
From: no-reply@mbie.govt.nz
Sent: Sunday, 24 November 2019 8:10 a.m.
To: Research, Science and Innovation Strategy Secretariat
Subject: Late submission on draft RSI strategy
Attachments: Online-submission-form-uploadsdraft-research-science-and-innovation-strategy-submissionsDairyNZ-RSI-Submission.docx

Are you making your submission as an individual, or on behalf of an organisation?

Organisation

Name

Bruce Thorrold

Name of organisation or institutional affiliation

DairyNZ

Role within organisation

Strategy and Investment LEader

Email address (in case we would like to follow up with you further about your submission)

bruce.thorrold@dairynz.co.nz

Which of the below areas do you feel represents your perspective as a submitter? (Please select all that apply)

If you selected other, please specify here:

Gender

Ethnicity

Name of organisation on whose behalf you are submitting, if different to the organisation named above

In which sector does your organisation operate: (Please select all that apply)

Research , Industry, Non-profit, Interface of research and industry

If you selected other, please specify here:

How large is your organisation (in number of full-time-equivalent employees)?

300

Please indicate if you would like some or all of the information you provide in your submission kept in confidence, and if so which information.

No

Please upload your submission document here

DairyNZ-RSI-Submission.docx - [Download File](#)



Research, Science and Innovation Strategy

Submission form

The Government is developing a Research, Science and Innovation (RSI) Strategy to set out our vision for RSI in New Zealand and its role in delivering a productive, sustainable, and inclusive future.

We are keen to hear the views of New Zealanders on the draft Strategy so that we can get a better understanding of what our country needs from RSI. We also are looking for feedback on how we can take action to ensure New Zealand's RSI system is optimised for success. These views will inform the direction of Government investment in RSI and the research and innovation areas for us to focus on as a country, as well as help us understand the challenges we need to overcome.

We encourage anyone with an interest to make a written submission.

How to have a say

We have included a number of questions in the draft RSI Strategy document to highlight issues on which we would like further input. We encourage you to use these questions as a guide when submitting your feedback.

This document provides a template for you to provide your answers. Please upload the completed document using our [online submission page](#).

You do not have to fill out every section – we welcome submissions on some or all of the questions.

The closing date for submissions is 10 November 2019.

After the consultation period finishes, we will analyse the submissions received and incorporate the feedback in the final version of the strategy.

Confidentiality

Please note: All information you provide to MBIE in your submission could be subject to release under the Official Information Act. This includes personal details such as your name or email address, as well as your responses to the questions. MBIE generally releases the information it holds from consultation when requested, and will sometimes publish it by making it available on the MBIE website.

If you do not want some or all the information you provide as part of this consultation to be made public, please let us know when you upload your submission. This does not guarantee that we will not release this information as we may be required to by law. It does mean that we will contact you if we are considering releasing information that you have asked that we keep in confidence, and we will take your reasons for seeking confidentiality into account when making a decision on whether to release it.

If you do not specify that you would prefer that information you provide is kept in confidence, your submission will be made public. While we will do our best to let you know that we plan to publish your submission before we do so, we cannot guarantee that we will be able to do this.

Contribution of Research, Science and Innovation

This strategy is about New Zealand's Research, Science and Innovation (RSI) at a high-level. Its aim is to identify challenges and opportunities that will have the broadest impact on our research and innovation activities. For this reason, it mentions few specific areas or sectors of research and innovation. For this draft version of the Strategy, we are keen to hear from researchers, innovators, businesses, and providers of public services on what the RSI system could be doing to accelerate progress on Government's priorities.

- Question 1:** Where can the RSI system make the greatest contribution towards the transition to a clean, green, carbon-neutral New Zealand?
- Question 2:** Where else do you see it making a major contribution?
- Question 3:** What else could the RSI system be doing to accelerate the progress towards the Government's priorities*?

* see list of the Government's twelve priorities included in Part 1 of the draft Strategy.

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Dairy NZ thanks the Ministry for Business, Innovation and Employment for the opportunity to provide feedback on the consultation document 'New Zealand's Research, Science & Innovation Strategy -September 2019.

DairyNZ is the industry-good organisation that represents all New Zealand's dairy farmers. We aim to improve the competitiveness and profitability of the New Zealand dairy sector.

DairyNZ has a large stake in the future of Research, Science and Innovation. Farmers consistently rank investment in R&D at the top of their preferred use of the levy that they pay DairyNZ. On behalf of these 14,000 farmers we invest over \$14M annually in research much of this in partnership with government, farmer led research and demonstration organisations and other pastoral sector companies. DairyNZ holds key capability for New Zealand in dairy farms systems research with a staff of 18 post-grad qualified researchers and supporting technical and farm staff. DairyNZ owns strategically important research facilities in Hamilton (Lye and Scott Farms) and Southland (Southern Dairy Hub) that are actively engaged in research on methane, N cycling, animal care and farm productivity.

DairyNZ is also an end-user of science from CRI's such as AgResearch, NIWA, Plant&Food and Manaaki Whenua. Our development and extension teams use this knowledge to build farmer-tools and work with farmers on practice changes.

DairyNZ considers that meeting Government priorities for and the transition to a clean, green carbon neutral New Zealand is heavily reliant upon enabling research into and development of innovative solutions to current primary sector issues and their adoption by land managers and industry suppliers.

Q1 & 2: The New Zealand dairy sector has played and will continue to play a key role in the nation's productive, sustainable and inclusive future that works for all New Zealanders. Our strategy "Dairy tomorrow" (<https://www.dairynz.co.nz/about-us/dairy-industry-strategy/>) is well

aligned with Government's priorities, particularly in the following areas:

- **Sustainable land use** : we will protect and nurture the environment for future generations, including water quality, biodiversity, and reducing greenhouse gases emissions from cattle
- **Improved productivity**: we will build world's most competitive and resilient dairy farming businesses and produce highest quality and most valued dairy nutrition
- **Regional growth**: we will build great workplaces for New Zealand's most talented workforce, and help grow vibrant and prosperous communities (<https://www.dairynz.co.nz/about-us/dairy-industry-strategy/plans-for-regions/>).

Q3: The dairy sector is a large part of New Zealand's land use, regional economies and emissions profile. The scale of dairy farming (export volume, land use area) in relation to the rate at which land use change occurs means that there is no medium term (20-30 year), large scale land use change that will profitably replace dairy farming. As an example, kiwifruit is much more profitable per hectare but expanding at about 300ha per year while dairy farms occupy approximately 1.6Mha. The solution for New Zealand in this time frame must be built a sustainable, high value dairy sector as a crucial part of the governments productive, sustainable and inclusive economic strategy.

This must be the goal of R,S&I as part of the Primary Sector Council led development of Industry Transformation Plans in the Food & Fibre, and Agritech areas of focus.

Researching and innovating towards the frontier

Question 4: Do you agree that the RSI Strategy should be focused on innovation at the "frontier" (creating new knowledge) rather than behind the frontier (using existing knowledge to improve the ways we do things)?

Question 5: In which research and innovation areas does New Zealand have an ability to solve problems that nobody else in the world has solved? Why?

Question 6: In which areas does New Zealand have a unique opportunity to become a world leader? Why?

Question 7: What do you consider to be the unique opportunities or advantages available to the RSI system in New Zealand?

Question 8: What RSI challenges are unique to New Zealand, that New Zealand is the only country likely to address?

Question 9: What are the challenges of innovating in the public sector? How do they differ from those in the private sector?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Innovation is a continuous process from knowledge creation to application. The creation of "new knowledge" in and of itself does not guarantee innovation, it is the application of the knowledge to/or about a given problem that will ensure innovation occurs.

Focussing on one area of this continuum creates gaps between scientists, engineers/developers, and innovators. It is important that the RSI system enables the users at the end of the innovation pipeline to engage in the setting of the research questions at the component frontier. It is equally important that the discovery side of the pipeline informs innovators on what is possible.

Q4: DairyNZ agrees that one of the role of science is to push out the frontier, but we argue that it is important to define what the frontier is. At an extreme simplification we can think of two scales - components and systems. An example relevant to DairyNZ now is plantain. Pushing out the frontier of component science allows us to understand how specific chemicals in plantain affect soil microbes and plant performance. But there are equally important research questions at system level where we want to push out the frontier of systems performance – reducing N leaching at farm level and improving water quality at catchment level, with equity, while growing rural economies. To do this, we need research on soil and climate interactions, pasture ecology, genetics X environment (GXE) effects, cow metabolism including lactation and effect of new farm systems on milk composition, regional economics, and landscape -scale N management.

Pushing out the systems frontier is a science challenge, it is not simply ‘using existing knowledge to improve the way we do things’ on individual farm. It is about re-designing farming systems at landscape or catchment scale.

Q5, 6 and 8: Sustainable, competitive, ethical, high-value pastoral-based production systems are both a unique RSI challenge for New Zealand and a research and innovation area where we can solve problems and create opportunities for the world. There are many aspects to this, including the following points:

- Pasture-specific agricultural issues such as greenhouse gases emissions, endophytes and animal care.
- Integration of pastoral farming and other land uses.
- Using pastoral farming as the spring-board for adjacent technology innovation.
- Land use and landscape management that delivers multiple benefits in physical, economic and cultural measures.
- In an economy where pastoral farming is an important economic driver not a subsidy-driven social activity, how can land use evolve to achieve multiple goals.

Pastoral-based dairy farming is only important in New Zealand, Australia and Ireland. This type of farming is very different from the barn-based systems seen in the USA and Europe. New knowledge, novel systems and products developed and implemented successfully for these systems are not directly applicable to New Zealand outdoor farming.

Our pastoral farming base therefore gives us a potential market advantage, but only if we can continue to demonstrate that we are world leaders in this field. We cannot afford to fall behind innovative approaches developed to lessen to environmental impact of intensive indoor-farm systems.

Our key challenge – Connectivity

Question 10: Do you agree that a key challenge for the RSI system is enabling stronger connections? Why or why not?

Please type your submission below.

Q10: Dairy NZ agrees that strong connectivity is a critical factor to achieving Government's goals, and in setting RSI strategy. However, it is our view the current RSI Investment system generates a wide array of RSI activities (of different sizes and completion dates) with little ability to connect across the innovation pipeline e.g. from Investigator-led discovery research programmes to applied User-led investigations and product development.

We comment on two aspects to this.

Our first comment is that connectivity within the NZ research community is hindered by a fragmented investment structure. The investment diagram on Page 2 illustrates this with the array of funds (Endeavour, SSIF, NSCs, PBRF) each with its own investment governance and criteria. DairyNZ's experience as an end user of science is that there is poor connectivity between the projects funded under these different mechanisms and entities. The lack of connectivity in investment is illustrated in the Page 10 table where 12 separate entities are named as investment vehicles, and this does not include SSIF funding from CRIs. It is DairyNZ's view that a more connected investment approach, with a co-ordinated research plan would increase returns to the Government's goals – in this case a carbon neutral economy.

Our second comment is that the evolution of RSI strategy over the last 5 years has weakened the connectivity between science and end users in New Zealand. This is illustrated in the Page 2 diagram where the investment in the Mission-led part of the diagram are small (relative to Investigator or User led) and have shrunk over time with the removal of the MBIE Partnership Fund and the shrinking of PGP and SFF funds into the new Sustainable Futures. We understand that MBIE is directing CRI SSIF funding towards longer-term research and are concerned that this will further weaken the connectivity with the existing users. We also note the low level of Government Department investment in User Led Research. It is noted too, that innovation is often developed within and by the end user groups and is almost always associated with addressing a specific problem or opportunity that the user group faces.

We support the need for international connectivity and connecting with new users of science and innovators.

We propose that the Ministry reviews its RSI investment system with a focus on investing in a way that better connects RSI activities:

- across the innovation process,
- between R&D teams and end users.

This should include developing an RSI Investment Strategy that is embedded in the Industry Transformation Plans.

Guiding Policy – Excellence

Question 11: Do you agree with the definition of excellence presented here as the best thing possible in its context? Why or why not?

Question 12: How can we achieve diversity within our research workforce? What are the current barriers preventing a diverse range of talent from thriving in the RSI system?

Question 13: Do you agree that excellence must be seen in a global context, and draw from the best technology, people, and ideas internationally? Why or why not?

Question 14: Do you agree that excellence is strengthened by stronger connections?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Q11: Dairy NZ agrees that excellence is a key characteristics of a quality RSI system and that it should be taken in a global context.

We entirely support the broad definition of excellence laid out in the document. We would add the idea of 'fit for the purpose'. Novelty of approach and science 'stretch' are not a substitute for an approach that will answer the scientific question being posed. This definition of excellence leads to scientific defensibility which means that robust methodologies are used to generate results that can be trusted as evidence of cause and effect.

Excellence is supported by collaboration – but collaboration by itself isn't an indicator of excellence.

Guiding Policy – Impact

Question 15: How can we improve the way we measure the impact of research?

Please type your submission below.

Q15: Potential impact must be assessed ahead of the fact when considered in allocating funding. Demonstration of a credible hypothesis and pathway to impact are important. Putting an estimate on the value is more challenging. We recommend that MBIE develops a standard method and set of assumptions and data that constrain applicants to articulate a credible path, allow better comparisons during the assessment process and monitor progress toward the intended end point or outcome(s).

Assessing impact after the event is best done in our view by following the evidence. What science has contributed to the change observed, what has the change been worth and how much of this can be associated with the research?

Guiding Policy – Connections

Question 16: Where do you think weak connections currently exist, and what are the barriers to connections at present?

Question 17: What actions will stimulate more connectivity between parts of the RSI system?

Question 18: How could we improve connections between people within the RSI system and people outside it, including users of innovation, and international experts, business communities, and markets?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Q16, 17 and 18

As mentioned above there appears to be little connectivity between funded research and application by end users. This leaves a potential for “siloes research” where excellent research has been undertaken, but is it not able to be taken through the adoption, and add value process of innovation.

Actions – Making New Zealand a Magnet for Talent

Question 19: How can we better nurture and grow emerging researchers within New Zealand and offer stable career pathways to retain young talent in New Zealand?

Question 20: How could we attract people with unique skills and experience from overseas to New Zealand?

Question 21: What changes could be made to support career stability for researchers in New Zealand? What would be the advantages and disadvantages of these approaches?

Question 22: Do you agree with the initiatives proposed in the Strategy to support and attract talented researchers and innovators? Are any changes needed for these initiatives to be successful? Are there any other initiatives needed to achieve these objectives?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Q22: Dairy NZ supports the RSI strategy focus on developing, attracting and retaining emerging researchers and people with unique skills and experience.

Such focus is also identified in the dairy industry strategy and addressed by building 'great workplaces for New Zealand's most talented workforce'. We are keen to work with the Ministry to facilitate opportunities for talented scientists to develop their career as researchers, and innovators in the pastoral sector.

Key factors to achieve this goal are funding certainty, rewarding work, competitive rewards, opportunities to learn, and ability to make an impact.

Right now it is our view that science is not an attractive career for talented people, and that this can be best addressed by increasing career and reward certainty for scientists. This means building continuity of funding into the science system, paying salaries that are competitive with the business and other opportunities available to these smart people and recruiting them early and training with funding from the science system rather than through the student loan system.

Actions – Connecting Research and Innovation

Question 23: What elements will initiatives to strengthen connections between participants in the RSI system need to be successful?

Question 24: What elements will initiatives to strengthen connections between participants in the RSI system and users of innovation need to be successful?

Question 25: What elements will initiatives to strengthen connections between participants in the RSI system and international experts, business communities, and markets need to be successful?

Question 26: Are there any themes, in addition to those proposed in the Strategy (research commercialisation and international connections), that we need to take into consideration?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Dairy NZ considers that current RSI investment structure has created disconnected and finite pockets of RSI activities that offer limited security beyond the completion date of the funded programme.

We propose that the RSI investment is structured along the innovation pipeline within priority areas. Funding would be allocated through long-term R&D plans developed and delivered through partnerships of researchers, engineers, developers, and end users. These R&D plans would include gating stages where changes can be made. Such structure would give RSI participants an opportunity to be involved in all aspects of R&D, learn from different experts, and contribute to the end products or services.

Q23: We suggest that joint appointment is an effective way to strengthen connections

between participants and increase job security. There are many cases of joint appointments between CRIs and universities, CRIs and industries, universities and councils.

Joint appointment across countries is less common, and yet this is where a real difference can be made. There are issues of language, recognition of qualifications, travel expenses, visas, family, local support from embassies or consulates. The Ministry can facilitate co-appointments by signing high-level agreements with selected partners overseas and assisting with the process especially around immigration and financial incentives.

Actions – Start-up

Question 27: How can we better support the growth of start-ups?

Question 28: Do the initiatives proposed in the draft Strategy to support growth of start-ups need to be changed? Are there any other initiatives needed to support start-ups?

Question 29: What additional barriers, including regulatory barriers, exist that prevent start-ups and other businesses from conducting research and innovation?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Q27: Start-ups face high costs accessing expertise or facilities/assets held by CRIs or research organisations such as DairyNZ. A mechanism to allow low/marginal cost access to this expertise could be built into SSIF contracts or as part of government grants.

Actions – Innovating for the public good

Question 30: How can we better support innovation for the public good?

Question 31: What public-good opportunities should our initiatives in this area be focused on?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Q31: Dairy NZ supports Government's focus on innovation within New Zealand's public services as they are users of RSI, public-good activities and invest in operational research.

Governmental agencies have a major role in ensuring that the regulatory framework in which industries and businesses (existing and new) operate, enables innovation while still protecting New Zealand's people, culture, environment and economy. However, the investment by government itself in User Led research (illustrated on Page 2) is small, and we understand has shrunk over time.

In particular we believe that as RSI can make a significant impact on the following governmental functions, they should be focused on:

- **Development and implementation of evidence-based policies** (e.g. National Policy Statements, National Environmental Standards, Regional Policy Statements and Plans). In theory, science should inform policy development. In reality, policies are developed using limited scientific information and data. In some cases, science is carried out at a later stage to defend policy. RSI is needed to assist with dealing with uncertainty.
- **Development and implementation of novel non-regulatory instruments** that effect large-scale changes. Examples are market or community based approaches to allocating and managing natural resources (such as water, nitrogen and carbon), incentives, and Accords. RSI is needed to design workable schemes including models.
- **Stakeholders' engagement.** Over the last 10 years, governmental agencies, Treaty partners (iwi), industries, and NGOs have worked together on several national (eg Land and Water Forum) and regional initiatives (eg Co-management of the Waikato and Waipa Rivers, N management in Lake Taupo) and built up a capability to use scientific information as basis for collective decision making. New Zealand is leading the world in this area. RSI is needed to understand the key factors of successful engagement processes.

Actions – Scale up

Question 32: What is the best way to build scale in focused areas?

Question 33: Do the initiatives proposed in the Strategy to build scale in focused areas need to be changed? Are there any other initiatives needed to build scale?

Note: see following page to comment on possible areas of focus

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Q32: Dairy NZ fully supports the Ministry's intention to build scale in focused areas. This would enable the formation of larger teams that include individuals representing the whole spectrum of the innovation pipeline. We support the inclusion of Connectivity as part of the rationale for Scale-Up.

DairyNZ believes that pastoral farming must be a focus area for government and sector partnerships. The on-going future importance and impact of pastoral farming in New Zealand, and the unique challenges and opportunities we face being pasture based support this view, as does our history of achievement working together.

An example of a successful mission-led partnership targeting rapid innovation on farm and wider sector is Pastoral 21 Next Generation Dairy Systems <https://www.dairynz.co.nz/about-us/research/pastoral-21/>. This was a collaborative* five-year farm programme that aimed to push out the frontier of system performance and deliver implementable solutions. P21 delivered new N management and winter crop management system in time for implementation.

*DairyNZ, Fonterra, Dairy Companies Association of New Zealand, Beef & Lamb New Zealand, the Ministry of Business, Innovation and Employment, PGG Wrightson, Blue Pacific Minerals, and managed by AgResearch.

Recognising the needs and historical successes, the sector's Dairy Tomorrow strategy includes the goal to

'...join with government and industry investors to develop and implement a co-funded, sector led 'National Science Challenge' for dairying to deliver the next generation of tested, cutting-edge science and technology solutions for future farm systems.'

Dairy Tomorrow uses the NSC as an example, but we now believe that a SSIF platform is probably a better model. This reflects the points made earlier about SSIF supporting start-up access to the critical research facilities that DairyNZ and the dairy sector hold through the regions. And the need to maintain these research facilities for critical projects such as testing methane reduction technologies and adapting to climate change in different regions.

Dairy NZ is keen to discuss this further with the Ministry as this is where we can make a significant contribution to achieving Government Priorities and RSI strategy.

Government-research-industry partnership

We support that the RSI strategy includes the formation of larger-scale government-research-industry partnerships or dedicated institutions in the focus area.

The dairy industry is an investor, user and supplier of RSI activities. In 2019/20, over \$14M of dairy levy was allocated to research at DairyNZ, CRIs, universities and farmer-led research groups.

Dairy NZ and the wider dairy sector represents a significant RSI platform composed of:

- Pool of knowledge and expertise in dairy farm systems that cannot be found elsewhere (e.g. AgResearch)
- An extension team located across New Zealand and facilitate adoption
- Eight research farms located throughout New Zealand (Northland, Waikato, Taranaki, Southland), not including university and CRI facilities.
- World-class animal research facilities that are unique in NZ.
- Datasets (DairyBase and Dairy Industry Good Animal Database, DIGAD).

Scale up – Choosing our areas of focus

For this draft iteration of the strategy, we seek input on the selection of possible areas of focus. We will consider establishing around five focus areas, but, depending on the eventual selection, are likely to introduce them over time, rather than immediately. In addition to the criteria set out in the Strategy document, we invite stakeholders to consider the following factors in their suggestions –

- The ambition of this strategy to focus efforts in the RSI portfolio at the global frontier of knowledge and innovation.
- Ways in which the RSI system can accelerate progress on the government's goals.
- The focus areas already determined by *From the Knowledge Wave to the Digital Age*.
- Work already underway where we are already seeking to build depth and scale in the RSI system.

The following areas could be a useful start, and are highlighted in *From the Knowledge Wave to the Digital Age*:

- **Aerospace**, including both autonomous vehicles and our growing space industry.
- **Renewable energy**, building on recent investments in the Advanced Energy Technology Platform.
- **Health technologies** to improve delivery of health services and explore opportunities in digital data-driven social and health research.

We invite comment on these suggestions and welcome input on other possible focus areas.

Please type your submission below.

Q33: DairyNZ fully supports Government intention to move into a more strategic and, integrated approach to RSI investment.

The New Zealand Dairy industry is aligned with Food & Fibre and Agritech areas of focus identified in *Knowledge wave to the Digital wave*. But we believe that Food and Fibre is too wide as a Focus Area.

We are world leaders in pastoral dairy farming. Every effort should be made to ensure that we are able to maintain our leadership in this area of research, science and innovation.

Our engagement with the Primary Sector Council and the Primary Sector Science Roadmap Steering Group indicates a wide view that the government's primary sector goals will not be achieved by the current fragmented approach to science investment.

DairyNZ requests that MBIE fully consider the recommendations of both these groups in settling on its RSI strategy.

Our responses to Q32 apply here also.

Actions – Towards an Extended Vision Mātauranga

This section of the draft Strategy signals our intention to consult and collaborate further with Māori stakeholders to co-design our responses and initiatives. From that perspective, we consider the signals in the draft Strategy to be a start, rather than a set of final decisions. Nonetheless, we are keen on initial feedback in the following areas.

Question 34: Does our suggested approach to extending Vision Mātauranga focus in the right five areas? If not, where should it focus?

Question 35: How can we ensure the RSI system is open to the best Māori thinkers and researchers?

Question 36: How can we ensure that Māori knowledge, culture, and worldviews are integrated throughout our RSI system?

Question 37: How can we strengthen connections between the RSI system and Māori businesses and enterprises?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Actions – Building Firm Foundations

Question 38: Do the current structures, funding, and policies encourage public research organisations to form a coordinated, dynamic network of research across the horizons of research and innovation? What changes might be made?

Question 39: Is the CRI operating model appropriately designed to support dynamic, connected institutions and leading edge research? What changes might be made?

Question 40: What additional research and innovation infrastructure is necessary to achieve the goals of this Strategy? What opportunities are there to share infrastructure across institutions or with international partners?

Question 41: What elements will initiatives in this area need to be successful?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Q38: Dairy NZ supports the Ministry's intention to form a co-ordinated, dynamic network. As we have pointed out in earlier answers, we don't believe the current system achieves all that is required.

Two changes that might be made include

- co-investing with the sectors to a plan that ensures connectivity of research effort from Investigator to User led on the Focus Areas.
- ensuring that the Strategic Science Investment Fund is set up to enhance connectivity across the innovation pipeline and deliver RSI priorities.

Q39: DairyNZ believes that the perceived issues with the CRIs are rooted in the funding systems and the direction given to CRIs by MBIE and Ministers. The problem is not the structure.

Q40: From our perspective, there are significant and unique research assets owned by dairy farmers that could be more widely used by start-ups or partners.

Actions – General

Question 42: How should the Government prioritise the areas of action, and the initiatives proposed under each area?

Please type your submission below.

Q42: DairyNZ believes that the Government should give priority to building a new research partnership with the Food and Fibre sector. We have three chief reasons for this

- The importance and impact of the sector in New Zealand's economic and environmental performance.
- The need to add value, encourage adjacent industries and support regional economies.
- The unique challenges faced by the sector with many small businesses (30,000 farmer and growers) funding their R&D through farmer levies which are under pressure to support many other changes. This is in tension with government's desire to see private sector investment in R&D increase.

This action should follow the recommendations of the Primary Sector Council and be part of the Transformation plan.

PROACTIVELY RELEASED

General

Question 43: Do you have any other comments on the Strategy which have not yet been addressed?

Please type your submission below.

PROACTIVELY RELEASED