

15 April 2019

Hon Dr Megan Woods
Minister of Research Science and Innovation
Private Bag 18041
Molesworth St
WELLINGTON 6160

Dear Minister

Annual Letter of Expectations for 2019/20 – The New Zealand Institute for Plant & Food Research Limited

I am writing in response to your recent Annual Letter of Expectations for The New Zealand Institute for Plant & Food Research Limited (PFR). You asked PFR to outline how we propose to respond to the expectations you have specified. A full outline of our strategy, key initiatives and performance measures for the year ahead will be provided in our draft Statement of Corporate Intent for your consideration. We provide below an overview of our intentions in relation to areas of strategy and performance specifically referred to in your Letter of Expectations.

1. *Creating value for New Zealand through our new strategy*

Last year we developed and started to implement our new organisational strategy, which aims to create a Smart Green Future for New Zealand. The strategy focuses on:

- Investing in world class science
- Applying that science to maximise value creation
- Ensuring the value created is shared in a fair manner.

There are seven strands to this new strategy: investing in Growing Futures science, creating a profitable and growing Science Services business, building a world class Technology Development business, lifting our customer engagement and innovation, stronger partnerships with Māori, achieving our financial targets and investing in facilities and information, and investing in people. Our Statement of Corporate Intent (SCI) will identify key initiatives for 2019/20 to realise all seven strategic strands and develops a quadruple bottom line score card for evaluating our performance (Figure 1).

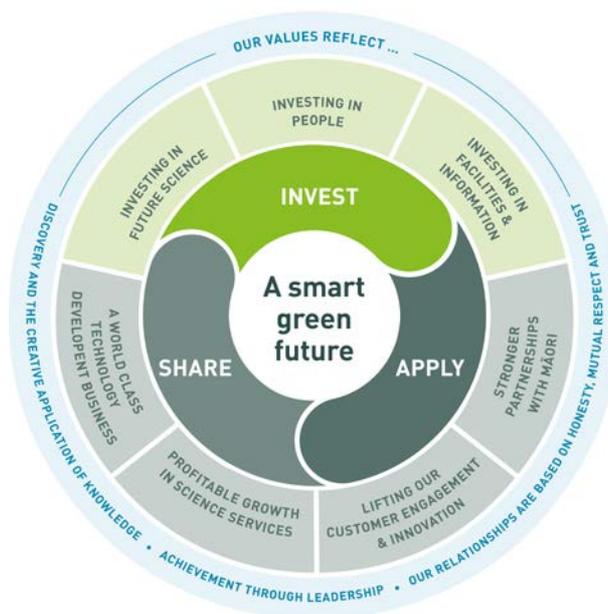


Figure 1: Plant & Food Research's strategy 2019/20

Key activities include:

- Investing up to 25% of our research activity in a future-focused Growing Futures science portfolio to deliver the world's most sustainable approaches to generating high value food from our land and ocean that will underpin future innovation
- Increasing the value we deliver to sector customers through our Science Services activity guided by a set of targeted engagement plans to improve impact for New Zealand
- Implementing a Technology Development activity to manage a pipeline of investments across a spectrum of opportunities to generate new products, services and technologies that New Zealand and off-shore investors can take to market.

A particular priority in 2019/20 is the implementation of Te Whakakitenga – our new strategy for partnering with Māori. It encapsulates our vision of being an organisation that helps Māori achieve the long-term success they are seeking. That success will rely on trusted relationships that integrate Mātauranga Māori and contribute the best Western science to create opportunities. In 2019/20 PFR will work towards more collaborative, relationship-based, co-design and co-creation approaches to partnering with Māori.

2. Aligning science and business with Government priorities for the primary sector

Plant & Food Research will continue to undertake science and deliver impacts that support the Government's priorities for the primary sector, particularly in enabling a diverse economy focused on high-tech, knowledge-intensive products and services, value rather than volume and creating new businesses and ways of doing business. We have a strong track record of working with our sectors on sustainable approaches to increasing the productivity and profitability of their enterprises. Slowing climate change, adapting to its effects and developing food production systems that are carbon neutral remain priorities for our research investments and activities. Protecting freshwater quality, our biodiversity, biosecurity and particular risks such as fruit fly, myrtle rust and kauri dieback are all areas of current research and remain a priority for future investment.

Our 2019/20 SCI will describe new themes for investment in a Growing Futures research portfolio that will guide investment in basic, targeted, future science aligned with delivering on Government's priorities for the primary sector. Largely funded by SSIF, these themes have been identified in consultation with our Science Advisory Panel, global trend analysis and futures scanning, and are:

- Sustainable controlled environment production systems for tree and vine crops
- The world's most sustainable outdoor production systems
- Open ocean finfish production system for New Zealand conditions.

All three of these themes have sustainability – economic, environment, social and cultural – at their core. This research will help to futureproof New Zealand's primary sector through the development of climate-smart land use options (e.g. through high-value, low footprint crops and cropping systems), new approaches to nutrient management (e.g. through new soil management practices such as tillage) and ways to transition to a low carbon economy (e.g. through new land-use modelling tools to predict effects on greenhouse gas emissions). Climate-smart land-use options will have their first impact on regional economies. Several collaborative projects with colleagues in AgResearch, DairyNZ, Manaaki-Whenua Landcare Research, GNS and Lincoln University with funding from Our Land & Water, MPI's Global Partnership in Livestock Emission Research, the New Zealand Agricultural Greenhouse Gas Centre and the Foundation for Arable Research are generating insights into the effects of land use on land, soil and water quality in order to contribute to a just transition to a low carbon economy. Careful consideration of biosecurity threats to new production systems (including controlled environment options) also remains a high priority through our investment in Better Border Biosecurity.

In 2019/20 PFR will continue to create new, high-value opportunities for New Zealand's primary sector. Some of these opportunities will be emerging technologies that may affect the social licence of the sectors with which we work, e.g. opportunities in gene editing, robotics, data management and its use along value chains, the effects of new uses of the land and sea as well as new crops (e.g. medicinal cannabis). Our approach is guided by regulatory requirements and stakeholder appetite for innovation in these areas with careful consideration of our role as a CRI. We will seek to engage with businesses, stakeholders and appropriate Government agencies over emerging opportunities in a timely way.

3. Collaboration, investing in and sharing capability and infrastructure

We note you expect CRIs to work collaboratively, share capability and invest in infrastructure in an efficient and effective manner. Our SCI will outline our 10-year capex plan to upgrade a number of our smaller regional sites, including Kerikeri and Motueka, as well as larger facilities at Palmerston North and Lincoln. These developments have been planned following discussions with potential co-locating organisations, including Lincoln University and the Blinc innovation hub, Wakatū at Motueka, and Food HQ partners at Palmerston North, to ensure that our future capex investment complement and enable the strategies of our partners while providing world-class facilities for undertaking science.

In 2019/20 we will further develop our national and international collaboration strategy to ensure we access the capabilities needed to achieve our vision of a Smart Green Future. That strategy will build on a preliminary analysis in late 2018 of leading international research providers whose expertise aligns with our new Growing Futures research themes. Our analysis confirmed we have strong relationships with international science organisations that are highly relevant to our strategy and highlighted opportunities to deepen connections with Wageningen University

and Research, Aarhus University and the University of California Davis as well as with leaders in seafood innovation in Norway. Links with Chinese and Australian researchers and industry groups will deepen in 2019/20 following increased investment in infrastructure, people and partnerships in both countries, e.g. the new China-New Zealand Joint Apple Research Centre at Northwest Agricultural and Forestry University – one of the top agricultural universities in China – and new office and science facilities at the University of Adelaide.

We are involved in collaborative projects with all six of the other CRIs as well as New Zealand universities, Callaghan Innovation, National Science Challenges and Centres of Research Excellence in areas that relate to our Statement of Core Purpose. Seventy-eight percent of our publications include other national and international research organisations. We will continue to strengthen these collaborations in 2019/20 and recognise that they are essential to delivering excellent science and impact through joint research, shared data, joint publications and shared infrastructure. Our approach to delivering impact is also the focus of collaborative effort; the CRIs are co-investing in a shared specialist evaluator to create CRI-wide skills and resources in impact monitoring and evaluation.

4. Managing employment and workforce relations, including diversity

We carefully monitor gender and ethnic diversity, age profile, pay equity and access to opportunities to ensure our science benefits from the very best ideas and talent. We have recently increased representation of women in our governance and senior management team with two women being appointed to our Senior Management Team (from zero) and two of our six Board members being women (an increase from one). Fifty percent of our science general managers are women. Pay levels are very similar for both men and women across almost all of our science and general pay ranges. We are focused on addressing the over-representation of men in the two senior general (S6 and 7) and scientist (R7, 8 and 9) ranges. There are equal numbers of men and women at the scientist entry level (R6). We will seek to provide an inclusive and diverse workplace, and monitor male and female representation in activities across our business as well as analyse a range of workforce statistics such as age and tenure.

5. Maintaining a resilient business

Our Business Plan for the next five years will see us carefully manage our capability pipeline and head count to ensure we invest in new areas that are important for New Zealand (including in social science, data science and new technologies), maintain at-risk capability and take into account the effects of natural turnover. Our new business model and strategy requires very careful and deliberate investment across Future Science, Science Services and Technology Development components. Our financial reporting systems are providing data to underpin the evaluation of performance across these business models as well as futureproof our systems to align with emerging expectations of the New Zealand Research Information System initiative.

As noted above, PFR's new strategy will see increasing co-investment with industry partners and investment in new products, services and technologies to create opportunities for the primary sector and associated service providers. This will create particular challenges and potentially some risk. The Board will manage any risk of taking equity stakes in new business models by exercising due diligence, carefully analysing return on investment, considering our role as a CRI and putting in place stage gates along commercialisation pipelines to ensure progress towards impacts is carefully monitored. We will also monitor our activity in these areas to ensure we are not exposed to undue reputational risk, and will observe the Government's 'no surprises' policy. We anticipate new opportunities to provide applied science to address the immediate needs of customers taking advantage of the new tax incentive scheme in the months ahead.

We value the collegial approach taken by our key contact in MBIE and look forward to a highly productive working relationship in the year ahead.

Yours sincerely

A handwritten signature in black ink, appearing to read 'MAHIE', with a small dot at the end.

Michael Ahie
Chair