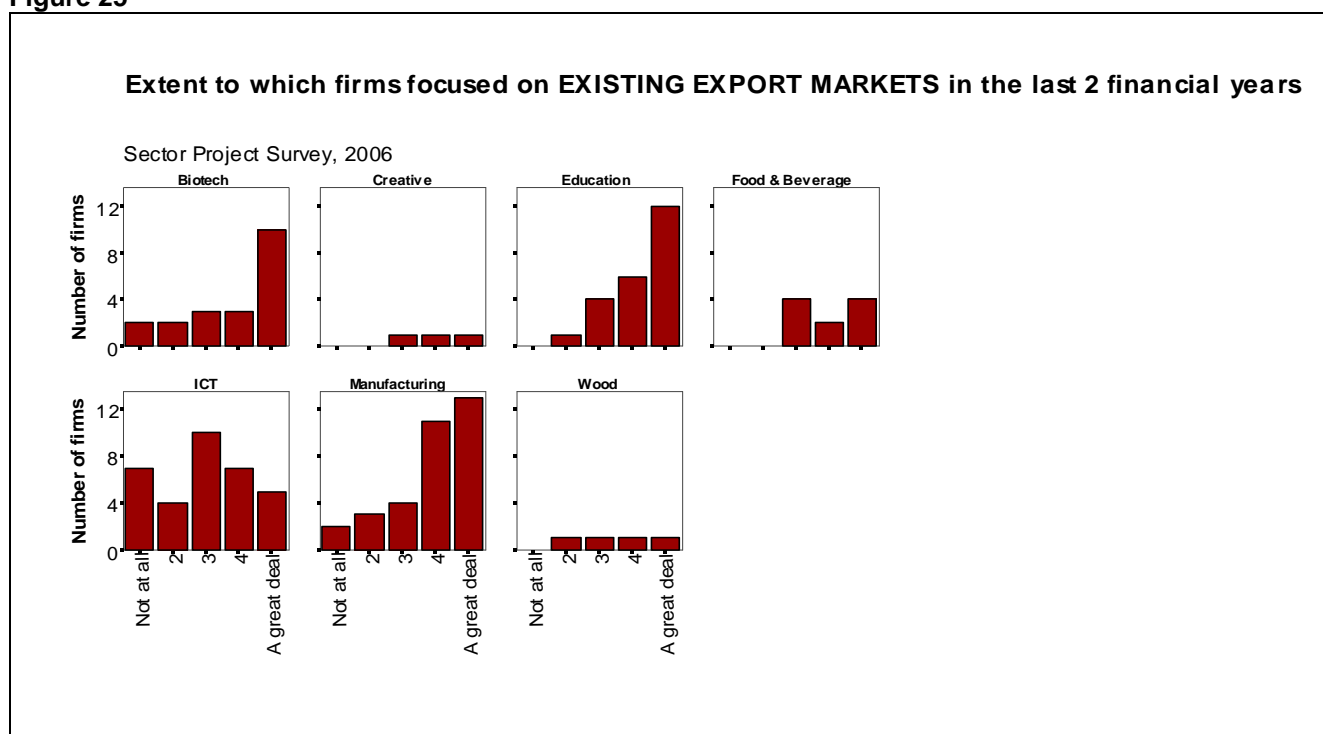
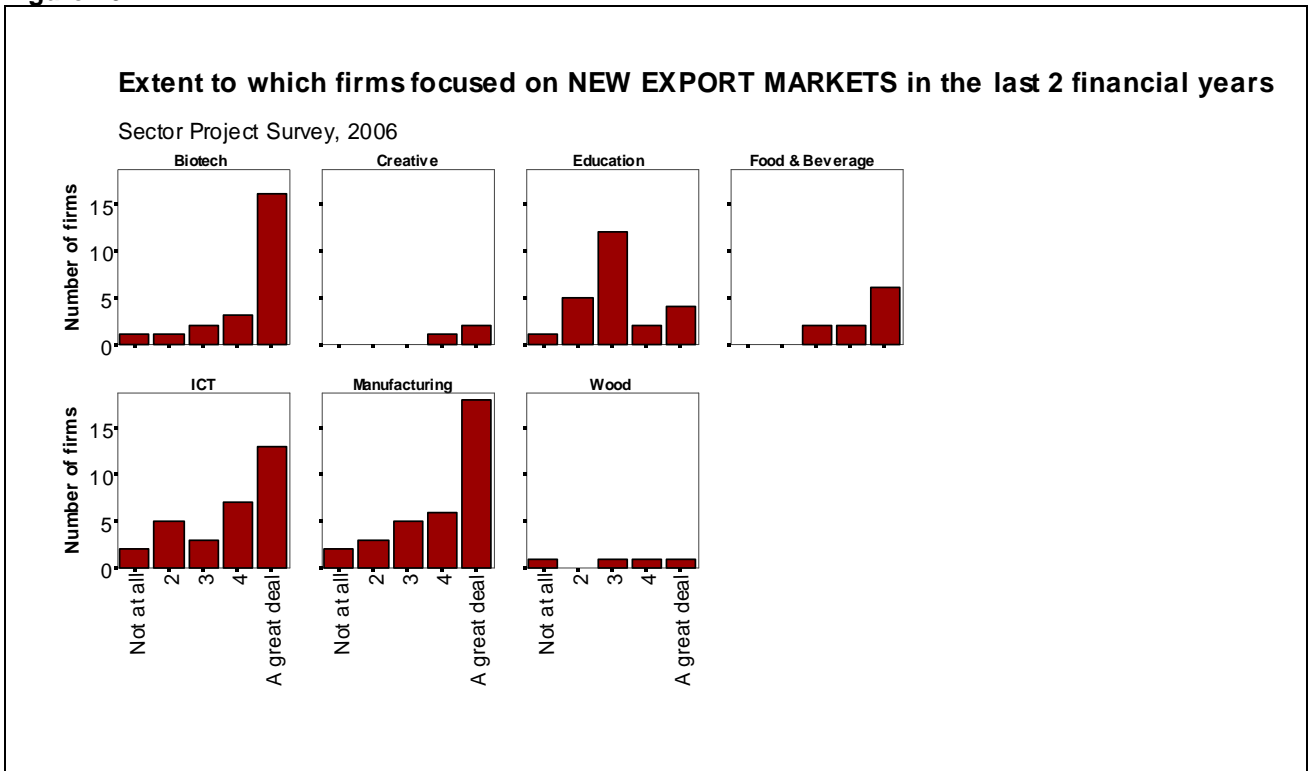


Figure 26



Export markets

The firm survey also indicated that the top export markets for firms in sector projects tend to be Australia, United Kingdom and the United States. The main difference between sectors is that in contrast to the other sectors, the top export markets for Education institutions are North Asian countries.

5.4 Involvement in other NZTE programmes

NZTE's sector project activities appear to be highly connected with its other programmes particularly Growth Services client management and grants. High growth potential firms that are receiving intensive client management from NZTE sector teams are typically the first to be invited to participate in the sector projects.

Figure 27

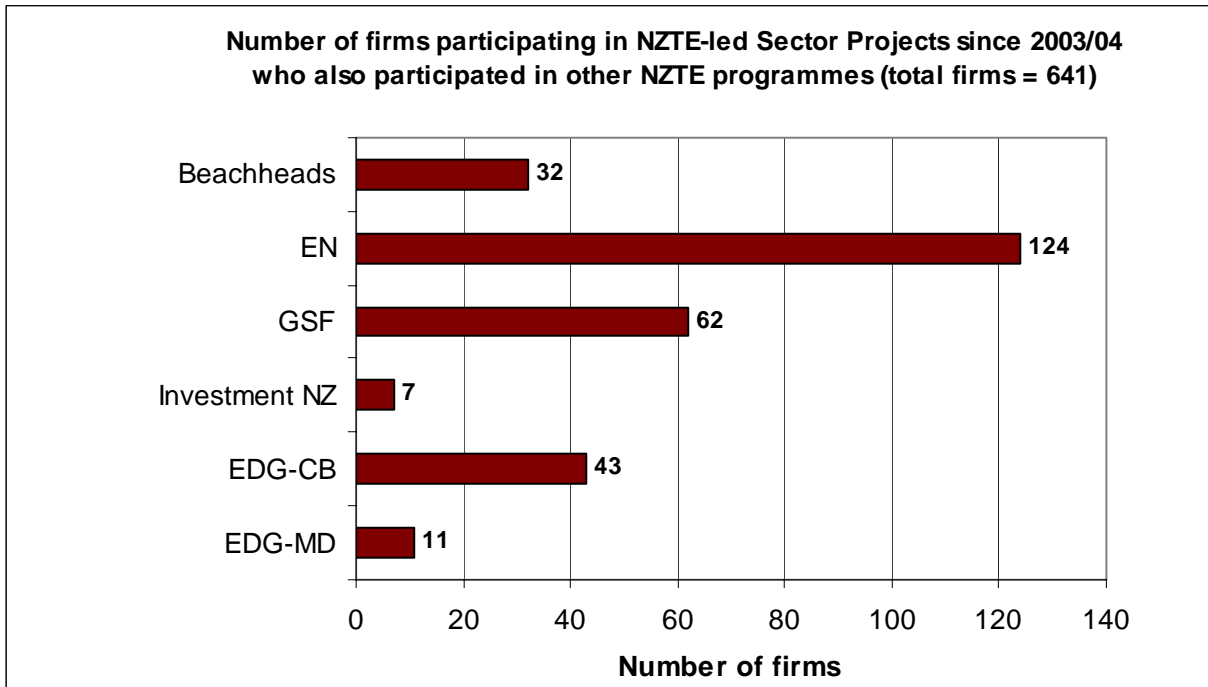


Figure 27 above shows the number of firms participating in NZTE-led Sector Projects who are also participants in other NZTE programmes. Less than one fifth (19%) participated in Enterprise Networks (EN) and only 5% participated in Beachheads. Only 10% received GSF grants and 7% received EDG-Capability Building grants.

Figure 28

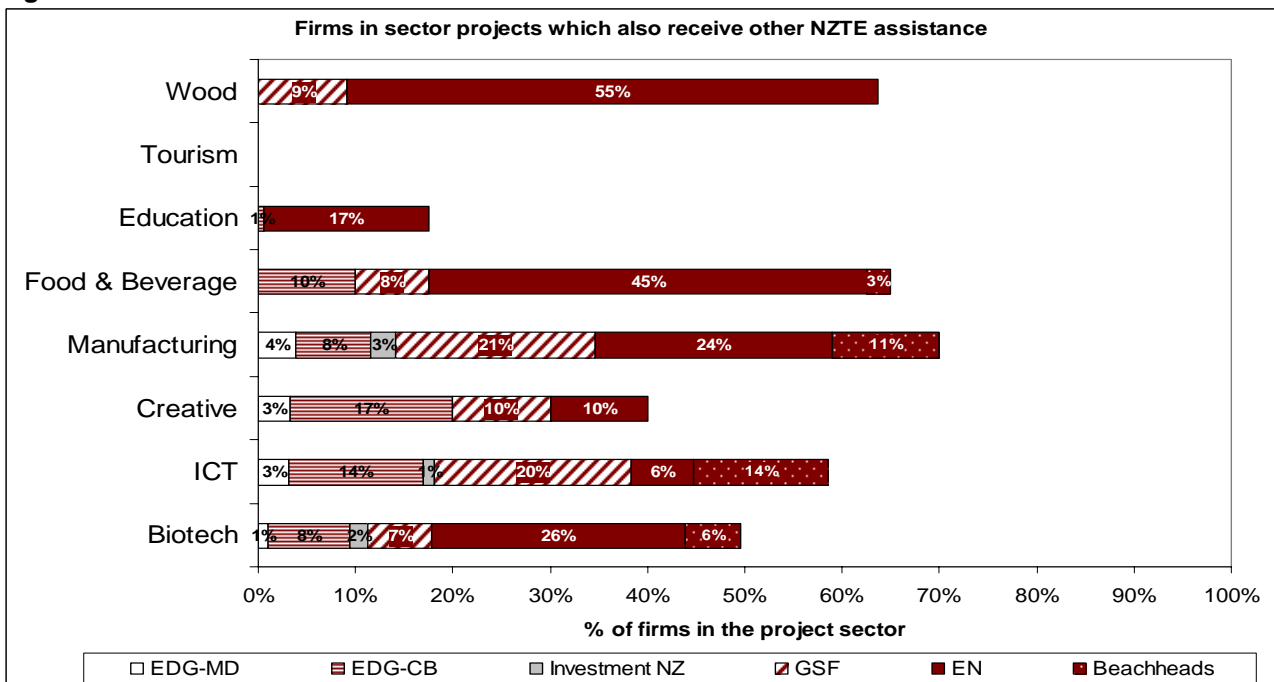


Figure 28 above shows the percentage of firms in each sector which are receiving other NZTE assistance. Over 60% of firms involved with projects in the Wood, Food & Beverage, and Manufacturing sectors receive other NZTE assistance. Enterprise Networks is the main form of other assistance received by firms in Wood, Food & Beverage, and Biotech projects.

The data also shows that a significant number of firms in Manufacturing and ICT sector projects have received other NZTE grants which target the specific capability building needs of individual firms (Among firms involved in Manufacturing projects, 21% received GSF and 8% received EDG-CB. Among firms involved in ICT projects, 20% received GSF and 14% received EDG-CB).

In contrast to the GSF and EDG-CB grants which reactively address the needs of individual firms, sector projects are intended to be used by NZTE to proactively address more systemic and strategic sector-wide issues. NZTE emphasised that the work of its Sector Managers in providing client management to individual firms complements the work of Sector Managers in leading sector projects by helping them identify the needs and opportunities facing firms in that sector.

It is important that NZTE continues to ensure that resources within the Sector Projects programme are not diverted away from more strategic sector-wide issues, and that this programme complements, rather than duplicates, its grants and other programmes designed to address the specific needs of individual firms. Sector projects could be used to disseminate best practices or spillover impacts from single successful GSF projects across the sector or to other sectors.

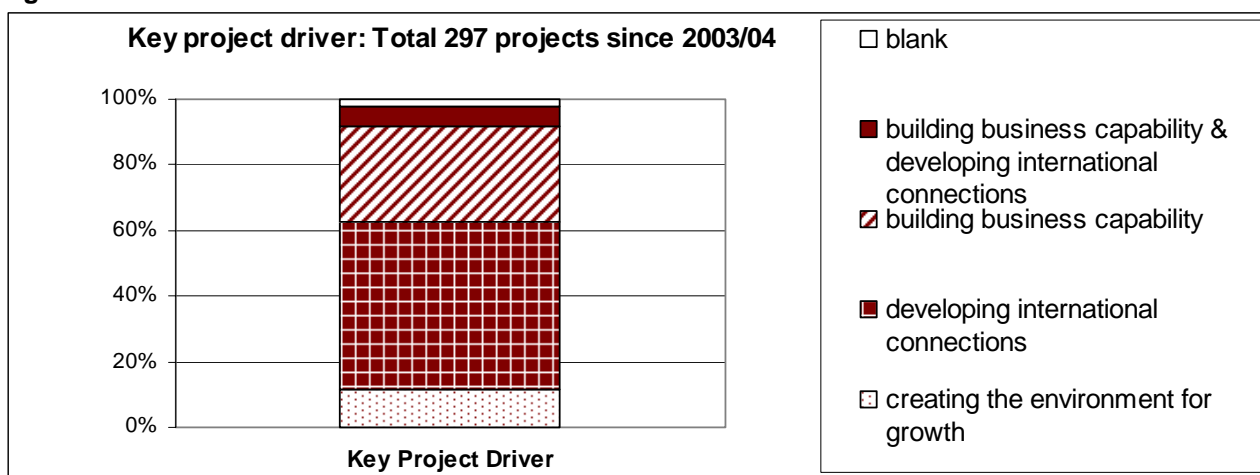
6. Findings: Outcomes

This section examines the extent to which NZTE's sector projects are targeted at the intended policy outcomes (shown on the Programme Logic Model in Section 1) and the extent to which these outcomes are being achieved.

6.1 Targeting of intended outcomes

This evaluation could not obtain sufficient information on all the sector projects to assess the extent to which the projects are targeted at all the intended policy outcomes (identified in the Programme Logic Model). However there are indications that the majority of these projects are focused on developing international markets. As shown in the previous chapter, the evaluation survey of firms indicated that the vast majority (83%) of the firms that participate in these NZTE sector projects are current exporters.

Figure 29



NZTE categorised its sector projects in terms of the key underpinning drivers. As shown in Figure 29 above:

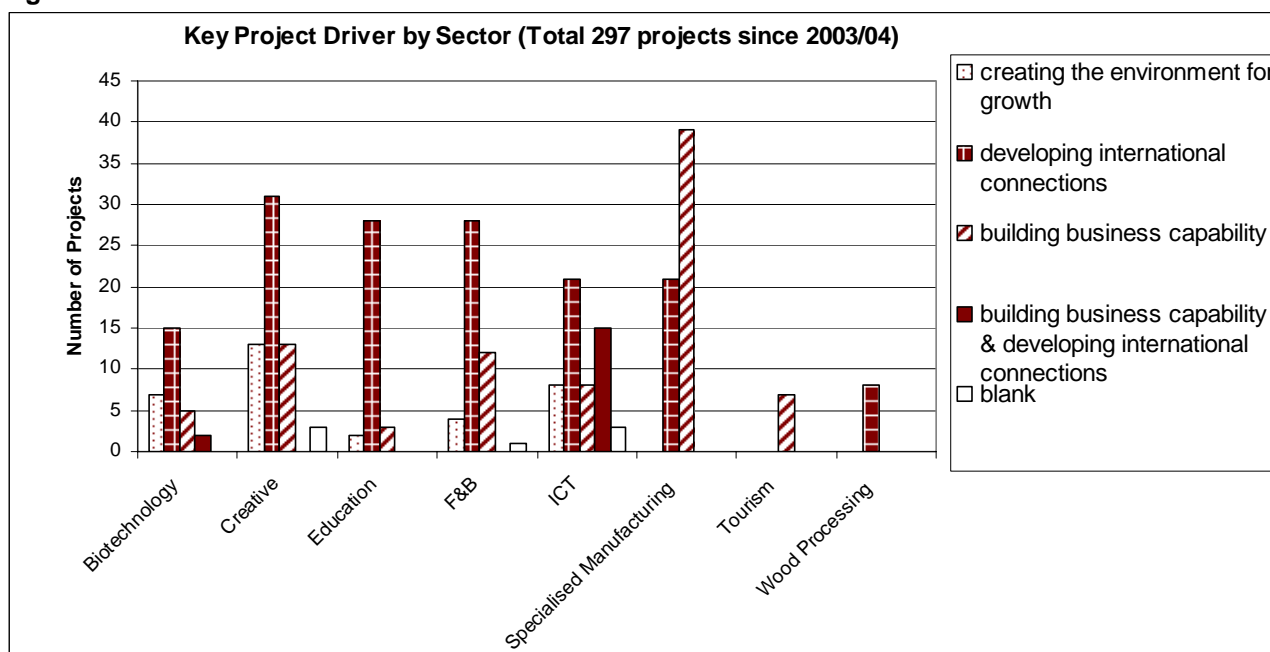
- the majority (51%) of the projects are focused on developing international connections (e.g. Biotech project on market development plans for North America and Europe; Creative project on participation in Paris Fashion week; Food and Beverage sector project on China Retail Channel Development);
- under a third (29%) focus on building business capability (e.g. Creative project on seminars on exporting NZ arts and crafts; Manufacturing project on high temperature superconductors opportunities; ICT project on Connect Auckland and Canterbury which implements a business growth network model to support new and immature ICT businesses).
- 6% focus on both developing international connections and building business capability (e.g. ICT sector project on Farmgate integrated farm management systems; ICT sector project on integrated electronic health records)
- 11% focus on creating the environment for growth (e.g. a Biotech project on intellectual property protection seminar series and manual; Services scoping project for the engineering and technology sector);

There appeared to be some relationship between project focus and the types of firms invited to participate. Compared to projects focused on capability building, projects focused on improving international connections appeared to involve firms which are more experienced exporters. This suggests that less experienced exporters may be more likely to be involved in projects that focus on capability building first before moving on to developing international markets.

According to the draft NZTE Statement of Intent 2006/07-2008/09, of the 20 major sector projects that NZTE is investing in during 2006-2009, 17 are focused on increasing the international connections of New Zealand businesses (e.g. improving the understanding of offshore markets and players) and three are focused on building onshore business capability (e.g. facilitate access to and use of the best ideas and technologies).

There are some differences across sectors in terms of extent of focus on international markets. Figure 30 below shows that in contrast to other sectors, projects in the Specialised Manufacturing and Tourism sector predominantly focus on building business capability.

Figure 30



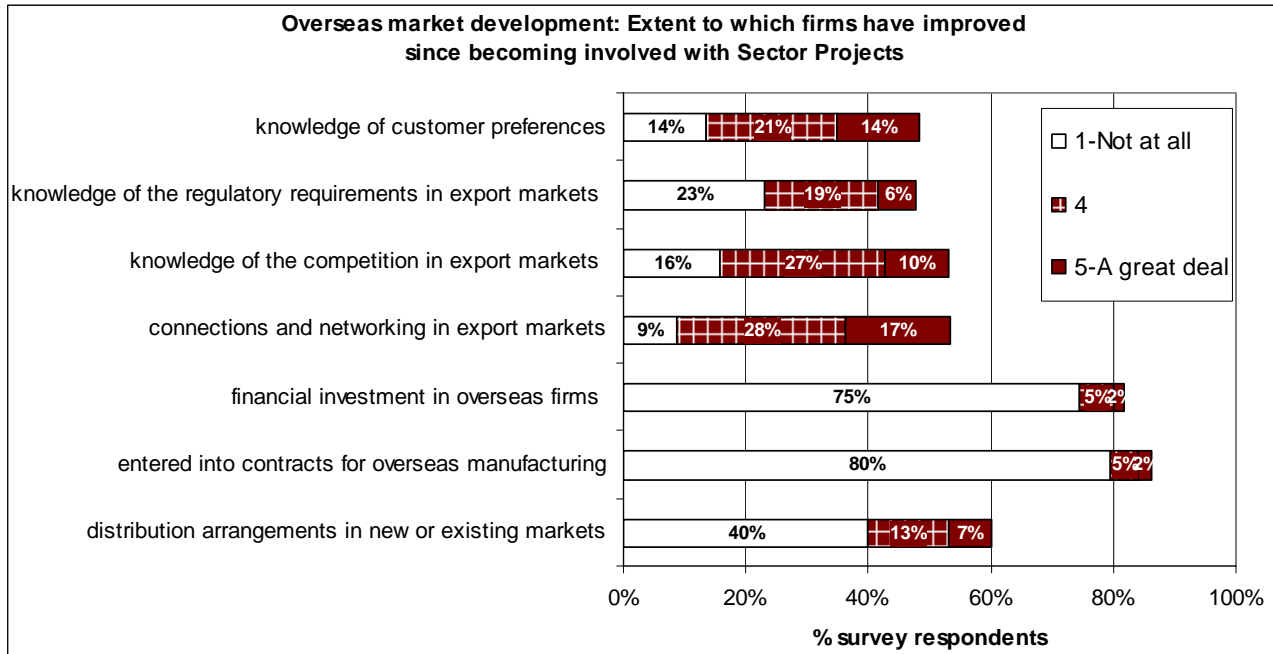
6.2 Improvements since involvement with NZTE-led sector project

This section examines findings from the evaluation survey of firm participants on the extent to which firms involved in the various sector projects experienced improvements in particular outcomes since they began their involvement in sector projects. Firms were asked to indicate the extent of improvement based on a 5-point scale from 1=not at all, to 5=a great deal. It is important to note that these results represent only the extent to which improvements have been experienced, and these improvements may not necessarily be due to the Sector Projects. Attribution of improvements to Sector Projects will be addressed in the following section.

6.2.1 Overseas market development

The following figure shows improvements firms reported on various dimensions of overseas market development since becoming involved with the NZTE-led Sector Projects.

Figure 31



The results indicate that the greatest improvements are in terms of knowledge of the market and connections in the market. The finding that not many firms experienced improvements in investment, contracts, or distribution arrangement in overseas markets is not surprising as these are impacts which may take longer to develop.

As would be expected, firms involved in projects with 'Developing international connections' as the key driver reported significantly greater improvements in the first four dimensions of market development, compared to firms involved in projects with 'Building business capability' as the key driver.

Box 2 below presents two case studies of sector projects that focused on overseas market development.

Box 2

Case Study: China Retail Channel Development Project

NZTE has identified China as a source of niche market growth opportunities for New Zealand food and beverage companies. The China Retail Channel Development Project is focused around reducing the risk of market entry by designing and implementing a format for effective and coordinated distribution, brand building and promotional activities within the retail sector, initially in Shanghai. Once a successful model has been proven, the intention is to expand the number of promotional sites.

To date, NZTE has allocated a budget of \$748,000 for this project over the 2005/06 and 2006/07 years (these budget figures represent direct project costs only and exclude any operational expenditure such as internal staff costs.)

NZTE engaged a Chinese logistics services provider to assist with the registration, importation, storage, retail licensing and distribution of New Zealand food and beverage products. Interested New Zealand companies were invited to submit samples to the distributor, which were evaluated for market and price suitability. Companies selected by the distributor were then invited to supply small quantities of their products to a New Zealand branded 'store within a store' in a major supermarket chain. NZTE provides additional marketing, communication and operational funding to promote the products.

Interviewed companies were positive about the project, which they saw as providing low-risk, low-cost entry into a market with significant potential. NZTE was able to actively broker commercial relationships between the New Zealand companies and a Chinese distributor, which will continue to exist outside the scope of this project. Although this project is still in its infancy, this model of engagement appears to be successful and has the potential to be duplicated in other markets and sectors. NZTE seems to have provided significant value by opening doors in a difficult regulatory environment, by virtue of being seen as representing the New Zealand Government.

Case Study: Thailand OCSC Education Fair

NZTE identified the need to raise New Zealand's tertiary profile in the Thai market. In October 2005, NZTE co-ordinated and funded a New Zealand stand at the Office of the Civil Service Commission (OCSC) International Education Expo in Bangkok, Thailand. The OCSC was targeted because it signalled New Zealand's commitment to further develop the market as well as the possibility of tapping into a previously ignored high-yield market (the Thai government awards 8,500 scholarships annually to civil servants to pursue further professional development). The Expo followed a NZTE sponsored visit to New Zealand by the OCSC and the Ministry of Higher Education.

NZTE allocated a budget of \$37,790 for this project for the 2005/06 year (this represents direct project cost only and excludes any operational expenditure such as internal staff costs).

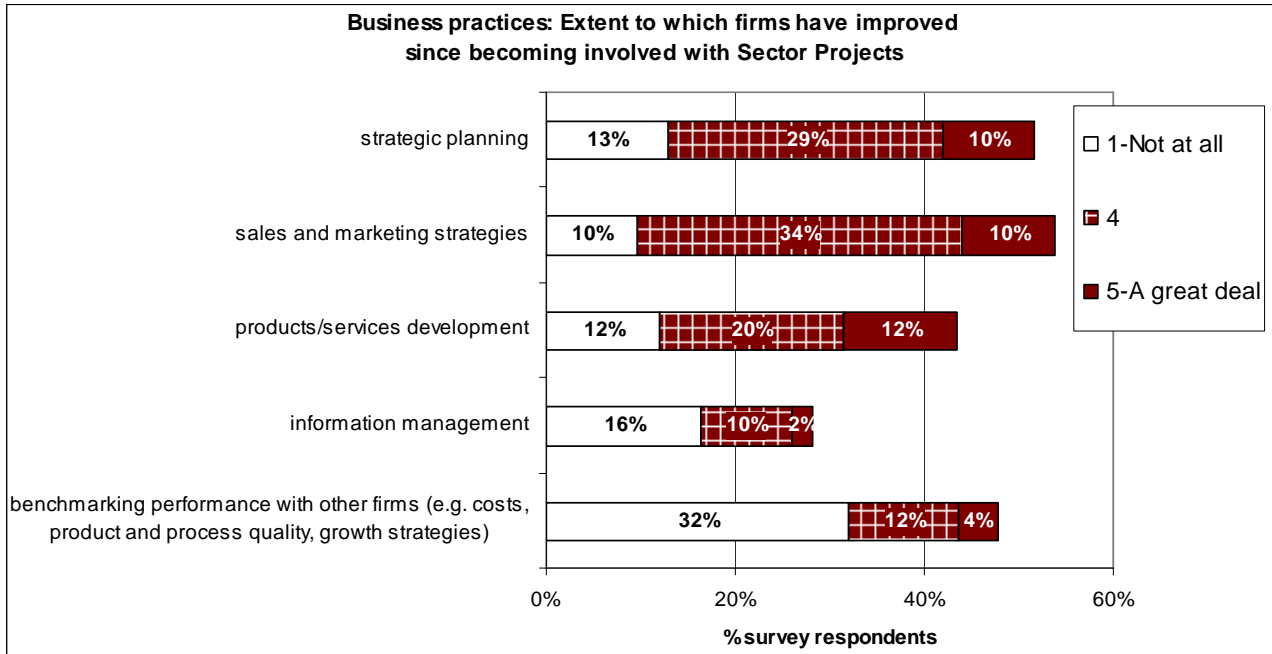
Eight New Zealand institutions travelled to the two day fair, which was attended by approximately 35,000 visitors. Prior to NZTE's involvement, only two New Zealand universities had attended this event – and the indications are that these two universities had been 'lost' without a national stand at an event of this magnitude. NZTE anticipated that attendance at this fair would double the amount of Thai students enrolled in New Zealand tertiary education (previously 460) over the next two years.

Interviewed institutions found the event to be useful, particularly NZTE's on-the-ground presence and support through their Bangkok office. However, interviewed participants found it more difficult to attribute any increases in enrolment to attending the event, although this may become more apparent over time. NZTE's involvement was valuable as a catalytic role – this is the type of event where NZTE can demonstrate the value to participants of undertaking such activity and then withdraw its involvement. Interviewed institutions indicated they would attend future fairs without NZTE funding.

6.2.2 Business practices

Figure 32 shows improvements reported by firms on various dimensions of business practices since becoming involved with the NZTE-led Sector Projects.

Figure 32



Firms appeared to experience the greatest improvements in sales and marketing strategies followed by strategic planning. The least improvements were reported in information management.

The extent to which firms reported improvements in benchmarking performance with other firms appeared to be related to their project sector and their export status. Firms in Manufacturing and Wood Processing projects appeared to experience greater improvements in benchmarking performance with other firms. Firms which were current exporters reported greater improvements than non-exporting firms in benchmarking their performance with other firms.

Box 3 presents two case studies of sector projects which focused on improving business practices.

Box 3**Case Study: Food & Wine Project (Tourism)**

A key aspect of NZTE's tourism strategy has been identifying and promoting best-practice business models. One tourism project focused on New Zealand's comparative advantage in food and wine and sought to disseminate best-practice case studies of world class international food and wine tourism operations. NZTE contracted an industry organisation to produce four case studies, which will be presented to wineries, restaurants and regional tourism operators.

NZTE allocated a budget of \$75,000 for this project over the 2004/05 and 2005/06 year (this represents direct project cost only and excludes any operational expenditure such as internal staff costs).

This project appears to have been highly successful in attempting to broaden the value of wine tourism and improving the value of New Zealand's regional offerings (away from a historical tendency to focus on increasing volume). This project had significant involvement by an industry body as well as other private sector stakeholders, and successfully targeted spillover benefits beyond the direct participants (including regional tourism operators and local EDAs).

Case Study: Volume Production Opportunity (Manufacturing)

In a specialised manufacturing project, NZTE worked with two engineering companies wanting to position themselves to bid cooperatively for a major internationally tendered volume production opportunity. This involved expert assistance with the tendering process itself, as well as benchmarking against overseas facilities and developing a strategy to demonstrate their ability to achieve the quality standards and production throughputs required.

NZTE allocated a budget of \$100,000 for this project for the 2005/06 year (this represents direct project cost only and excludes any operational expenditure such as internal staff costs).

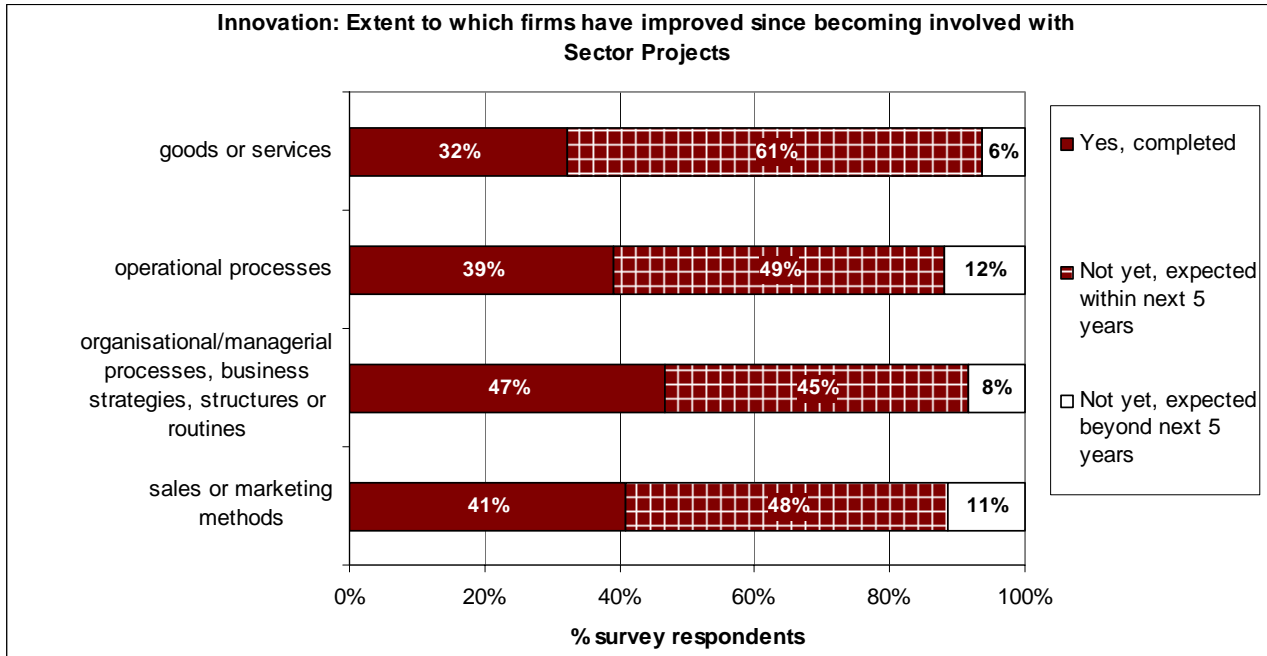
NZTE saw a general benefit in demonstrating that companies which derived most of their revenue from short production run, customised work could compete in a very different area of the market, and in the process of identifying possible NZ component supply chains establish the basis for wider collaboration within this industry.

The project built on other support provided through the GSF to raise productivity in their production processes. The companies see the changed approach that they are now able to adopt as very valuable in itself, irrespective of whether they win the business which provided the initial impetus to this project.

6.2.3 Innovation

The following figure shows improvements firms have experienced on various dimensions of innovation since becoming involved with the NZTE-led Sector Projects.

Figure 33



Only a third of firms indicated they have completed a goods or services innovation, i.e. introduce into the market any new or significantly improved goods/service. A further 61% indicated they have not implemented this innovation yet, but expect to do so within the next 5 years. The rate of completion is higher for the other three types of innovation. When combined with the rate of expected innovation within the next 5 years, the rate of innovation is very high (about 90%). Box 4 presents a case study of a project that focuses on improving innovation.

Box 4

Case Study: Farmgate (Integrated Farm Management Systems) Project (ICT)

The objective of this project is to provide support to a consortium of agritech companies to enable them to demonstrate how an integrated ICT farm management system can improve decision making and farm productivity.

NZTE allocated a budget of \$503,800 for this project over the 2004/05 and 2005/06 years (this represents direct project cost only and excludes any operational expenditure such as internal staff costs).

Surveys of ICT uptake by farmers show a high level of PC ownership and personal use but less than 25% reported their computers being used in some way for farm management or accounting purposes. Part of the problem in dairy farming (in particular) is the substantial number of electronic technologies available but the total absence of a comprehensive integrated system with database facilities, making it difficult to get a single snapshot of performance and areas for productivity improvement.

A core component of this system is electronic based animal identification using RFID technology (radio frequency identification) which is required to meet the increasing demand from Northern Hemisphere regulators for increased food traceability. This project is currently using one high-performing dairy farm for the demonstration but the consortium and NZTE plan to extend this experience to other forms of farming such as beef, sheep and deer.

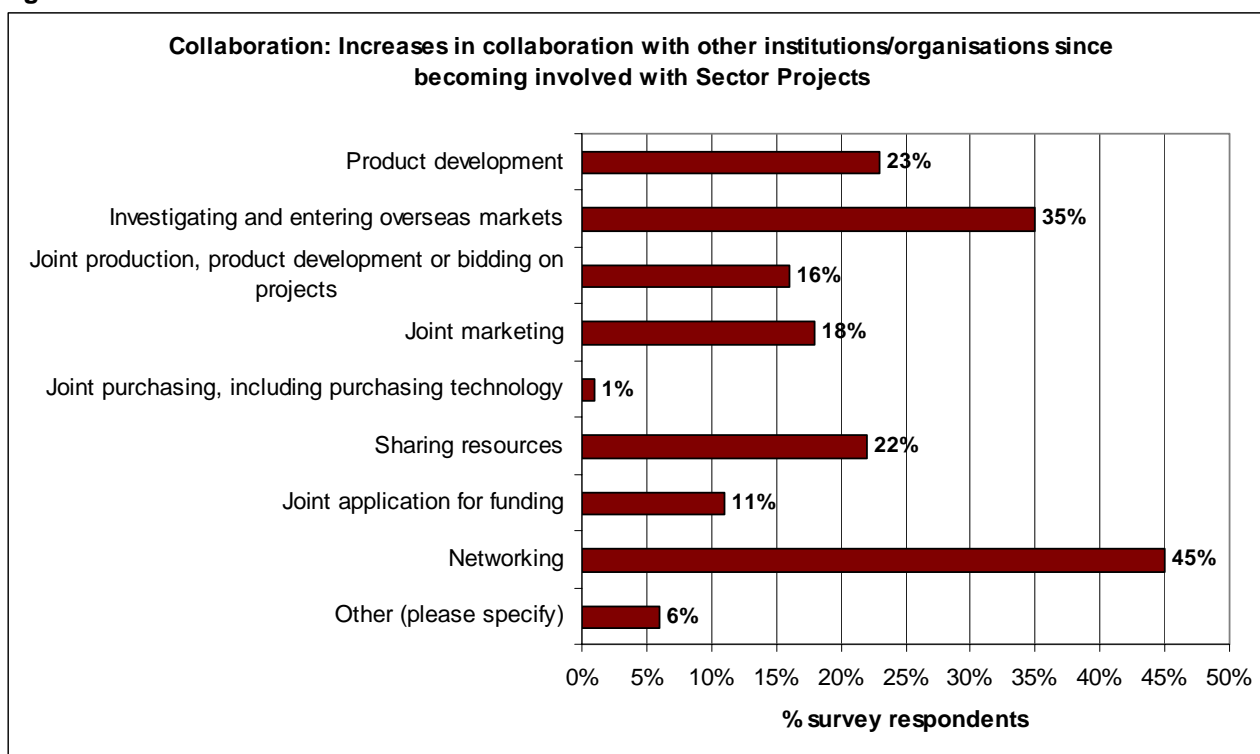
The role of the consortium is to vet ICT applications and processes for the demonstration dairy farm and measure their performance. The demonstration farm was initially base lined to measure performance and the farmer has absolute veto. NZTE were approached by the consortium in 2005 to provide a coordination role for the consortium and conduct market research. Significant funding commitments have been made by the consortium companies. Key performance targets for the project are to raise annual milk production on the demonstration farm by a minimum of 10% through improved cow selection and herd and pasture management and to lift annual \$EBIT/ha from \$3,000 to \$4,500.

Progress to date has been encouraging. Improved production capacity has been observed in grass quality and volume, milk production and quality, feed management and effluent and energy management. In addition, the consortium companies are now seeing the potential to export bundled components of this ICT farm management system to Australia, North Asia and South America. For some of the companies, this will be their first entry into exporting.

6.2.4 Collaboration

The following figure shows increases in firm collaboration with other institutions/organisations since becoming involved with the NZTE-led Sector Projects.

Figure 34



The top increases in collaboration appear to be in terms of networking (45% of firms) followed by investing and entering overseas markets. Hardly any firms reported increases in joint purchasing, including purchasing of technology.

There appears to be significant differences across sectors in terms of increases in collaboration in product development. Compared to other sectors, firms in the GIF sectors were more likely to report increases in collaboration in terms of product development since becoming involved with the NZTE-led Sector Project (32% of GIF sector firms compared to 19% of non-GIF firms and 7% of Education institutions reported this improvement).

There also appears to be sector differences in terms of joint marketing. Education institutions were more likely to report increases in joint marketing since becoming involved with the NZTE-led Sector Project (30% of Education institutions compared to 13% of GIF sector firms and 20% of non GIF sector firms reported this increase). This is probably not unexpected as most of the Education sector projects were overseas trade fairs.

Box 5 illustrates a sector project that focused on improving collaboration between firms.

Box 5

Case Study: European Value Added Wood Strategy (Wood Processing)

For this project, NZTE funded and directed market research to identify customer trends in Europe, develop strong in-market networks and link them to appropriate local product providers.

NZTE allocated a budget of \$125,000 for this project for the 2005/06 year (this represents direct project cost only and excludes any operational expenditure such as internal staff costs).

NZTE selected leading in-market consultants as opposed to NZ nationals to provide the market research to provide an understanding of market size, industry structure, networks, regulations and consumer trends. Significant outcomes from this strategy have included the transfer of knowledge (manufacturing technologies, market and product developments) and design ideas and the securing of commercial deals.

This strategy emerged from a forum of CEO's representing the major forestry companies who realised that the 2001 wood processing strategy was necessary to lift the export performance of the sector but not sufficient. The forum acknowledged that the wood processing industry had a lack of marketing capability and market data because of a traditional emphasis on production management skills and that government could play a significant role by providing market data, knowledge and experience of high value markets, credibility for the strategy on and offshore and acting as a conduit for organising firms to work together to take advantage of identified market opportunities.

NZTE saw this strategy as a valuable demonstrator of new business models required for the wood sector to compete internationally and a wider example of how NZTE could assist firms to access new markets by producing products and services that focused on market-pull (not just expanding the quantity of exports currently produced) and building greater linkages between New Zealand firms and between New Zealand and offshore firms.

6.2.5 Access to finance

Figure 35 below shows that in all sectors no more than a third of firms indicated they had experienced improvements in their ability to access domestic or overseas finance since becoming involved in the Sector Project.

Figure 35

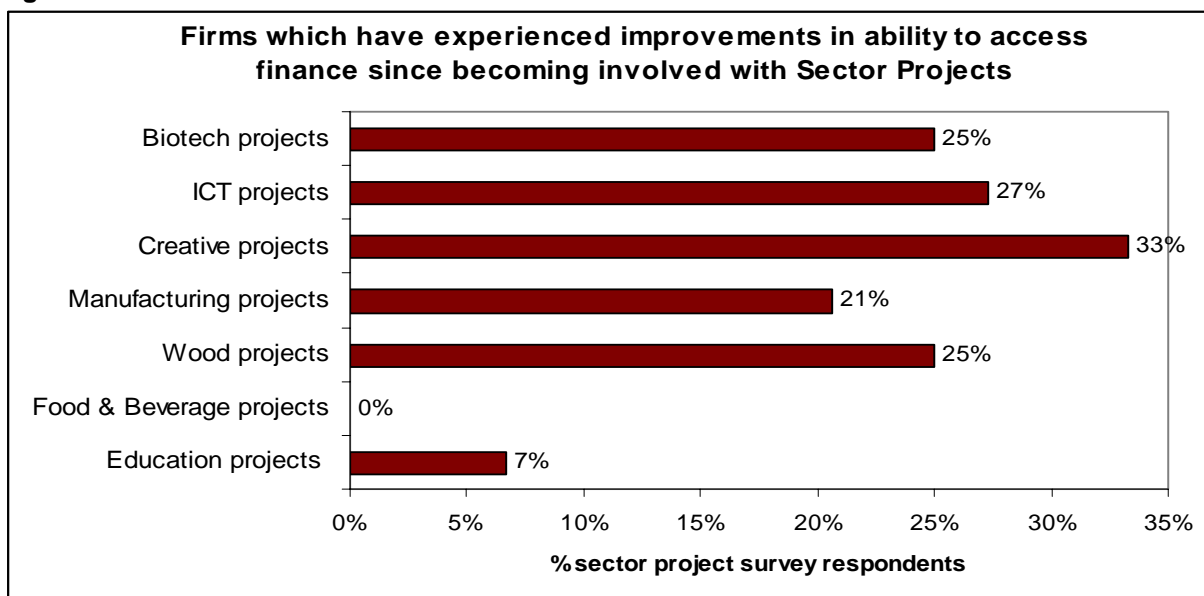


Figure 36 shows the extent to which firms have improved their understanding of business financing options and practices since becoming involved in the NZTE-led Sector projects. Firms in ICT sector projects (21%) and the one Creative project (33%) covered by the survey are the most likely to report improvement in their understanding of business financing options and practices (compared to 12.5% of firms in Biotech projects, 9% of firms in Manufacturing projects, and none of firms in Food & Beverage, Education, and the one Wood project covered by the survey).

Figure 36

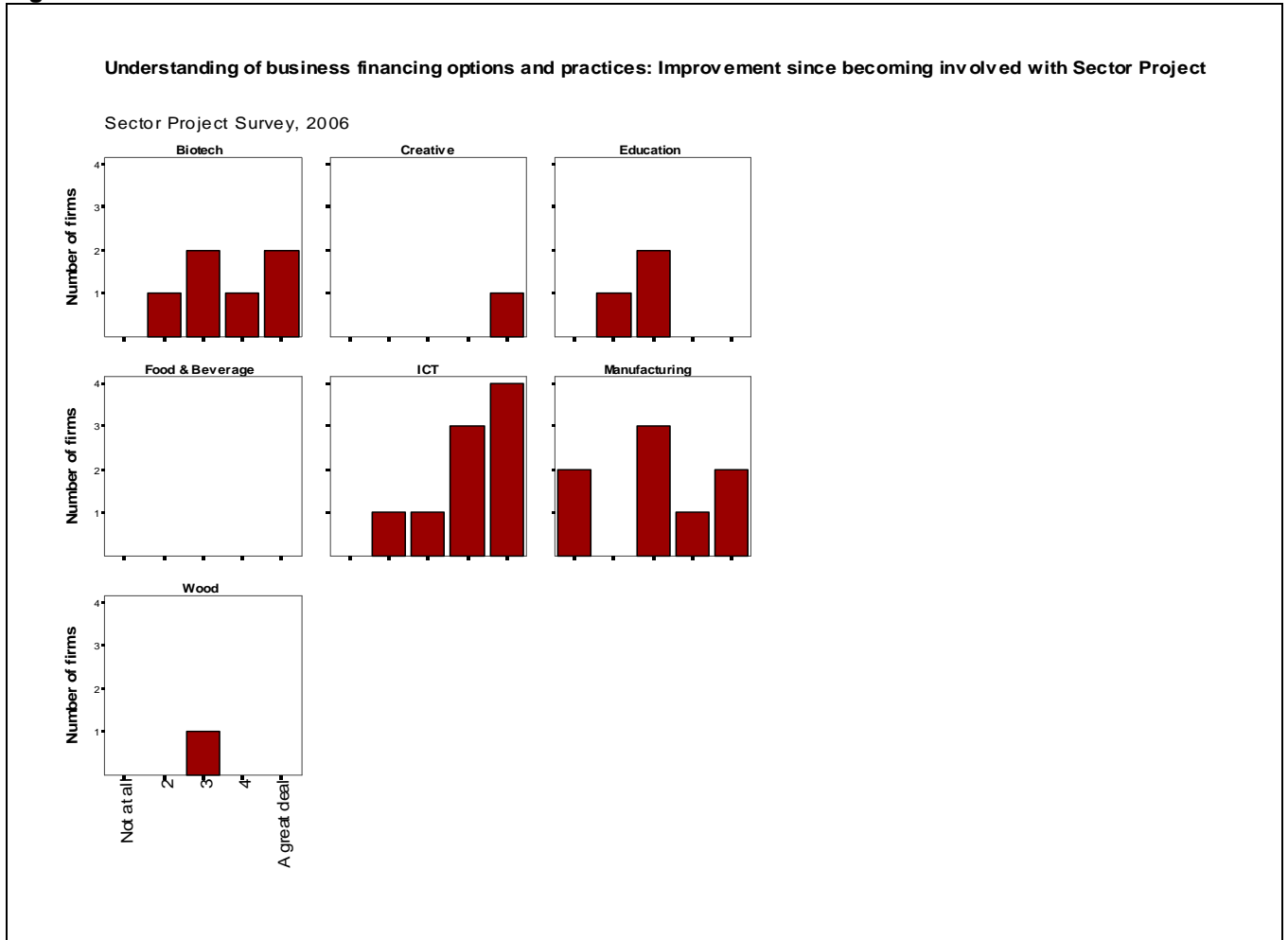
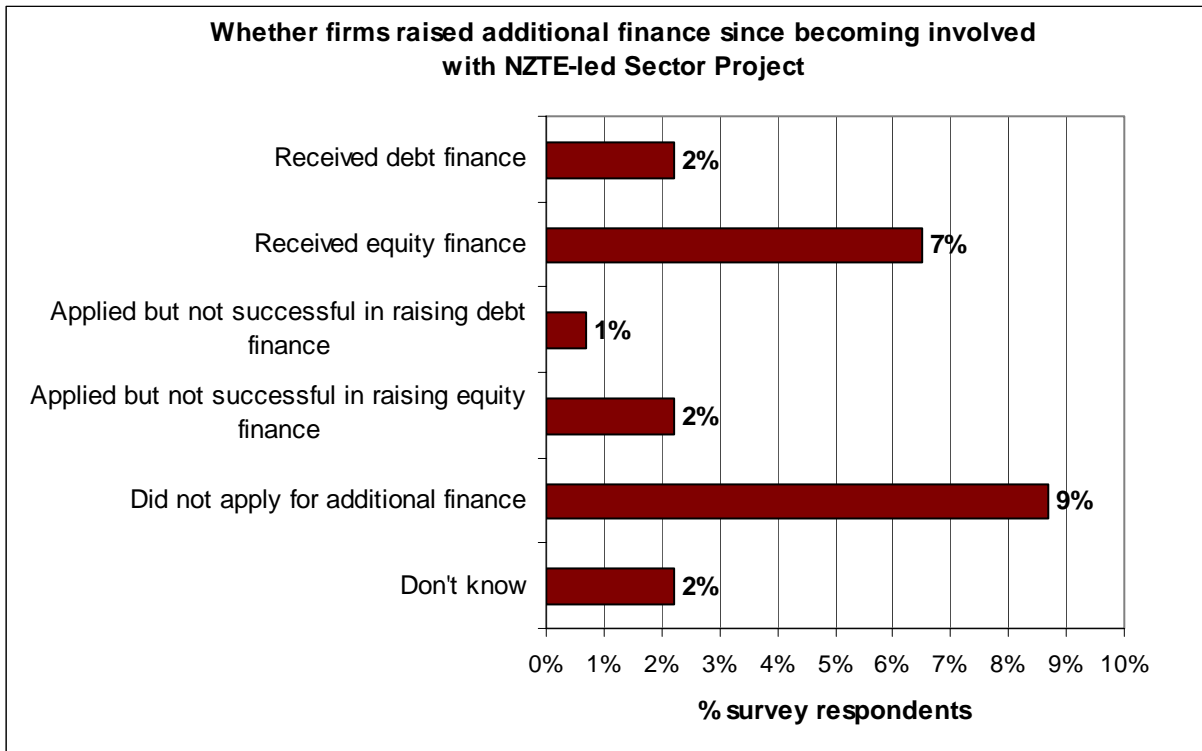


Figure 37 shows that less than 10% of firms raised additional finance since becoming involved with NZTE-led Sector Projects. Only 2% received debt finance and 7% received equity finance.

Figure 37



6.3 Are these improvements attributable to NZTE-led Sector Projects?

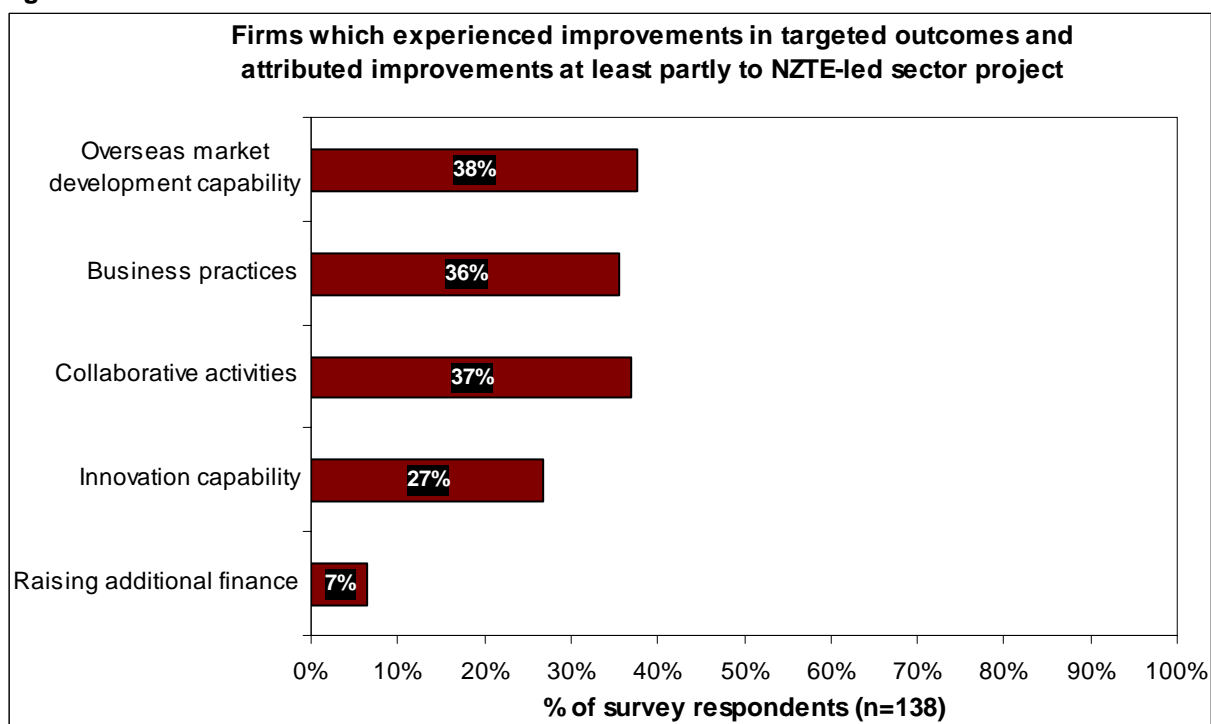
6.3.1 Intermediate outcomes

To examine the extent to which the improvements reported in the previous section were attributable to the Sector Projects programme, the evaluation survey asked firms to indicate the extent to which they attributed their improvements to the NZTE-led project they participated in. Firms indicated the degree of attribution on a 6 point scale ranging from 1= not due to the project at all, to 5=totally due to the project, and 6= not applicable, no improvements.

Overall findings

Figure 38 below shows that on the whole, sector projects have the greatest impact on firms' ability to understand and develop overseas market opportunities, business practices, and collaborative activities, less impact on innovation capability, and least impact on their ability to access finance.

Figure 38



Sector-specific findings

Projects in different sectors appeared to vary in extent of reported impact on the outcomes targeted by this programme. Projects in the Manufacturing sector are assessed by firm participants as having the greatest impact and projects in the International Education sector appear to be having the least impact on these outcomes. However, it should be noted that the relatively poor performance of the International Education sector reflects projects undertaken under its current sector engagement strategy. NZTE is seeking to change its current focus from attracting students (retail focus) to attracting more business to institution links – that is attract businesses to provide professional training for their employees in NZ universities and polytechnics. This change would require Education NZ to have a significant retail marketing role to replace the current NZTE activities which is predominantly assisting tertiary institutions in attending overseas education trade fairs. Further discussions with Education NZ and the Ministry of Education are required for NZTE to receive the necessary support for this change in strategy.

Due to the following limitations relating to responses for Creative and Wood sector projects, this evaluation is unable to make firm conclusions on these two sectors based on the survey responses. Only 3 firms involved in Creative sector projects responded to the survey, representing a 27% response rate. The 3 firms were all involved in only 1 of the 5 projects the survey intended to capture. There were only 8 total projects in NZTE’s Wood Processing sector, and only 2 of these projects met the criteria for selection of the survey sample (described in the Methods section). Although the response rate was high at 57%, it represents only 4 firms who are all involved in one project. The survey did not cover any tourism projects as there are only 7 projects in this sector and NZTE indicated they were all at the scoping phase and it was therefore too early to survey the participants regarding project impacts.

The figures below show for each sector, the responses of participating firms in terms of the extent to which their improvements in overseas market development capability, business

practices, innovation capability, and collaborative activities are attributable to the NZTE-led sector project.

Figure 39

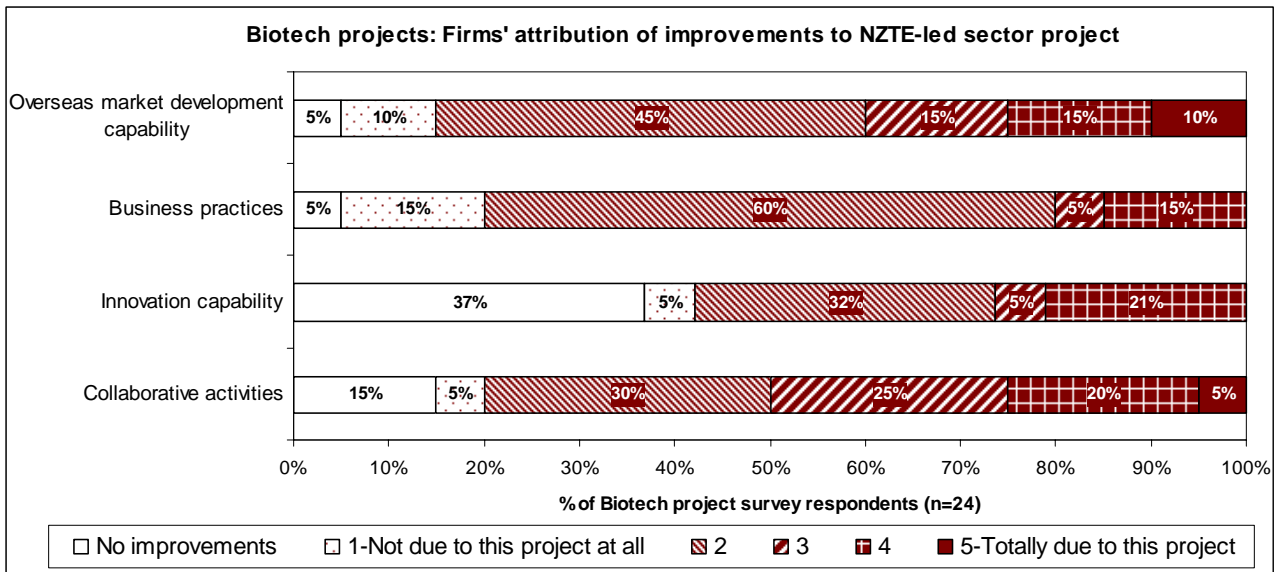


Figure 40

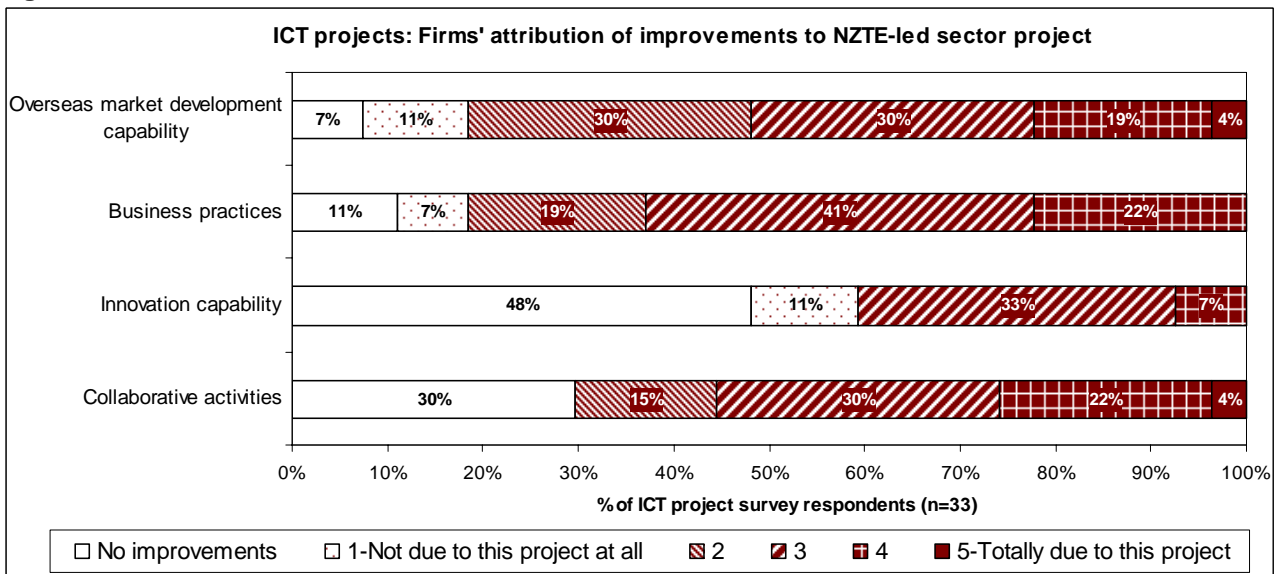


Figure 41

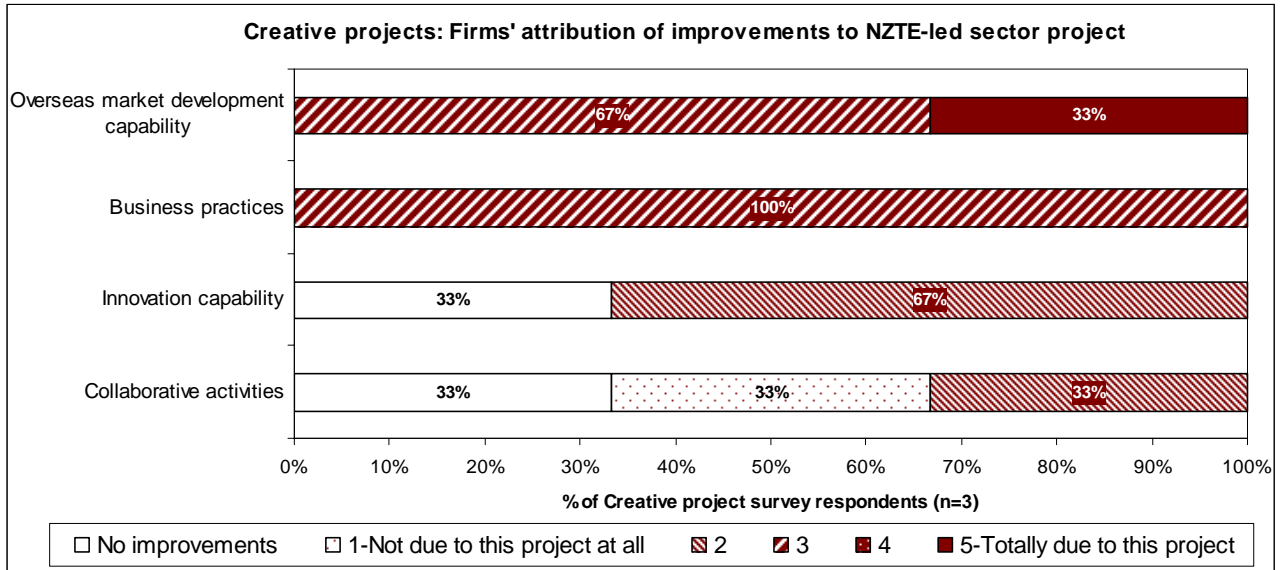


Figure 42

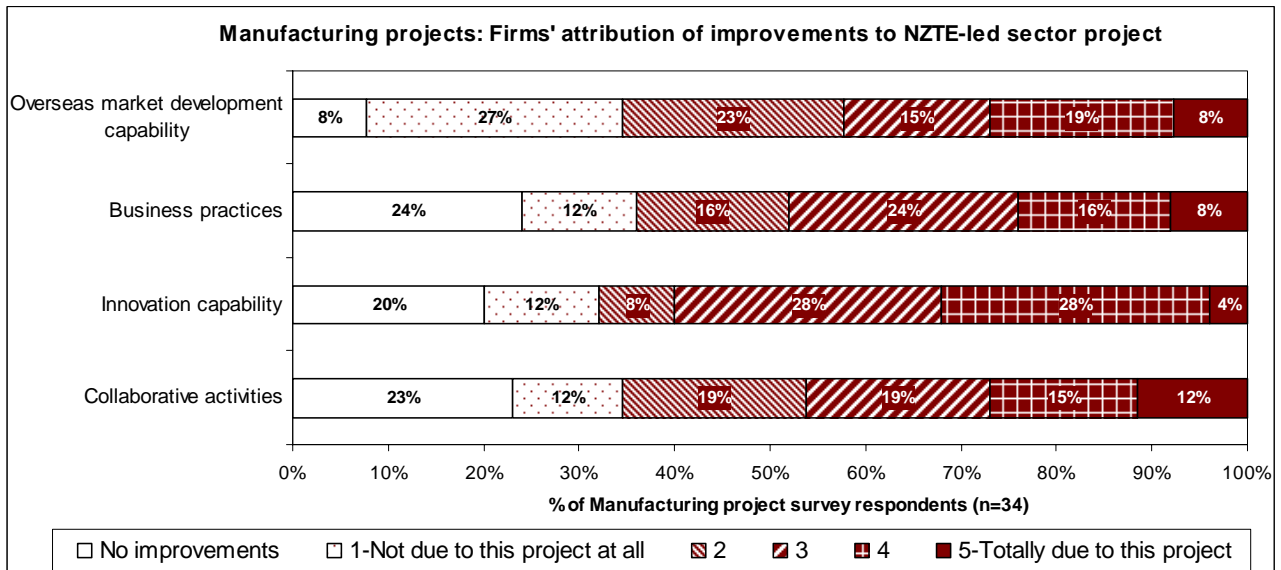


Figure 43

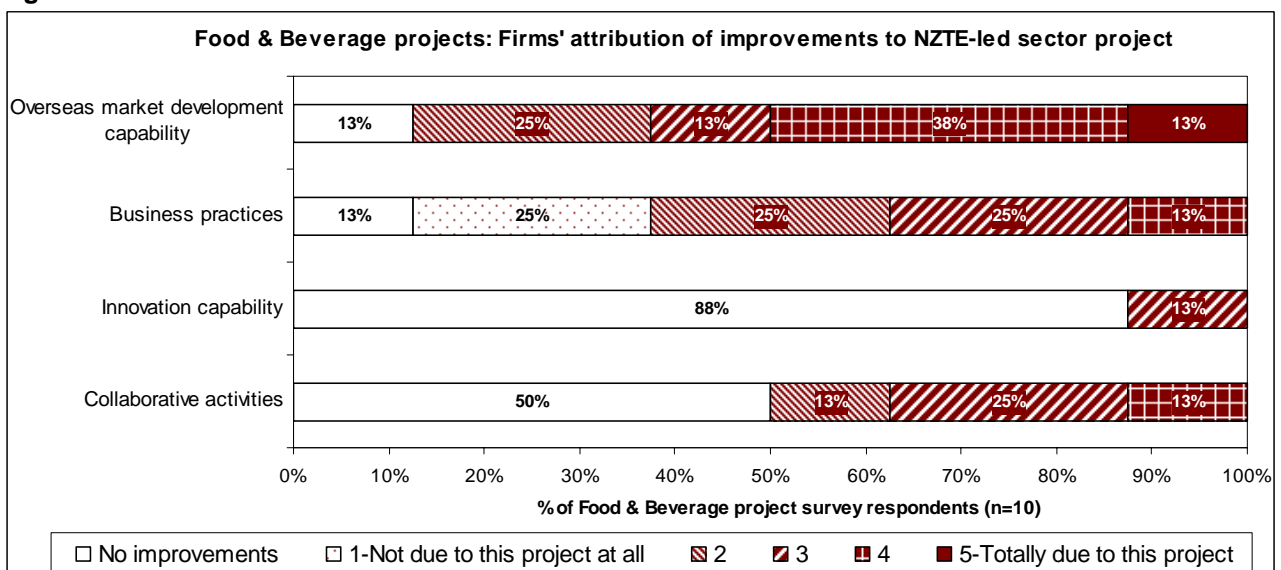


Figure 44

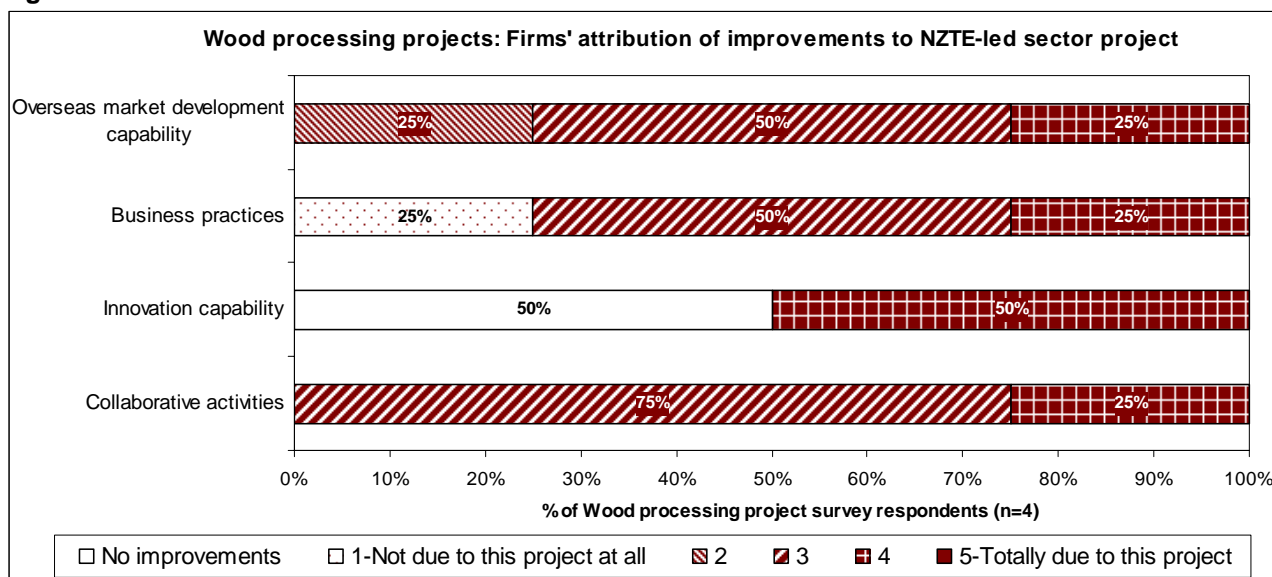
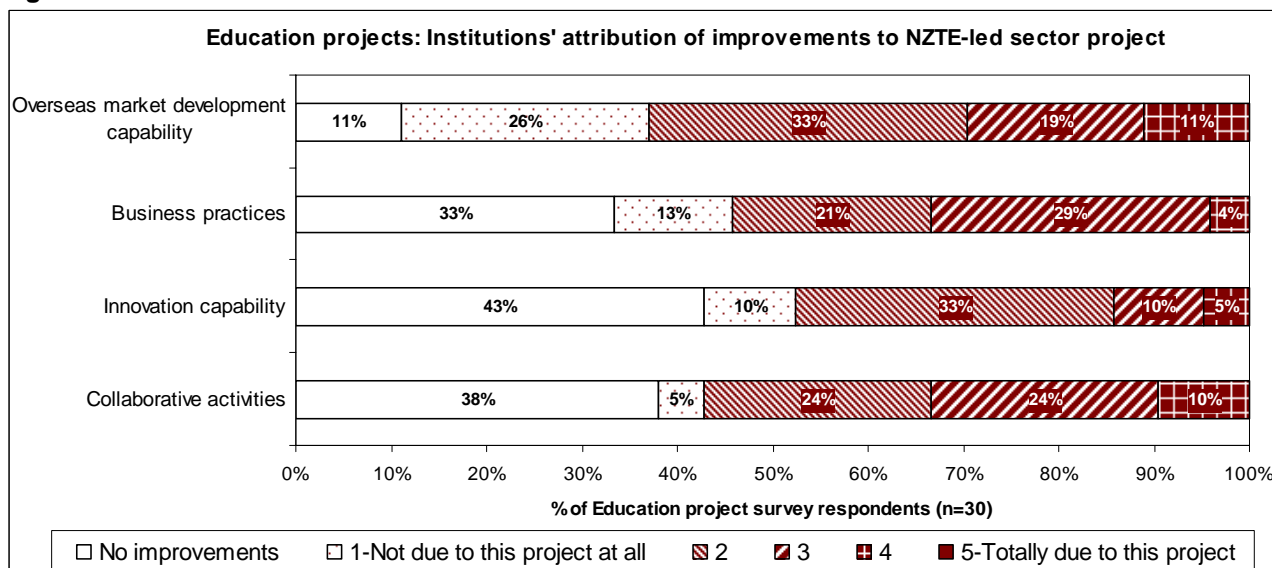


Figure 45



In terms of impacts on specific intermediate policy outcomes, the survey results indicate the following:

a) improvements in overseas market development capability

This outcome appears to be most impacted by Food & Beverage sector projects and least impacted by International Education sector projects. Half (51%) of firms in Food and Beverage projects indicated improvement in this outcome and attributed the improvements mainly or totally to the NZTE-led sector project (compared to 25% of firms in Biotech projects, 23% of firms in ICT projects, 27% of firms in Manufacturing projects, 33% of the firms in the Creative project covered by the survey, 25% of firms in the Wood project covered by the survey, and only 11% of institutions in International Education projects). Firms which benefited most in terms of this outcome, appeared to be those that had significantly higher turnover and export growth past 3 years.

b) increases in collaborative activities

This outcome appears to be most impacted by Manufacturing, Biotech, ICT, and Wood projects and least impacted by the Creative project. About a quarter of firms in Manufacturing projects, Biotech projects, ICT projects and the one Wood project covered by the survey indicated improvement in this outcome and attributed the improvements mainly or totally to the NZTE-led sector project (compared to 13% of firms in Food & Beverage projects, 10% of institutions in International Education projects, and none of the firms in the one Creative project covered by the survey). Firms which benefited most in terms of increased collaboration appeared to be younger exporters that are more focused on new domestic markets.

c) improvements in business practices

This outcome appears to be most impacted by Wood and Manufacturing sector projects and least impacted by Creative sector projects. A quarter of firms in the Wood project covered by the survey and 24% of firms in Manufacturing projects indicated improvement in this outcome and attributed the improvements mainly or totally to the NZTE-led sector project (compared to 15% of firms in Biotech projects, 22% of firms in ICT projects, 13% of firms in Food & Beverage projects, 4% of institutions in International Education projects, and none of the firms in the one Creative project covered by the survey). Firms which benefited most in terms of improvements in business practices tend to be those focused more on new markets, and less on existing domestic markets.

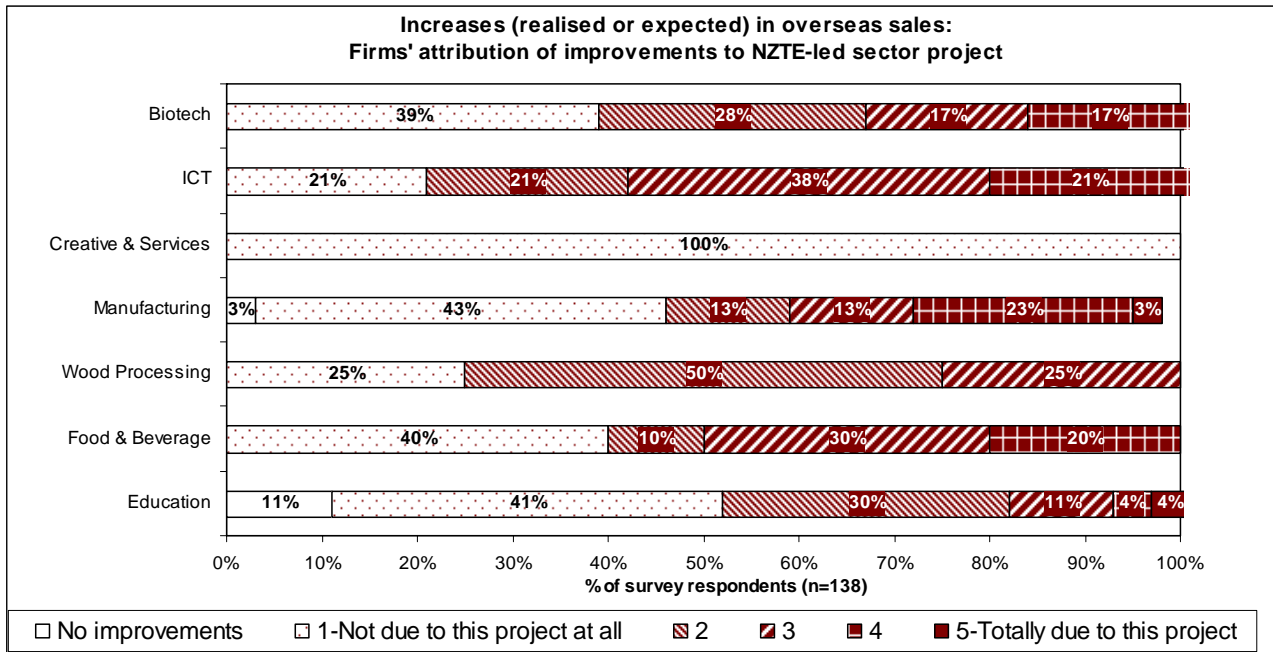
d) improvements in innovation capability

Improvements in innovation capability seem to be most impacted by Wood sector projects and least impacted by Food & Beverage projects. Half of the firms involved in the one Wood project covered by the survey indicated improvement in this outcome and attributed the improvements mainly or totally to the NZTE-led sector project (compared to 21% of firms in Biotech projects, 7% of firms in ICT projects, 32% of firms in Manufacturing projects, 5% of institutions in International Education projects, none of the firms in Food & Beverage projects and the Creative project covered by the survey). Firms which benefited most in terms of improvements in innovation capability tend to be those focused more on new markets, and less on existing domestic markets. There seemed to be a relationship between this outcome and extent of firm involvement in setting up the project. Firms which benefited most in terms of improvement in innovation appeared to be those that had greater involvement in setting the project direction or scope.

6.3.2 Final outcome: Increases in overseas sales to Sector Project

This is the only final outcome that was measured in the survey. Due to lack of data for the whole sector, export growth for the sector was measured in terms of increases or expected increases in overseas sales experienced by the participant firms.

Figure 46



As shown in Figure 46, improvements in overseas sales (including expected future sales) appear to be most impacted by projects in the Manufacturing sector and least impacted by projects in the International Education and Wood sectors. About a quarter of firms in Manufacturing projects and the one Creative project⁶ covered by the survey indicated improvement in this outcome and attributed the improvements mainly or totally to the NZTE-led sector project (compared to 17% of firms in Biotech projects, 21% of firms in ICT projects, 20% of firms in Food & Beverage projects, 8% of institutions in International Education projects, and none of the firms in the Wood project covered by the survey). Firms which benefited most in terms of overseas sales appeared to be those that were less likely to focus on existing domestic markets and had experienced higher turnover and export growth over the past three years. Box 6 presents a case study of a project that had an impact on increasing overseas sales.

⁶ Although 3 survey respondents to the Creative project indicated improvements were not due to this project, another firm that was interviewed regarding this same project (for the case study described above in Box6) indicated they did experience improvements as a result of this project.

Box 6

Case Study: Paris Fashion Week (Creative)

NZTE has assisted a group of established and emerging New Zealand fashion designers to showcase their designs at Paris Fashion Week for three consecutive seasons (a pilot in March 2005 (four firms), October 2005 (four firms) and March 2006 (five firms)). Assistance included the provision of a New Zealand stand at the Tranoï trade fair, marketing collateral, hosting a hospitality event and facilitating meetings with potential buyers. The project was designed to grow New Zealand's fashion industry, create indirect benefits for New Zealand's textile industry and to raise New Zealand's global profile as a creative country.

As indicated earlier, only one firm attributed any growth in overseas sales (realised or expected) to participating in this sector project. This particular firm is expecting an increase in export revenue (outside Australasia) from around €50,000 to at least €1m within 18 months; growth which it largely attributes to attending this event. By all indications, the other participant companies were not as committed to rapidly expanding their export levels and had not conducted the same level of necessary market research (on issues such as which buyers to target, appropriate pricing levels and which garments were most appropriate to display), prior to attending the Tranoï event.

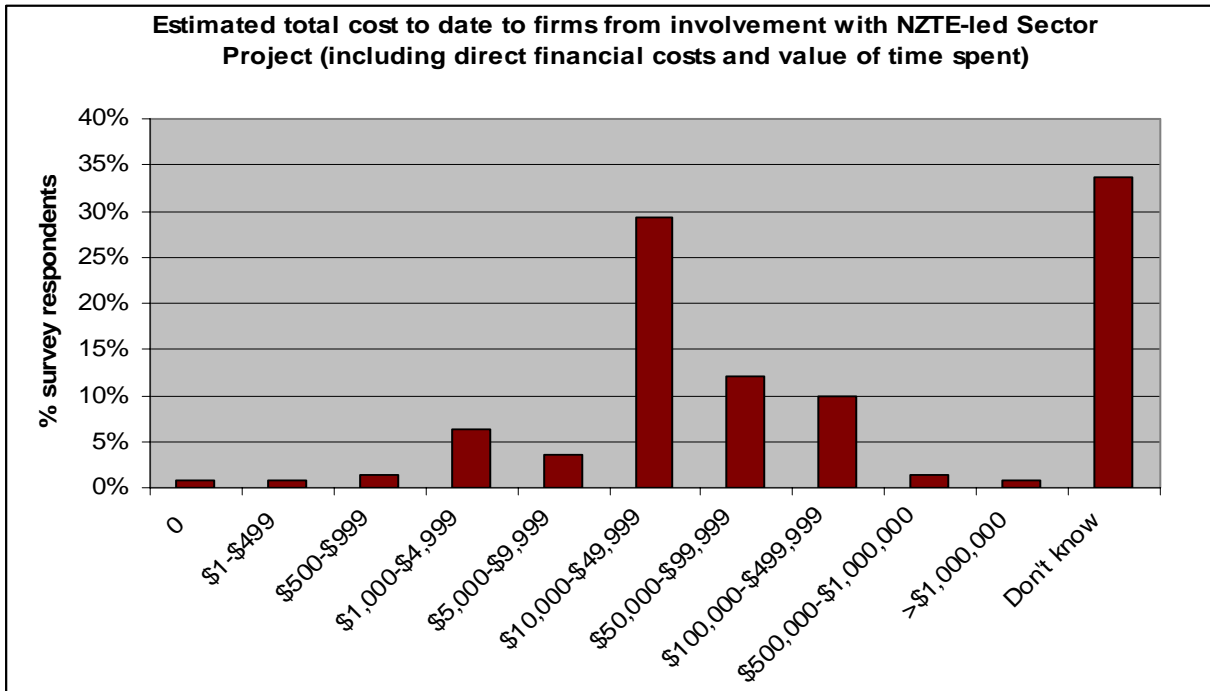
While the less-successful participants will inevitably have valuable learnings from being exposed to such a premier fashion event, NZTE will need to actively monitor the sales coming out of projects such as this. Identifying the aspects that have contributed to one participant being more successful than others, will enable NZTE to tighten the eligibility criteria for receiving NZTE assistance to participate in such events – such as requiring each participant to develop a robust strategy for offshore expansion and identifying how Paris Fashion Week will contribute to that goal.

6.4 Cost vs. benefits of participating in sector projects

6.4.1 Firms' estimation of cost

Figure 47 below shows firms' estimation of the total cost to date of their involvement with NZTE-led Sector Project (note: firms may be involved in more than one project, but each firm's response relates to only one of the Sector Projects they are involved in). About a third of the firms were not able to respond to this question. Of the 93 firms who did provide a cost estimate, the estimates ranged widely from a minimum of \$0 to a maximum of \$6 million. The average was \$128,191 (median was \$25,000). The most frequent cost estimate was in the range of \$10,000 to \$49,999.

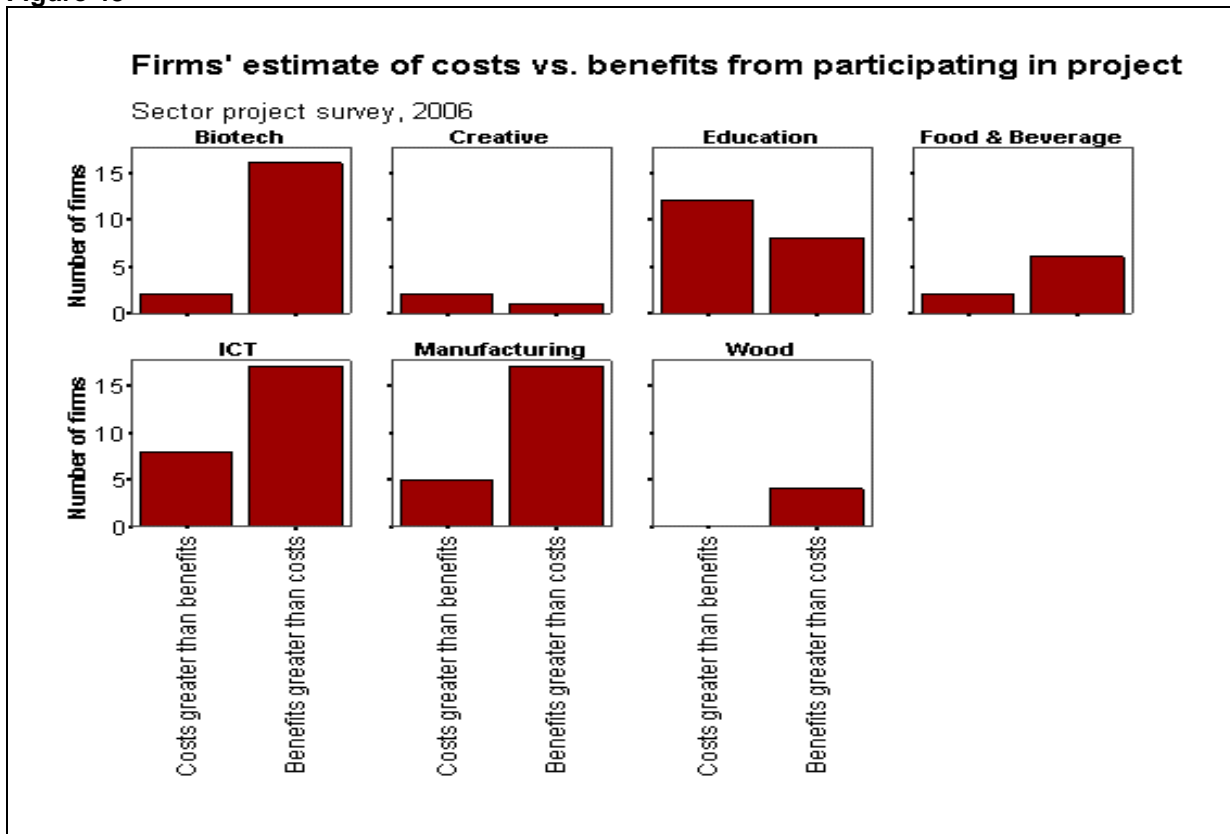
Figure 47



6.4.2 Costs vs. benefits

When asked how the estimated costs compared to the benefits expected from involvement, in all sectors, except International Education and Creative & Services, the majority of firms indicated that the benefits they expect from participating in the NZTE-led sector project is greater than the costs of involvement (as shown in Figure 48 below).

Figure 48



When compared to other firms, those which indicated that they expect the benefits from participating in the NZTE-led sector project to be greater than the costs of involvement appeared to have significantly greater involvement in setting the direction and scope of the NZTE-led sector projects. These firms were also more likely to be involved in projects that are larger (i.e. with budgets greater than \$100,000) and/or at Completion rather than Implementation stage. Firms which expected benefits to outweigh costs also appeared more likely to have experienced significantly greater improvements in overseas market development. Furthermore, these firms seemed to have a higher level of satisfaction with the ability of NZTE project staff to understand the key issues facing their sector.

Figure 49

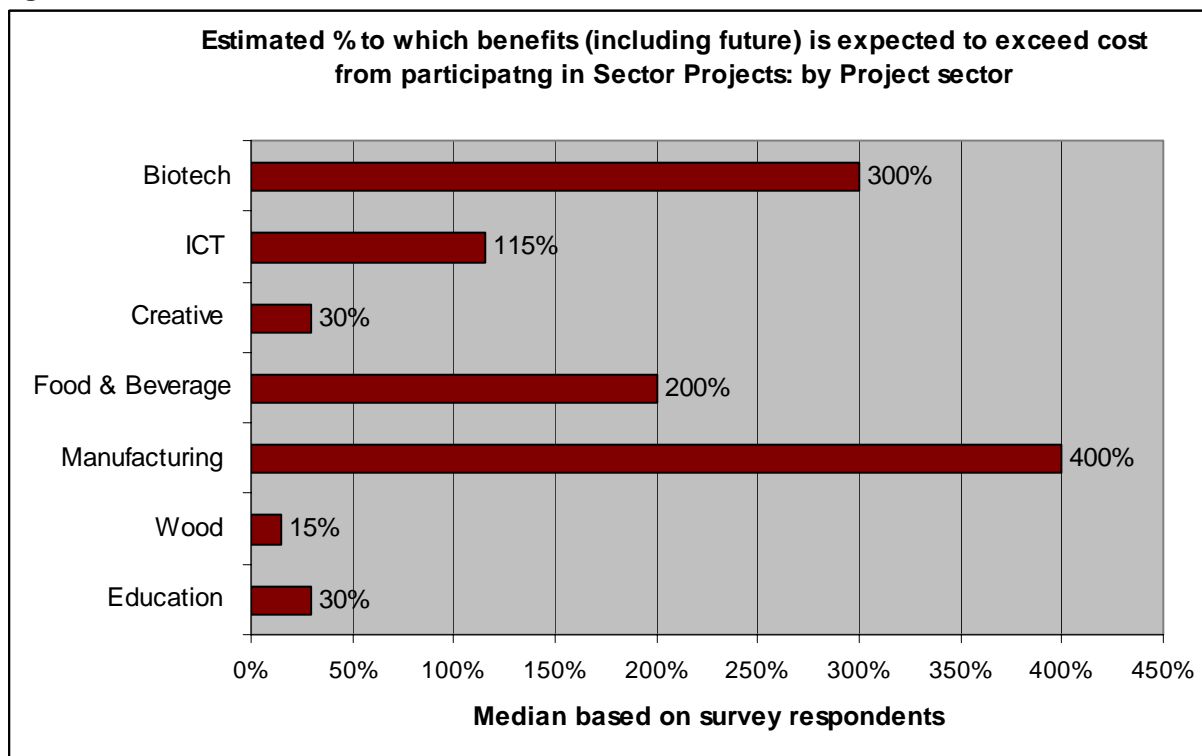


Figure 49 above indicates that expectations of the net benefit of sector project participation (i.e. benefits exceeding cost) are highest among firms which participated in Manufacturing and Biotech projects and lowest among firms in Wood, Creative, and International Education projects. The positive result for Manufacturing projects is consistent with the findings that these projects appeared to have a greater impact on the outcomes targeted by the Sector Projects programme.

6.5 Additionality

To examine the extent to which the Sector Projects programme resulted in benefits over and above what firms would have achieved themselves without involvement in this programme, the survey asked firms to indicate the extent to which they would have achieved similar results if they had not participated in the NZTE-led sector project.

As shown in Figure 50 below, projects in the Wood and Biotech sectors seemed to result in the highest additionality. None of the firms in the Wood project and only 17% of firms in Biotech projects indicated they would have achieved similar results if their firm had not participated in the Sector Projects. In contrast, projects in International Education and Creative sectors seem to have the lowest additionality with 37% of firms in International

Education projects and 33% of firms in the Creative project indicating they would have achieved similar results anyway.

Figure 50

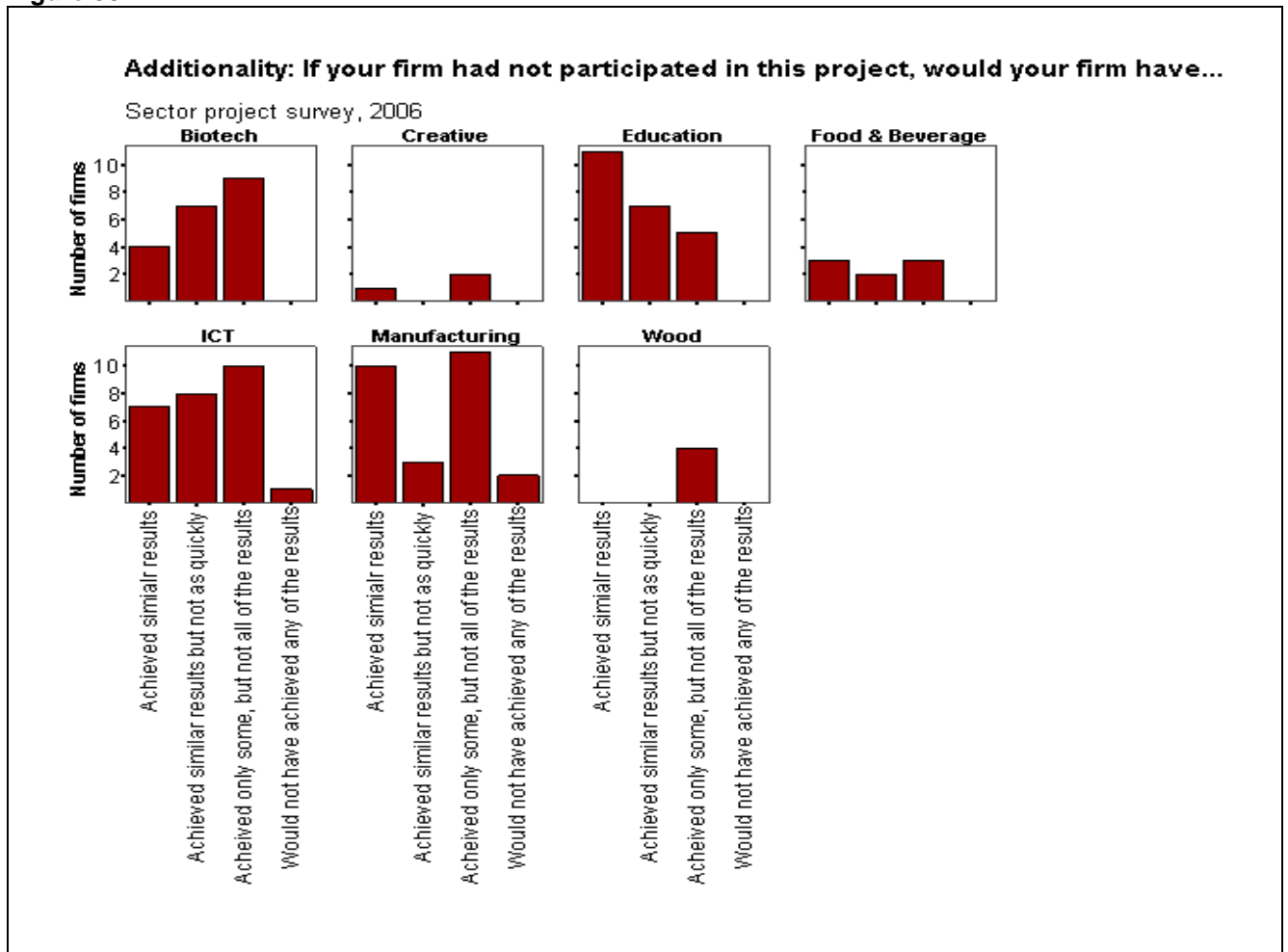
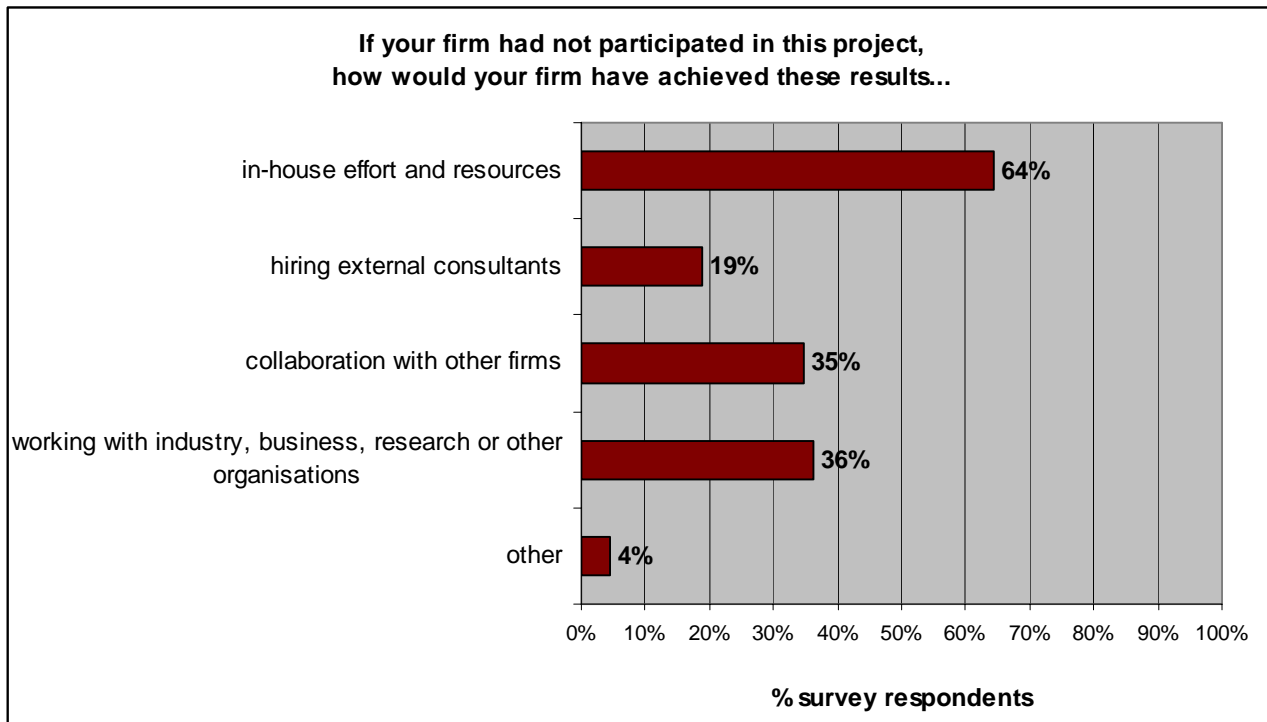


Figure 51 shows that if they had not participated in the NZTE-led Sector Project, the majority of the firms thought they would have achieved similar results by using in-house effort and resources.

Figure 51



7. Conclusions

Programme implementation

1. NZTE has had a lot of discretion in the implementation of the Sector Projects programme. The underpinning policy has not provided a sufficiently clear framework to guide programme implementation in terms of direction and objectives. NZTE's execution of this programme has evolved since its inception in July 2003 in response to its organisational learning, changes in the policy environment and economic conditions.
2. The evolution in NZTE's implementation of the programme has resulted in rather different approaches across NZTE sector teams in terms of the nature and extent of partnership with industry on specific projects, the extent to which the projects address systemic issues for the sector or sub-sectors, and extent to which projects are aimed at demonstrating the value of new business models, or increasing the uptake of enabling technologies.
3. NZTE has used the 'Coordination and facilitation of sector strategies' and 'Sector-focused International Market Development' components of Sector Project funding to implement two core categories of sector projects with different hurdles to reach to receive funding approval and different objectives: a) sector implementation projects; and b) sector-based foundation activities. The 'International Sector Specialists' component of this programme was intended to be used by NZTE to pay for the input of external experts into the development of sector projects.
4. In late 2005, as preparation for this evaluation, NZTE and the Ministry of Economic Development (MED) started to articulate the intervention logic for this programme along with the specific intended outcomes. This is outlined in the Programme Logic Model in Section 1.2 of this report. The findings from this evaluation identified opportunities to refine this Programme Logic Model to provide better direction and guidance for programme implementation (described further in the Recommendations section).
5. The findings of this evaluation on the number and types of projects initiated by NZTE and the impacts on the participating firms can be used by NZTE to review and further improve the effectiveness of its operational strategies and approaches in each sector.

Outputs: Quantity and quality of projects

Quantity of projects

6. The total number of sector projects developed by NZTE in the three year period between July 2003 and June 2006 is 297 (112 of those projects were in the 2005/06 year). The average direct budget allocation for a project is in the \$20,000 to \$49,000 range. Over that period, the largest number of projects is in the Specialised Manufacturing and Creative sectors, followed by the ICT sector. There is a risk that the high number of projects approved in a year may dilute strategic direction. There is also a risk that some projects may be too limited in scope and budget to have a significant impact on the targeted outcomes. However, NZTE's latest output plan contains fewer and larger projects for 2006/07, which is an indication of more strategic focus. NZTE is continuing to improve its process for approving projects.

This evaluation identified opportunities to clarify and tighten the criteria for project approval (listed in Recommendations section).

GIF vs. non-GIF sectors

7. Due to lack of policy clarity and definition, there is divergence between MED and NZTE in the interpretation of the priority of the GIF (Growth and Innovation Framework) sectors (i.e. ICT, Biotech, Creative and Services) over non-GIF sectors (i.e. Specialised Manufacturing, Food & Beverage, International Education, Tourism, and Wood Processing) in terms of development and/or application of enabling technologies to raise productivity across a range of sectors. This is reflected in NZTE's resource allocation for projects across the sectors. The Food & Beverage sector followed by ICT and Manufacturing received the highest sector project budget allocation in 2005/06. Thus apart from the ICT sector, the other two sectors which received the highest budget allocation are not the GIF sectors, which the original policy expected to be given priority due to the importance of enabling technologies and cross-sector spillover impacts.
8. This divergence in interpretation of the policy objective raises a question of the balance between the GIF sectors driving the supply of enabling technologies and the user sectors promoting possible applications of these technologies. This needs to be resolved through further policy development by MED, in conjunction with NZTE, on sector facilitation. NZTE has begun a process to improve decisions about allocating resources between sectors. It is developing a "*Sector Resource Allocation Framework*" to identify and weigh criteria to be used to determine sector resource allocation, for example sector size, market size (global), the existence of growth drivers (labour and capital) in a sector and the existence of visible lead firms in a sector.
9. Traditionally most projects have been positioned within one of the eight NZTE sectors rather than cross-sector. However in 2006/07, NZTE is intent on cross-sector projects playing an increasing role in sector engagement strategies by establishing a contestable fund of \$0.500m for such projects.

Foundation (Scoping and research) vs. implementation projects

10. Up to 2005/06, many of the sector projects undertaken appear to be scoping and research-based. This is understandable for less 'mature' sectors where NZTE's involvement is recent, such as International Education and for more 'mature' sectors where major changes in strategy are contemplated, such as Specialised Manufacturing. MED acknowledge the need for NZTE to continue with scoping and research-based projects but expect that the focus going forward should be on implementation projects that carry out strategic activity for which there is clear industry participation. There are signs of this shift occurring in 2005/06 and 2006/07 with more strategic and focused sector engagement strategies and sector projects, aimed at implementing solutions to assist the sector in addressing systemic issues.

Partnership with industry

11. The development of a genuine partnership approach between NZTE and groups of firms and/or industry bodies should be an explicit part of the sector project model. Survey results from this evaluation indicate that firms which had greater involvement in setting the direction and scope of NZTE-led sector projects were more likely to

expect that benefits from the project would outweigh the cost of their participation. These firms were also more likely to attribute improvements in their innovation capability to NZTE-led sector projects. Interviews with representatives of industry bodies suggested that there was in all sectors a reasonable degree of agreement with the NZTE sector teams on the sector engagement strategies which identify the high-level critical issues relating to barriers and opportunities. However, case studies and firm surveys conducted in this evaluation indicated varying levels of industry contribution or buy-in to the specific sector projects.

Participant firm satisfaction with NZTE project leadership

12. The evaluation survey examined firm's satisfaction with NZTE's ability in leading the sector projects. The majority of firms in all sectors indicated a high level of satisfaction with NZTE's ability to facilitate the sector projects. Satisfaction was highest among firms in Food & Beverage (88%) and ICT (85%) projects, and the one Wood project covered by the survey (100%).
13. In terms of NZTE's ability to understand key issues facing the firms' sector, the majority of firms in all sectors, with the exception of firms involved in the one Creative project covered by the survey, indicated high levels of satisfaction. Satisfaction was highest among firms involved in ICT (81%) and Biotech (78%) projects, and the one Wood project covered by the survey (100%). In contrast, none of the firms involved in the one Creative project covered by the survey indicated high levels of satisfaction with this aspect of NZTE's project leadership.

Outcomes

Targeting of outcomes

14. Discussions between MED and NZTE during late 2005 identified the following key intended outcomes for the Sector Projects programme:
 - c. *intermediate outcomes*: improve firms' overseas market knowledge and development, business practices, innovation capability, increase collaboration between firms, and increase firms' ability to access finance; and
 - d. *ultimate outcomes*: increase the rate of sustainable economic growth particularly through improvements in productivity, profitability, export and turnover growth.
15. This evaluation could not obtain sufficient information on all the sector projects to assess the extent to which the projects are targeted at all the intended policy outcomes (identified in the Programme Logic Model). However the programme appears to be highly focussed on developing international markets. The majority (83%) of the surveyed firms that participate in these NZTE sector projects are current exporters.
16. NZTE categorised 57% of its 297 sector projects as focusing on developing international connections, with only a third focused on building business capability and 11% focusing on creating the environment for growth. Looking ahead, the draft NZTE Statement of Intent 2006/07-2008/09 indicated plans for 17 out of the 20 major sector projects during that period to focus on increasing the international connections of New Zealand businesses (e.g. improving the understanding of offshore markets

and players) and the remaining three projects to focus on building onshore business capability (e.g. facilitate access to and use of the best practice ideas and technologies).

Achievement of outcomes

17. The survey of firm participants examined the extent to which firms involved in the various sector projects experienced improvements in the intended outcomes and the extent to which they attributed the improvements to NZTE-led sector projects.
18. In total 138 firms responded to the survey, yielding a good response rate of 51%. The survey responses consisted of firms which participated in 34 sector projects, which is 78% of the projects that could be assessed in terms of impact on firms, i.e. the projects were at the implementation or completion phase and had individual firm participants. However, responses were received on only one Creative and one Wood project. Thus survey results for these two sectors should be treated as indicative.
19. Survey responses from firms suggested that on the whole, sector projects have the greatest impact on firms' ability to understand and develop overseas market opportunities, business practices, and collaborative activities. Over a third of the surveyed firms indicated they experienced these improvements and attributed the improvements at least partly to the NZTE-led sector projects they were involved in. Sector projects appear to have less impact on innovation capability (only 27% of firms reported improvements attributable to sector projects) and least impact on ability to raise additional finance (only 7% of firms indicated they applied for additional finance and were successful).
20. Projects in different sectors appeared to differ widely in extent of reported impact on intended programme outcomes. Projects in the Manufacturing sector are assessed by firm participants as having the greatest impact and projects in the International Education sector appear to be having the least impact on these outcomes. It needs to be noted that the International Education sector results reflect projects undertaken under its current sector engagement strategy. NZTE is seeking to change its current focus from attracting undergraduate students to attracting more businesses to provide professional training for their employees at New Zealand universities and polytechnics. However, further discussions with key stakeholders such as Education New Zealand and the Ministry of Education is required for NZTE to receive the necessary support for this change in strategy.
21. In terms of impacts on specific policy outcomes, the survey results indicated the following:
 - improvements in overseas market development capability appear to be most impacted by Food & Beverage sector projects and least impacted by International Education sector projects.
 - increases in collaborative activities are most impacted by Manufacturing, Biotech, ICT, and Wood projects.
 - improvements in business practices are most impacted by Wood, ICT and Manufacturing sector projects.

- improvements in innovation capability are most impacted by projects in the Wood and Manufacturing sector and least impacted by Food & Beverage projects.
- improvements in ability to raise additional finance are most impacted by ICT projects and the one Creative and one Wood project covered by the survey.
- increases in overseas sales (including expected future sales) are most impacted by projects in the Manufacturing sector and least impacted by projects in the International Education and Wood sectors.

Programme cost and efficiency

22. The total budget for Sector projects in 2005/06 of \$21.995m is broken down into two categories:

- \$8.872m (40%) is for direct allocation to sector projects (both foundation and implementation projects) and consists of all onshore and offshore direct costs related to the project including travel, external work, etc.
- \$13.123m (60%) is for onshore operational expenditure. This includes the cost of time spent by NZTE staff (e.g. Sector Directors, Sector Managers) on sector projects and sector engagement activities.

An additional \$13.079m has been estimated for offshore Operational Expenditure on sector projects.

23. This evaluation was not able to assess the efficiency of the Sector Projects programme because the NZTE data on staff costs could not be broken down into time spent on sector projects, more general sector engagement, or other activities. NZTE has acknowledged this problem as a major issue and has made a commitment to address it by completing a baseline costing project to improve tracking of costs associated with sector engagement and projects, particularly with regard to time of onshore and offshore staff.

Cost-benefit to firms

24. In all sectors, except International Education and Creative, the majority of firms indicated that the benefits they expect from participating in the NZTE-led sector project is greater than the costs of involvement. Expectations of the net benefit of sector project participation (i.e. benefits exceeding cost) appeared highest among firms which participated in Manufacturing and Biotech projects and lowest among firms in Wood, Creative, and International Education projects.

Additionality

25. Projects in the Wood and Biotech sectors seem to have the highest additionality. None of the firms in Wood projects and only 17% of firms in Biotech projects indicated they would have achieved similar results if their firm had not participated in the Sector Projects. In contrast, projects in International Education and Creative sectors seem to have the lowest additionality with 37% of firms in International Education projects and 33% of firms in Creative projects indicating they would have achieved similar results anyway.

Linkage with other NZTE programmes

26. NZTE's sector project activities appear to be highly connected with its other programmes particularly the Growth Services client management and grants. High growth potential firms that are receiving intensive client management from NZTE sector teams are typically the first to be invited to participate in the sector projects.
27. The Sector Projects programme is designed to be used by NZTE to proactively address more systemic and strategic sector-wide issues. NZTE emphasised that its client management services for individual firms complement the work of Sector Managers in leading sector projects by helping identify the needs and opportunities facing firms in that sector.
28. It is important that NZTE continues to ensure that resources within the Sector Projects programme are not diverted away from more strategic sector-wide issues, and that the programme complements, rather than duplicates its grants and other programmes designed to address the specific needs of individual firms. Sector projects could be used to disseminate best practices or spillover impacts from single successful GSF projects across the sector or to other sectors.

Summary of outputs and outcomes in each sector

Biotech Sector Projects

29. Number of projects: Biotech projects make up 10% of NZTE's 297 sector projects between 2003/04 and 2005/06. In 2005/06 they make up 12.5% of the Sector Project budget allocation.
30. Partnership with industry: NZTE data suggests that firms and/or sector organisations are involved in 83% of these projects, but this evaluation could not examine the nature of the involvement. Surveys of participant firms indicated that about half (57%) of the firms had some involvement in setting the project direction and scope.
31. Firm satisfaction: About half of the firms had a high level of satisfaction with the ability of NZTE in understanding key issues facing the sector (58%), identifying appropriate firms for project participation (46%), and facilitating the project (50%).
32. Intermediate outcomes: Surveys of firms participating in Biotech projects indicated that:
 - 25% of these firms improved in overseas market development capability and attributed the improvements mainly or totally to the NZTE-led sector project.
 - 15% of these firms improved in business practices and attributed the improvements mainly to the NZTE-led sector project.
 - 21% of these firms improved in innovation capability and attributed the improvements mainly to the NZTE-led sector project.
 - 25% of these firms increased in collaborative activities with other firms or organisations and attributed the increase mainly or totally to the NZTE-led sector project.

- Only 12.5% of these firms reported significant improvements in understanding of business financing options and practices since involvement in the sector projects. None of these firms successfully raised additional debt financing and only one firm (i.e. 4.2%) raised additional equity financing.

33. Ultimate outcomes: Surveys of firms participating in Biotech projects indicated that 17% of these firms reported increases or expected increases in overseas sales and attribute this mainly to the NZTE-led sector project.

ICT Sector Projects

34. Number of projects: ICT projects make up 19% of NZTE's 297 sector projects between 2003/04 and 2005/06 and are predominantly at the scoping or engagement phase. In 2005/06 they make up 14% of the Sector Project budget allocation.

35. Partnership with industry: NZTE data suggests that firms and/or sector organisations are involved in 58% of these projects, but this evaluation could not examine the nature of the involvement. Surveys of participant firms indicated that just under half (45%) of the firms had some involvement in setting the project direction and scope.

36. Firm satisfaction: Majority of the firms had a high level of satisfaction with the ability of NZTE in understanding key issues facing the sector (67%), identifying appropriate firms for project participation (52%), and facilitating the project (70%).

37. Intermediate outcomes: Surveys of firms participating in ICT projects indicated that:

- 23% of these firms improved in overseas market development capability and attributed the improvements mainly or totally to the NZTE-led sector project.
- 22% of these firms improved in business practices and attributed the improvements mainly to the NZTE-led sector project.
- 7% of these firms improved in innovation capability and attributed the improvements mainly to the NZTE-led sector project.
- 26% of these firms increased in collaborative activities with other firms or organisations and attributed the increase mainly or totally to the NZTE-led sector project.
- 21% of these firms reported significant improvements in understanding of business financing options and practices since involvement in the sector projects. None of these firms successfully raised additional debt financing and 15% raised additional equity financing.

38. Ultimate outcomes: Surveys of firms participating in ICT projects indicated that 21% of these firms reported increases or expected increases in overseas sales and attribute this mainly to the NZTE-led sector project.

Manufacturing Sector Projects

39. Number of projects: Manufacturing projects make up 20% of NZTE's 297 sector projects between 2003/04 and 2005/06. In 2005/06 they make up 14% of the Sector Project budget allocation.

40. Partnership with industry: NZTE data suggests that firms and/or sector organisations are involved in 48% of these projects, but this evaluation could not examine the nature of the involvement. Surveys of participant firms indicated that about half (52%) of the firms had some involvement in setting the project direction and scope.
41. Firm satisfaction: 44% of the firms had a high level of satisfaction with the ability of NZTE in understanding key issues facing the sector and facilitating the project. However just over a quarter (27%) of firms, indicated a high level of satisfaction with the ability of NZTE to identify appropriate firms for project participation.
42. Intermediate outcomes: Surveys of firms participating in Manufacturing projects indicated that:
 - 27 % of these firms improved in overseas market development capability and attributed the improvements mainly or totally to the NZTE-led sector project.
 - 24% of these firms improved in business practices and attributed the improvements mainly to the NZTE-led sector project.
 - 32% of these firms improved in innovation capability and attributed the improvements mainly to the NZTE-led sector project.
 - 27% of these firms increased in collaborative activities with other firms or organisations and attributed the increase mainly or totally to the NZTE-led sector project.
 - 9% of these firms reported significant improvements in understanding of business financing options and practices since involvement in the sector projects. Only 3% of these firms successfully raised additional debt financing and 6% raised additional equity financing.
43. Ultimate outcomes: Surveys of firms participating in Manufacturing projects indicated that 26% of these firms reported increases or expected increases in overseas sales and attribute this mainly to the NZTE-led sector project.

Food & Beverage Sector Projects

44. Number of projects: Food & Beverage projects make up 15% of NZTE's 297 sector projects between 2003/04 and 2005/06. In 2005/06 they make up 15% of the Sector Project budget allocation.
45. Partnership with industry: NZTE data suggests that Food & Beverage projects have lower participation by firms and/or sector organisations compared to other sectors (only 29% of these projects seem to have these participants), but this evaluation could not examine the nature of the involvement. Surveys of participant firms indicated that about 70% of the firms had some involvement in setting the project direction and scope
46. Firm satisfaction: Majority of the firms had a high level of satisfaction with the ability of NZTE in understanding key issues facing the sector (60%), identifying appropriate firms for project participation (70%), and facilitating the project (70%).

47. Intermediate outcomes: Surveys of firms participating in Food & Beverage projects indicated that:
- 51 % of these firms improved in overseas market development capability and attributed the improvements mainly or totally to the NZTE-led sector project.
 - 13% of these firms improved in business practices and attributed the improvements mainly to the NZTE-led sector project.
 - None of these firms improved in innovation capability and attributed the improvements mainly to the NZTE-led sector project.
 - 13% of these firms increased in collaborative activities with other firms or organisations and attributed the increase mainly or totally to the NZTE-led sector project.
 - None of these firms reported significant improvements in understanding of business financing options and practices since involvement in the sector projects but 25% successfully raised additional debt financing.
48. Ultimate outcomes: Surveys of firms participating in Food & Beverage projects indicated that 20% of these firms reported increases or expected increases in overseas sales and attribute this mainly to the NZTE-led sector project.

International Education Sector Projects

49. Number of projects: International Education projects make up 11% of NZTE's 297 sector projects between 2003/04 and 2005/06. In 2005/06 they make up 8% of the Sector Project budget allocation.
50. Partnership with industry: NZTE data indicated that 70% of International Education projects had participation by institutions and/or sector organisations, but this evaluation could not examine the nature of the involvement. Surveys of participant institutions indicated that compared to other sectors, participants in International Education projects had lower levels of involvement in setting the project direction and scope (67% of the participants had no involvement).
51. Institution satisfaction: About half of the participants had a high level of satisfaction with the ability of NZTE in understanding key issues facing the sector (43%), identifying appropriate firms for project participation (50%), and facilitating the project (53%).
52. Intermediate outcomes: Surveys of institutions participating in International Education projects indicated that:
- 11 % improved in overseas market development capability and attributed the improvements mainly or totally to the NZTE-led sector project.
 - 4% improved in business practices and attributed the improvements mainly to the NZTE-led sector project.
 - 5% improved in innovation capability and attributed the improvements mainly to the NZTE-led sector project.

- 10% increased in collaborative activities with other firms or organisations and attributed the increase mainly or totally to the NZTE-led sector project.
- None reported significant improvements in understanding of business financing options and practices since involvement in the sector projects and none successfully raised additional debt or equity financing.

53. Ultimate outcomes: The participant surveys also indicated that only 8% of these institutions reported increases or expected increases in overseas sales and attribute this mainly to the NZTE-led sector project.

Creative & Services Sector Projects

54. Number of projects: Creative and Services projects make up 20% of NZTE's 297 sector projects between 2003/04 and 2005/06 are predominantly at the scoping or engagement phase. In 2005/06 they make up 10% of the Sector Project budget allocation.

55. Partnership with industry: NZTE data suggests that firms and/or sector organisations are involved in 40% of these projects, but this evaluation could not examine the nature of the involvement. Two of the three survey respondents indicated they had some involvement in setting the project direction and scope⁷.

56. Firm satisfaction: Of the three survey respondents, two indicated a high level of satisfaction with the ability of NZTE in understanding key issues facing the sector and 1 had high satisfaction with NZTE's ability in identifying appropriate firms for project participation. However none of the firms indicated high satisfaction with NZTE's ability to facilitate the project.

57. Intermediate outcomes: Survey responses from the 3 firms suggest that the performance of this one Creative project covered by the survey is low compared to projects in other sectors:

- 1 improved in overseas market development capability and attributed the improvements mainly or totally to the NZTE-led sector project.
- None of these firms improved in business practices, innovation capability or collaborative activities and attributed the improvements mainly to the NZTE-led sector project.
- 1 reported significant improvements in understanding of business financing options and practices since involvement in the sector projects and succeeded in raising additional debt and equity financing.

58. Ultimate outcomes: None of the surveyed firms but one of the firms interviewed for the case study participating in the same Creative project reported increases or

⁷ As mentioned above, the evaluation survey only received responses from 3 firms participating in 1 Creative project. Thus the survey results based on these three firms should be treated as indicative rather than conclusive.

expected increases in overseas sales and attribute this mainly to the NZTE-led sector project.

Wood Processing Sector Projects

59. Number of projects: Wood Processing projects make up only 3% of NZTE's 297 sector projects between 2003/04 and 2005/06 are predominantly at the scoping or engagement phase. In 2005/06 they make up 9% of the Sector Project budget allocation.
60. Partnership with industry: NZTE data suggests that firms and/or sector organisations are involved in 40% of these projects, but this evaluation could not examine the nature of the involvement. The survey indicated that all 4 firms had some involvement in setting the project direction and scope⁸.
61. Firm satisfaction: All 4 firms had a high level of satisfaction with the ability of NZTE in understanding key issues facing the sector, identifying appropriate firms for project participation, and facilitate the project.
62. Intermediate outcomes: The following survey results from the 4 firms concerning the one Wood Processing project suggests that the performance of this project is high compared to projects in other sectors:
 - 25% of the firms improved in overseas market development capability and attributed the improvements mainly or totally to the NZTE-led sector project.
 - 25% of these firms improved in business practices and attributed the improvements mainly or totally to the NZTE-led sector project.
 - 50% of these firms improved in innovation capability and attributed the improvements mainly or totally to the NZTE-led sector project.
 - 25% of these firms increased in collaborative activities and attributed the improvements mainly to the NZTE-led sector project.
 - None of the firms reported significant improvements in understanding of business financing options and practices since involvement in the sector projects but one succeeded in raising additional debt financing.
63. Ultimate outcomes: None of the surveyed firms reported increases or expected increases in overseas sales and attribute this mainly to the NZTE-led sector project.

Tourism Sector Projects

64. Number of projects: Tourism projects make up only 2% of NZTE's 297 sector projects between 2003/04 and 2005/06. In 2005/06 they make up 2% of the Sector Project budget allocation.

⁸ As mentioned above, the evaluation survey only received responses from 4 firms participating in 1 Wood project. Thus the survey results based on these four firms should be treated as indicative rather than conclusive.

65. NZTE data suggests that Tourism projects have higher participation by firms and/or sector organisations compared to other sectors (86% of these projects seem to have these participants), but this evaluation could not examine the nature of the involvement.
66. There are only 7 total projects in NZTE's Tourism sector and NZTE data indicated they were all at the scoping phase as this sector has only recently been added to NZTE's Sector Facilitation Activities. Therefore it was too early to survey the participants of these projects.
67. However, the one Tourism project that was examined in the case study appeared to be targeted at the intended outcomes of the programme, i.e. it had significant involvement by the industry body and other private sector stakeholders and targeted spillovers beyond the direct participants.

8. Recommendations

Lessons from the way the Sector Projects programme has been implemented require improvements in the current articulation of sector facilitation policy and in NZTE's approach and operations. Specifically this evaluation recommends the following:

1. MED should play a more active leadership role in the interpretation and implementation of sector policy, and in particular:
 - clearly articulate the specific policy direction and objectives of the sector projects programme. A proposed revised Programme Logic Model is presented at the end of this report; and
 - act as a conduit across government agencies and NZTE to ensure that sector policies are well-aligned and impacting firms and sectors in a consistent manner.
2. There should be a more explicit role within government for NZTE expertise on sector-specific business strategies and constraints to firm performance which other agencies need to be aware of, and if necessary, act upon.
3. NZTE should continue to improve its process for approving sector projects, and report back to Ministers on changes made in light of this evaluation. Specifically this evaluation recommends that clearer criteria be introduced, including the following:
 - i. explicit linkage to agreed sector engagement strategies;
 - ii. restriction to activities leading to:
 - a. the development, or more likely, the application of enabling technology with significant potential to improve productivity, or
 - b. a step change in the form of engagement of the sector with the international marketplace or in its ability to compete on value through greater innovation, or
 - c. the creation of overseas infrastructure to overcome a coordination failure;
 - iii. demonstrated industry buy-in through private sector contributions (financial and/or in-kind) where significant private benefits are expected to accrue to stakeholders;
 - iv. complementarity with support offered through other NZTE programmes without duplication;
 - v. detailed specification of project objectives and impacts on firms with the collection of information to judge whether these have been achieved;
 - vi. clear exit strategy for NZTE; and
 - vii. consideration of the greater use of external advisory Boards with relevant expertise and experience.

4. NZTE, working with MED, should develop clear measures and targets to improve the performance of the Sector Projects programme. These should be consistent with the revised Programme Logic Model agreed following this review.
5. NZTE should continue to improve the recording of sector project data to enable better monitoring of the programme's costs and performance, particularly:
 - project objectives - to enable tracking of the number of projects which target particular programme outcomes
 - project outcomes
 - operational expenditure items for each project e.g. FTE costs (specifying the proportion of time spent directly in support of sector projects) , discretionary, overheads, travel etc. - to identify areas for efficiency improvements.
 - project start and completion dates
 - financial contribution from other NZTE programmes/budgets and external sources (e.g. firms, industry organisations, other government agencies etc.)
6. Upon the completion of each project, there should be a process for assessing/evaluating the performance of each project against the achievement of stated outcomes and project budget.

Table 3

NZTE's Sector Projects Programme: Revised Logic Model				
Problems	Outputs	Immediate Outcomes	Intermediate Outcomes	Ultimate Outcomes
<ul style="list-style-type: none"> Fragmentation within sectors, inhibiting open, consistent dialogue within sectors and with government on systemic sector issues and opportunities Lack of coordinated and timely support across government for development of sectors and more effective allocation of resources Availability and quality of specific sector skills, quality of research and development, technology absorption, and commercial and management skills Sectors do not take sufficient advantage of international market opportunities 	<ul style="list-style-type: none"> NZTE sector engagement strategies developed in consultation with industry and (where appropriate) other government agencies Number and quality of sector projects developed and implemented by NZTE, in partnership with private sector stakeholders 	<ul style="list-style-type: none"> Strengthened collaborations within sectors and stronger direction for sector development Improved and timely understanding of issues and opportunities for specific sectors and across sectors by government and sectors Increased communication by NZTE of sector issues and opportunities to other relevant government departments. 	<ul style="list-style-type: none"> Step change improvements of sectors in: <ul style="list-style-type: none"> Business strategies and practices Process and product Innovation Access to finance Increased involvement of sectors in significant international market opportunities <p><i>as measured by:</i></p> <ul style="list-style-type: none"> Market knowledge Market connections Market presence Overseas sales Information provided to relevant parts of government on constraints to achieving the outcomes above, eg inappropriate government regulations and avoidable skill shortages 	<ul style="list-style-type: none"> Increased rate of sustainable economic growth for the sector and NZ as a whole, particularly through productivity improvements <p><i>as measured by:</i></p> <ul style="list-style-type: none"> Exports as % of turnover Growth in turnover Value added per FTE Profits as % of turnover