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30 June 2016



Four Year Rolling Review: AgResearch

Report from the Review Panel



Four Year Rolling Review: AgResearch

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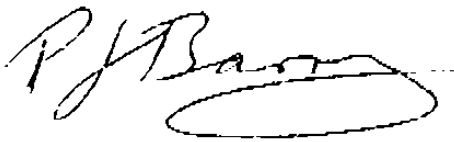
1 FOREWORD

The Four-Yearly Rolling Review Panel would like to record its appreciation to the Board, management and all we met with from AgResearch for the assistance they provided during the review process. All the people the Panel met with at AgResearch were very open and constructive in their dealings with the Panel. Further, all the information and support the Panel required was provided in an extremely timely and efficient manner.

The support provided to the Panel by the Ministry of Business, Innovation and Employment (MBIE) was also very much appreciated.

Having rolling four year reviews of the Crown Research Institutes (CRIs) is a useful initiative in focusing attention on the longer-term performance and capacity of these Crown-owned companies.

More generally, we hope that this report will assist AgResearch to flourish over the next four years and that it supports MBIE and the Government in their decision-making.



Philip Barry (Chair)

and



Rob Flannagan



Anake Goodall



Dame Alison Paterson

30 June 2016

2 EXECUTIVE SUMMARY

The Statement of Core Purpose for AgResearch states that “AgResearch’s purpose is to enhance the value, productivity and profitability of New Zealand’s pastoral, agri-food and agri-technology sector value chains to contribute to economic growth and beneficial environmental and social outcomes for New Zealand”. The Statement of Core Purpose further elaborates on the key outcomes, scope of operation and operating principles for AgResearch and it is against all these that the Panel makes its report.

AgResearch is the largest of the Crown Research Institutes (CRIs) in terms of revenue and assets. AgResearch undertakes research in the dairy, meat and fibre sectors, both behind and post the farm gate. These three sectors account for almost 40% of Aotearoa **New Zealand’s** merchandise exports.

This review is taking place at a time when AgResearch is under considerable stress. The organisation has been downsizing and restructuring in the face of shifting demand and realignment to its future strategic direction. At the same time, the external environment is challenging. While beef and deer prices are strong and lamb and wool prices have shown signs of recovery, dairy prices are sharply down, thus reducing levy-based income at a time when government funding of CRIs is tight. The organisation is distributed across four sites around the country, its properties are underutilised and dated, and its staff surveys suggest the organisation is not in good heart. Its latest Annual Report indicated there was a significant drop in some outputs in 2015, with the numbers of commercial reports per scientist, down by over 50% (although this reflects in part changes to the database). On the other hand, the quality of scientific publications increased, with the number of publications in high-impact journals more than doubling over a period of several years.

The Panel identified many positives in AgResearch’s **favour**, with the staff having a passion for science and for adding value to the productivity of New Zealand and a pride in New Zealand’s long history of world-leading innovation in the **agribusiness sectors**. **All AgResearch’s** activity is underpinned by solid practices, processes and policies with **innovative** “roadmaps” used to guide the direction of its research and internal operations. It has succession plans for its senior staff and retention plans for its key staff. AgResearch generally has a reputation with its key customers for being responsive, open and honest, and there is widespread respect for the quality of its research. Its financial controls are sound and it has been migrating its core funding to help it better leverage its core competencies.

New Zealand has a long and proud history of world-leading innovation in the agri-sectors and AgResearch has contributed to many significant outcomes in recent years. Examples include the Overseer Nutrients Budget Model, the development of new cultivars and endophytes and the contributions of **AgResearch's** genetic research to improving the productivity of sheep.

At the same time, AgResearch is facing major challenges. It is the only CRI to have had falling revenues over the last three years (reflecting in part the sale of non-research assets). It has reduced its staff numbers by 20% - with non-scientist numbers down by 12% - and it is expected to make a loss this year, in part due to the current round of restructuring that is going on. The financial situation also reflects that many of the activities AgResearch has traditionally undertaken are no longer well supported by its funders. Declining revenue has in turn forced AgResearch to scale back and prioritise amongst its research activities.

AgResearch's plan - the Future Footprint Programme (FFP) - is **“to get the right people in the right place doing the right things.”** **This involves**, in particular, consolidating its on-farm research at Lincoln and its off-farm research at Grasslands (outside Palmerston North), while maintaining smaller satellite operations at Ruakura and Invermay. With the FFP, AgResearch is planning the largest capital expenditure and redistribution of capability of any CRI. The plan is about much more than just new buildings and new infrastructure, however. It is also focussed on changing its science direction, changing its culture and changing the way that AgResearch works by being more collaborative, more commercial and more professional across all its activities.

The Panel supports **AgResearch's** strategy but is concerned about the time that is being taken to execute it. The FFP was first developed in 2010/11 and the move to Lincoln was expected to be mostly complete by March 2017 according to the 2012 business case. In reality the move is only just starting and is now not expected to be complete before 2019 at the earliest. The Panel **recognises the delays are largely due to factors outside AgResearch's control** but change, especially at this scale, is best implemented swiftly and with certainty so that the organisation can adjust and move forward. The Panel considers that establishing and maintaining momentum in the FFP is now critical; a view unanimously shared by external stakeholders.

Around a year ago the governance of AgResearch was showing signs of strain and disunity. However, the Board has come through this difficult period and is now better aligned. The shareholders now need to identify a succession plan for the chairman (who has been in the role for over eight years), and have the opportunity to assess both the governance and management skills needed to take the organisation forward. In the Panel's view the addition of large-scale project management skills would be helpful while the Board moves through the FFP implementation phase, and all new appointments might usefully be made with an eye towards maximising the opportunities created by the new Hub strategy.

The Panel found all the expected strategic documents, plans and implementation reports in place, and considers that sufficient information is provided to the Board to guide and maintain the strategic direction. However, the Panel was surprised that there was not a clearer reporting of detailed milestones at the Board level and believes that greater oversight of performance metrics would support greater clarity and urgency around execution, and provide more effective linkages between governance and management.

As with all the CRIs, **AgResearch's people are its key asset. The organisation has many highly** talented scientists and other staff. A number of its scientists are of international standing, including the rumen microbiology team that is one of the largest in the world. AgResearch has been successful in attracting highly qualified international post-doctoral staff, enhancing its flexibility in the process. The risk the organisation faces if it does not adjust and implement the restructuring quickly is the loss of key people and important scientific capability. This risk is accentuated by the gap in the staff tenure profile, with relatively few mid-career staff currently on the books.

AgResearch's financial performance has been one of the worst of the CRIs over the last four years, with a return on equity (RoE) averaging between 1.4% and 3.9% (depending on the asset valuation method used). There has been a steady fall in earnings Over this period, with material declines in EBITDAF, EBIT and NPAT measures. AgResearch is budgeting a RoE of negative 1.2% this financial year. While one-off factors, including the restructuring and the downturn in dairy prices have contributed to this poor performance, **no significant turnaround in AgResearch's financial** performance is projected in the coming years, with revenue only projected to return to 2013/14 levels by 2020. **s 9(2)(b)(ii)**

In its latest SCI, AgResearch's RoE is projected to average 0.5% p.a. over the five-year period to 2021, **s 9(2)(b)(ii)**

At the same time, the entity is planning on investing around \$160m over the next three years under the FFP, the largest investment program of any of the CRIs. The investment program is being funded by AgResearch taking on debt and selling surplus assets. The Board acknowledged this financial underperformance, and also noted its view that the organisation has no choice but to invest now in upgrading its very dated facilities if it is to remain relevant to the agriculture sector in the long run and to continue to be able to attract world leading scientists.

A significant disconnect identified by the Panel is the apparent gap between the impacts AgResearch estimates it makes on the sectors it serves and those **sectors' willingness to pay for** its services. Funding by commercial players in the dairy, meat and fibre sectors totals around \$10m p.a. or less than 5% of **AgResearch's revenue**, though private organisations co-invest more in AgResearch in partnerships with the government. A major challenge facing AgResearch is to

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effectively monetise and share in the benefits that its research provides to these producers. Feedback from commercial stakeholders suggests to the Panel that AgResearch is not yet systematic or proactive about selling strategic services.

AgResearch will also **need to be nimble and responsive to its stakeholders' changing demands**. The government has already signalled in its National Statement of Science Investment that it is unlikely to increase investment in research in the primary sector and will be looking for the industry to fund or co-fund more of that research. Around 30% of the research undertaken by the government already occurs in the primary sector, with that sector making up around 8% of national output. AgResearch nevertheless has significant opportunities given it covers both on-farm and off-farm sectors at a time when the distinction at the farm gate is less meaningful given end-consumers' demands for food provenance and the emphasis being placed on better environmental and animal welfare outcomes.

Given the scale of the transformational change being undertaken by AgResearch, and the associated risk profile, the Panel was surprised to find that a number of organisational functions had been initiated quite late in the process and/or were lagging the wider FFP project. Examples of note include the internalisation of the communications function (at a time when the organisation is relocating some 200 staff), upgrading the IT infrastructure (when greater use of big data is a core strategic goal), and improving risk management practices (notwithstanding that the WPC80 report was released in 2014, the experience with the Christchurch earthquakes, and the scale of the FFP itself). Other priorities for AgResearch include developing the depth and breadth of its executive team, shifting from a process-oriented to a more client-focused culture, strengthening the commercial skills of the executive and investing senior management time in developing relations with iwi/Māori and other stakeholders.

There is a clear - and widely recognised - opportunity for building substantive partnerships with iwi/Māori, recognising the significant and growing **influence Māori** have in the development of Aotearoa **New Zealand's natural resources in the post-Treaty** settlement environment. The Panel was impressed with the approach taken in the **Māori business case** and its recognition of the challenges of building organisational capacity in this area. **In the Panel's view**, however, this function is not adequately resourced at present to make a material and sustainable difference to **AgResearch's capacity or capability in the long run**. As for the IT, communications and risk management areas mentioned above, **the iwi/Māori function will need to be reprioritised if it is** to meet its potential.

Overall, the Panel believes that AgResearch is at a critical point in its life. It is **'between two stools'** in both an organisational change and physical location sense, with a very unsettled workforce, considerable and continued uncertainty around timelines, and a high-risk exposure to events **outside AgResearch's control**. The major risk it faces is the loss of key staff and customers during

the change process. These significant challenges notwithstanding, AgResearch is committed to the planned restructure and relocation and its plans have the support of their industry and research partners. **The Panel considers that the government's early resolution of the matters relating to the Lincoln Hub will be critical to AgResearch's success. Equally, the Panel believes** that the Board could usefully strengthen its own project management capability, provide greater resourcing to critical functions, and adopt more rigorous and integrated monitoring of its execution processes to ensure optimal delivery of the FFP over the next few years.

3 BACKGROUND

3.1 About AgResearch

AgResearch was established as a Crown Research Institute in 1992 and has campuses at Ruakura (Waikato), Grasslands (Manawatū), Lincoln (Canterbury) and Invermay (Otago). AgResearch works in the pastoral, agri-food and agri-technology spaces, bringing new knowledge and technology to the agribusiness sector. It is a New Zealand leader in animal production systems, new plant varieties, mitigating greenhouse gas emissions from agriculture and food and biotechnologies.

The CRIs are required to undertake research to contribute to New Zealand's economic growth and environmental and social prosperity. In particular, AgResearch's purpose, as outlined in its Statement of Core Purpose (SCP), is to 'to enhance the value, productivity and profitability of New Zealand's pastoral, agri-food and agri-technology sector value chains to contribute to economic growth and beneficial environmental and social outcomes for New Zealand'.¹

Around 35% of AgResearch's research is allocated to the dairy sector and a further 37% to the meat and fibre sectors. AgResearch splits its research across 'strategic research' (10-15-year time horizon), 'applied research' (3-5-year time horizon) and 'product & knowledge development and transfer' (1-2-year time horizon). Its research is allocated on the following basis:

- 25% on long-term 'strategic research';
- 48% on medium-term 'applied research'; and

¹ AgResearch's SCP is provided in Annex 1 of this report.

- 27% on short-term ‘product and knowledge development and transfer’.

AgResearch is the largest of the seven CRIs in terms of total revenue (\$155m in 2014/15) and total assets (\$270m as at year end 2014/15).

3.2 Context for the rolling reviews

The 2010 Crown Research Institutes (CRI) Taskforce reforms were an integrated suite of changes designed to increase the impact and benefit of the CRIs to New Zealand. Central to the reforms was **the intention to increase the CRIs’ focus on collaboration with**, and efficient technology transfer to, the sectors and key stakeholders they serve.

Each CRI has adopted a Cabinet-approved Statement of Core Purpose (SCP) which reflects this focus and clearly articulates the purpose, outcomes and strategic role for the organisation. The SCP for AgResearch is attached as Annex 1.

To ensure CRIs continue to increase their contribution to Aotearoa **New Zealand’s economic, social and environmental well-being**, the CRI Taskforce also recommended, and Cabinet agreed [CAB Min(10)43/5C refers], that the government evaluates the performance of each CRI against its SCP through a process of independent four-yearly rolling reviews.

3.3 Purpose of the review and this report

The purpose of these reviews is to provide shareholding Ministers with insights on where each **CRI’s performance can be improved** and assurance on where the CRI is operating effectively in **delivering outcomes that contribute to New Zealand’s economic, social and environmental well-being**. The reviews include an assessment of governance effectiveness, financial viability and sustainability as well as an identification of opportunities and barriers to success. Findings from the reviews will also support CRI Boards in their governance role. The review of AgResearch is the last such review in the first cycle of rolling reviews.

3.4 Scope of the review

As outlined in the Terms of Reference for the review, **each CRI’s SCP provides the scope of enquiry** for the four year rolling review. **The review is expected to evaluate the CRI’s performance and progress in delivering to the purpose, outcomes, scope of operation and operating principles in its SCP**. There will also be some consideration of the likely durability of outcomes in the current economic and environmental context. The reviews are expected to evaluate factors that influence **the CRI’s overall success in contributing to its SCP outcomes now and into the future**.

Every year each CRI, in collaboration with key stakeholders, measures and evaluates its impact on its respective sectors. The independent Panel undertaking the four-year rolling reviews is not expected to duplicate this work. However, based on the measures and assessment generated by the CRI, the Panel should evaluate how well the CRI is contributing to the outcomes in its SCP and assess the quality of the measures used to inform that assessment.

The Terms of Reference have the following as out of scope:

- measuring the performance of the CRI in delivering against individual contracts; rather the Panel will evaluate how the CRI manages its contracts overall; and
- **measuring the CRI's** science quality; rather the Panel will evaluate how well the CRI is monitoring, measuring and improving science quality.

3.5 The Review Panel and processes

Panel members were appointed to ensure an appropriate mix of experience in governance, corporate finance and economics, and organisational review. The Panel membership was Philip Barry (Chair), Rob Flannagan, Anake Goodall and Dame Alison Paterson. Brief biographies for the Panel members are attached as Annex 2. The Panel reviewed any potential conflicts of interest that members may have in relation to this process, and no direct conflicts were identified. Relevant indirect issues were managed throughout the review process.

The Panel was appointed by the Ministry of Business, Innovation and Employment (MBIE) in March 2016 and convened on April 13, 2016. The review was undertaken between April and June 2016. Prior to the first meeting, Panel members were provided with a range of background material from both MBIE and AgResearch. The information from AgResearch was based on an information request and further information was provided throughout the period of the review. The full list of information provided to the Panel through the review is detailed in Annex 3.

In undertaking the review, the Panel sought to be:

- a. independent: working closely with AgResearch and MBIE, but remaining independent of both to ensure the **Panel's report reflects an independent** assessment;
- b. objective: the review sought to be objective and as far as possible evidence-based. The Panel **sought to be open minded and 'let the facts and the numbers do the talking'**;
- c. interactive: the Panel consulted with members of the AgResearch Board and executive team during the review and AgResearch had the opportunity to see and

- comment on matters of factual accuracy in the draft report before it was finalised;
and
- d. efficient: the Panel aimed to be efficient in its engagements with AgResearch and to keep compliance costs to a minimum.

The Panel met with the Board, senior management, science team leaders and a group of young scientists over three days at Grasslands. Further meetings were held with management and staff at Ruakura, Lincoln and Invermay. The Panel met again with the Chair and Deputy Chair of AgResearch, held meetings or teleconferences with a number of external stakeholders and senior staff and presented its draft findings to the Board. The full list of those the Panel met with, or spoke to, is provided as Annex 4.

A draft report was provided to both MBIE and AgResearch for comments on matters of accuracy on June 12, 2016, and the final report was provided to MBIE and AgResearch on June 30, 2016.

4 HOW WELL IS AGRESEARCH DELIVERING AGAINST ITS SCP?

4.1 Context for assessment

A CRI's performance is measured against two key deliverables:

1. the impact of its research in relation to economic, social or environmental benefits for New Zealand; and
2. the financial performance of the CRI.

The Panel provides below its assessment of the current performance of AgResearch in delivering against its SCP within the context of the current operating environment for the CRIs.

4.2 Outcomes, outputs and operating principles

The table below summarises the key outcomes sought by AgResearch (from its SCP) together with **the Panel's assessment** against each outcome.

<p><u>Outcomes</u></p> <p>AgResearch will fulfil its purpose through the provision of research and transfer of technology and knowledge in partnership with key stakeholders, including industry, government and Māori, to:</p>	
<p>• increase the value of these industry sectors to the New Zealand economy through the development of high-value pastoral-based products and production systems that meet current and future global market needs</p>	<p><i>AgResearch's 2015 Annual report and SCI summarise its assessment of its performance.</i></p> <p><i>An independent report values the contributions of the Overseer Nutrient Budgets Model at \$271m/yr.</i></p> <p><i>Some other examples where AgResearch assesses it has made significant impacts include:</i></p> <ul style="list-style-type: none"> <i>- clover root weevil biocontrol (estimated benefits of over \$300m/yr nationwide);</i> <i>- AR1 and AR37 endophytes, ryegrass and clover cultivars;</i> <i>- the Genomnz™ genetic testing laboratory's contribution to improving the productivity of sheep; and</i> <i>- its contribution to the design of a world-first woollen running shoe.</i> <p><i>The challenge for AgResearch is to monetise the impacts into sustainable revenue paths.</i></p>
<p>• position New Zealand as a global leader in the development of environmentally sustainable, safe and ethical pastoral production systems and products</p>	<p><i>The National Science Challenge that AgResearch is leading, "Our Land and Water" is focused on this outcome.</i></p> <p><i>The Science Advisory Panel has been a good source of increased international connections.</i></p> <p><i>AgResearch is collaborating with a broad range of stakeholders including s 9(2)(b)(ii)</i></p> <p style="text-align: right;"><i>and various farmer groups.</i></p> <p><i>AgResearch hosts the NZ Agricultural Greenhouse Gas Research Centre.</i></p>

<ul style="list-style-type: none"> • ensure that New Zealand’s pastoral sector is able to protect, maintain and grow its global market access 	<p><i>AgResearch is a key contributor across a range of initiatives including to the NZ Food Safety Science and Research Centre and the Global research Alliance on Agricultural Greenhouse Gases.</i></p> <p><i>Core funding is being used to undertake food provenance and Green House Gas (GHG) work.</i></p> <p><i>Feedback from external stakeholders and partners indicate these are important initiatives but it is early days.</i></p>
<ul style="list-style-type: none"> • increase the capacity of rural communities and enterprises to adapt to changing farming conditions in ways that balance economic, environment, social and cultural imperatives 	<p><i>AgResearch’s hill country pasture species development, farm systems and new grazing work and emphasis on sustainable management are contributing to this outcome.</i></p>

Further details on AgResearch’s performance against its SCP outcomes can be found in AgResearch’s recent Annual Reports, Annual Report Highlights, quarterly reports and Statements of Intent.

4.3 Scope

The table below summarises the areas where AgResearch is the lead CRI and where it works with other research providers and end-users (from its SCP) together with the Panel’s commentary against each.

<p><u>Scope of operation</u></p> <p>To achieve these outcomes, AgResearch is the lead CRI in the following areas:</p>	
<ul style="list-style-type: none"> • pasture-based animal production systems 	<p><i>AgResearch does the bulk of New Zealand’s research on pasture-based animal production systems. Lincoln and Massey universities and DairyNZ are the other main research organisations in this space. Plant & Food Research contributes research on non-pasture animal feed. Much of AgResearch’s work is in collaboration with these other organisations.</i></p>

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<ul style="list-style-type: none"> • new pasture plant varieties 	<p><i>AgResearch does almost all of the research that leads to new pasture plant varieties in NZ, with some being done by Massey University and some by private plant breeding companies like PGG-Wrightson Seeds.</i></p>
<ul style="list-style-type: none"> • agriculture-derived greenhouse gas mitigation and pastoral climate change adaptation 	<p>AgResearch does much of NZ's research on GHG mitigation and co-ordinates the rest by hosting the nine-organisation NZ Agricultural Greenhouse Gas Research Centre (http://www.nzagrc.org.nz/). AgResearch works on pastoral climate change adaptation and is the lead CRI in that area.</p>
<ul style="list-style-type: none"> • agri-food and bio-based products and agri-technologies 	<p><i>AgResearch is the leading CRI with respect to milk and meat-based food products (working mainly with Massey University, University of Auckland and Plant & Food Research). As an example, three of the seven contestable projects funded by the High-Value Nutrition NSC were led by AgResearch, in partnership with those other organisations. AgResearch is also the lead CRI in animal fibre-based bio-products. In that area AgResearch mainly works with Scion and Plant & Food Research who lead research in plant fibre-based bio-products.</i></p>
<ul style="list-style-type: none"> • integrated social and biophysical research to support pastoral sector development 	<p>AgResearch's social and farm systems, land and environment research teams have many research programmes that integrate social and biophysical research.</p>
<p>AgResearch will work with other research providers and end-users to contribute to the development of the following areas:</p>	
<ul style="list-style-type: none"> • biosecurity, land, soil and freshwater management 	<p><i>AgResearch works with Landcare Research, Plant & Food Research and several of the universities in this area.</i></p>
<ul style="list-style-type: none"> • climate change adaptation and mitigation 	<p><i>AgResearch collaborates with a variety of providers as noted above.</i></p>

<ul style="list-style-type: none"> • food and beverage sector (including foods for human nutrition and health, food technologies and food safety) 	<p><i>AgResearch works with Plant & Food Research, Fonterra Research Centre, Massey University and other organisations in this area.</i></p>
<ul style="list-style-type: none"> • provide advice on matters of its expertise to the Crown 	<p><i>AgResearch provides central and regional government advice on biosecurity, environmental science (e.g. AgResearch’s work on the Lake Taupō nitrogen management regime and the Canterbury water allocation process) and animal welfare.</i></p>
<ul style="list-style-type: none"> • represent New Zealand’s interests on behalf of the Crown through contribution to science diplomacy, international scientific issues and/or bodies as required 	<p><i>AgResearch staff represent New Zealand as part of the Global Research Alliance on agricultural greenhouse gases; participate in biennial joint commission meetings on science and technology with other countries; and contribute to NZAID projects in South America, etc.</i></p>

4.4 Operating principles

The table below summarises AgResearch’s operating principles (from its SCP) together with the Panel’s commentary against each principle.

<p><u>Operating principles</u> AgResearch will:</p>	
<ul style="list-style-type: none"> • operate in accordance with a statement of corporate intent and business plan that describes how AgResearch will deliver against this statement of core purpose, and describes what the shareholders will receive for their investment 	<p><i>AgResearch is not achieving its financial KPIs. There is evidence that the quality of outputs has increased (for example, high impact journal articles increased from 34 in 2008 to 66 in 2015) but the quantity of outputs has declined (for example, commercial reports per scientist down from 2.3 to 1.0, although this reflects in part changes to the database).</i></p>
<ul style="list-style-type: none"> • meet its obligations as a Crown Company and remain financially viable, delivering an appropriate rate of return on equity 	<p><i>AgResearch has delivered a return on equity of 1.4% p.a. on average over the last four years, well below the minimum 6.4% return estimated to be required (CRI Balance Sheet Review) for</i></p>

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	<p><i>AgResearch to be financially sustainable.² No improvement is projected, with AgResearch projecting an average 0.5% p.a. return over the next five years in its latest SCI.</i></p>
<p>• develop strong, long-term partnerships with key stakeholders, including industry, government and Māori, and work with them to set research priorities that are well linked to the needs and potential of its end-users</p>	<p><i>There are deep strategic relationships with some stakeholders but not with others and there is opportunity to improve.</i></p> <p><i>The Māori space is immature.</i></p> <p><i>A key challenge is to grow long-term sustainable revenues.</i></p>
<p>• maintain a balance of research that both provides for the near-term requirements of its sectors and demonstrates vision for their longer-term benefit</p>	<p><i>AgResearch is in a difficult space as the government focus shifts to H1/H3 when its traditional focus has been on H2. The risk is delivering to the Ministers' and sectors' expectations for the FFP strategy. As noted in section 3, research effort is allocated: 27% short-term; 48% medium-term; and 25% long-term strategic research.</i></p>
<p>• transfer technology and knowledge from domestic and international sources to key New Zealand stakeholders, including industry, government and Māori</p>	<p><i>Seeds is an example where AgResearch has successfully developed new cultivars which are then deployed by commercial seed companies. Overseer is another way in which fundamental knowledge is made available in a forum that adds value for the end user.</i></p>
<p>• develop collaborative relationships with other CRIs, universities and other research institutions (within New Zealand and internationally) to form the best teams to deliver its core purpose</p>	<p><i>Encouraging greater collaboration is at the heart of the FFP. AgResearch is generally regarded well by other stakeholders for its collaborations.</i></p>
<p>• provide advice on matters of its expertise to the Crown</p>	<p><i>AgResearch provides advice to central and regional government in the areas noted above.</i></p>

² See Balance Sheet Review of Crown Research Institutes, 2012, p.13, and <http://www.mbie.govt.nz/info-services/science-innovation/research-organisations/crown-research-institutes/cri-toolkit/section-3> for a description of the Crown's expectations for financial returns from CRIs.

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<ul style="list-style-type: none"> • represent New Zealand’s interests on behalf of the Crown through contribution to science diplomacy, international scientific issues and/or bodies as required 	<p><i>AgResearch staff represent New Zealand in a number of areas as noted above.</i></p>
<ul style="list-style-type: none"> • seek advice from scientific and user advisory panels to help ensure the quality and relevance of its research 	<p><i>AgResearch uses its Science Advisory Panel (SAP) well, with 6-monthly engagement with Board, doing deep dives, and bringing international connections. The SAP engages with science leaders in AgResearch and the use of a SAP is best practice. AgResearch does not have a user advisory panel but meets with a number of end users each year.</i></p>
<ul style="list-style-type: none"> • establish policies, practices and culture that optimise talent recruitment and retention 	<p><i>AgResearch has succession plans and retention plans in place for key staff. It also has recruited a talent spotter. It is targeting 50 post-doctoral students by 2019.</i></p>
<ul style="list-style-type: none"> • enable the innovation potential of Māori knowledge, resources and people 	<p><i>AgResearch has a plan and commitment from the Board and CEO to lift the game and provide resources in engaging with Māori. It is debatable whether sufficient resources are being devoted to make real impact.</i></p>
<ul style="list-style-type: none"> • maintain its databases, collections and infrastructure and manage the scientific and research data it generates in a sustainable manner providing appropriate access and maximising the reusability of data sets 	<p><i>AgResearch protects its existing databases and collections (for example, seed banks). It has a disaster recovery plan but no business continuity plan. It has longer-term, big data aspirations.</i></p>
<ul style="list-style-type: none"> • seek shareholder consent for significant activity beyond its scope of operation 	<p><i>No issues were identified.</i></p>

5 KEY ISSUES THAT INFLUENCE THE ABILITY OF AGRESEARCH TO DELIVER TO ITS SCP IN FUTURE

5.1 An effective governance culture

This section draws on the Institute of Directors' Four Pillars of Governance³ to assess AgResearch's governance processes.

Last year the Board commissioned an independent external review of its performance, with the review undertaken in February 2015. **s 9(2)(b)(ii)**

To the Board's credit, it has addressed these issues and as a consequence has come through stronger **s 9(2)(b)(ii)**

Determining purpose

Through a process **of consultation and planning the Board has a clear view of AgResearch's business model. The Board appears aligned on this vision. Having the Board's vision embedded** into the organisation however is still a work in progress as indicated in the staff engagement surveys.

It appears that at the customer interface there could be greater clarity as to the roles and competencies required (eg, of portfolio leaders and scientists respectively) to effectively transition to the new roles established by the FFP. In addition, all stakeholders (internal and external) gave the clear message that they would value seeing more of the Board and senior management.

With respect to external stakeholders, the Panel considers that the Board and senior management could do more to bring external stakeholders along on the journey with them. Gaps are appearing **between stakeholders' requirements and AgResearch's capabilities and if not remedied these** will detract from the value AgResearch is able to provide in the future. For example, the government has clearly signalled its intentions, via its National Statement of Science Investment, to seek to invest in more ideas-driven, discovery research in the primary sector. On the other hand, the government will invest in closer-to-market research when that supports and extends existing business models and it is primarily funded and led by industry, for example through levy

³ Institute of Directors in New Zealand (Inc). 2012. *The Four Pillars of Governance Best Practice*.

mechanisms. The Board will need to ensure that AgResearch is attuned to the changing requirements of its major funder so as to remain as relevant as possible in the future.

Governance oversight

The Panel found all the expected strategic documents, plans and implementation reports in place. **The reports to the Board from the executive are, in the Panel's view, pitched at the right level and have sufficient information for the Board to guide and maintain the strategic direction.**

However, the Panel was surprised that there was not a clearer reporting of detailed milestones at the Board level. While detailed monitoring is in place it is principally within the executive function of the organisation, with the Board reports being relatively brief on performance metrics and in narrative form. The Panel believes that greater oversight of performance metrics at Board level would support greater clarity and urgency around execution, and provide more effective linkages between the governance and management layers.

AgResearch is changing its business model and moving to hubs or 'centres of excellence'. As a consequence, there is considerable culture change and uncertainty for the staff (especially the specialist staff). The Board and senior management have been transparent about the changes, but unresolved issues outside AgResearch's control have meant announcements have been made without the necessary certainty as to timing and actual impact. This is an extremely difficult environment in which to manage. Staff are not only uncertain about job-security, but the structural changes require shifts to different locations and the building of new social bases. Many staff with specialised skill sets may find it difficult to gain employment elsewhere which has created issues with morale and productivity (see section 5.4 on People and Culture).

Some of the decisions affecting the pace of change are outside the direct control of the Board and senior management. However, a Board is charged with overseeing the changes with both a sense of urgency and focus. It also requires skilled leadership to bring the staff, stakeholders and customers along on the journey. Perhaps the change has been slower than one would like to allow staff to make informed decisions that best fit their circumstances. The slow progress in executing change may make adjustment to the new business model easier, but this is not without risk (as discussed further in section 5.2 below).

There has been considerable internal focus, especially around the establishment of the Lincoln Hub, which is understandable. However, reporting is light on specific outputs, for the Science Roadmaps. At the same time, the organisation needs to ensure it is bringing stakeholders (externally and internally) along on the journey during a rapidly changing period. From discussions with the Board they advise that their focus is very much on two goals, these being financial results and impact on national science outcomes.

Reporting to and by the executive

Detailed reports on operational matters are provided to the executive team. These reports are then distilled so that only the key issues and strategic matters go to the Board. This process appears to work well as long as the Board continues to occasionally **carry out “deep dives”** into the layers of reporting to test the robustness of the overall system.

The number of reports that are prepared for the executive team (and for the Board) however is considerable. The Panel questions whether the volume of reporting going on is required and suggest a detailed exercise be undertaken to streamline the reporting while also ensuring that there is alignment with the SCP. It is important to have one aligned reporting structure throughout the organisation aligned to the **shareholder**. **The Institute of Directors “Ten top tips for better board papers” could be a helpful guide. Consistent with the above approach,** AgResearch could make more use of dashboards. It is noted that a paper has recently been adopted by the executive to use as a standard template when seeking decisions.

The Science and other roadmaps are impressive documents. Updates are provided to the Board, but it would also be useful to see here some form of dashboard as to how each roadmap is tracking against the planned outputs. As this is the AgResearch economic engine the Panel considers that the outputs could be more financial and output focused.

Market-facing matrix

AgResearch uses a matrix model to manage the interface between its scientists and external clients. It does this through Portfolio Leaders who have responsibilities for specific research areas, such as dairy, and who work with each other as required.

The Panel heard from various members of staff that before the introduction of the matrix model there were incidences of confusion and internal competition. At times, AgResearch teams were competing with each other for the same piece of client work, sometimes without knowing that other teams were bidding for the work and sometimes at different prices.

The matrix approach appears to have successfully removed these coordination issues. External clients confirmed that their interactions with AgResearch staff were now more straightforward than in the past, and also that from their perspective the model appeared to be working relatively well.

The view inside AgResearch was generally positive about the shift to the matrix approach. It was also noted, however, that the success of the new arrangements was heavily dependent on the individuals in the Portfolio Leader roles and their skills and experience.

In order to improve and realise greater consistency in the operation of the matrix, these matters are being addressed in the Programmes and Performance Roadmap that is due to go the Board in June 2016. On balance, the Panel considers that the current matrix arrangements are an improvement on past practice, but should still be considered a work in progress.

Effective compliance

Risk management has, over the last couple of years, been stepped up and is slowly being embedded throughout the organisation (as is discussed further in section 5.7 below). Risk is governed through the Audit and Risk Committee of the Board.

Succession planning at the Board level

The Board Chair has held the position for eight years and his term ends shortly. Given the major changes currently going on at AgResearch **some continuity in the Chair's position is important**. The Panel considers that at least a **six months' transition period should be planned for the Chair's** role.

The appointment of new board members over time provides an opportunity to consider the appropriate balance of skills required for both the FFP transition and the post-FFP environment. In particular, it will be important that the Board has members with strong commercial skills, accountability skills, project management skills and stakeholder engagement skills. The Panel suggests that a competency assessment be considered to ensure the Board continues to have the necessary skill mix going forward.

5.2 Strategy

AgResearch is currently part way through a transformational change in response to a significantly changed operating environment. The Panel agrees with the adopted strategy, and notes that the core strategic decisions are now irrevocable. This fundamental refocusing and consolidation of **AgResearch's operations is subject to a number of decisions outside its direct control, with those** relating to the Lincoln Hub especially introducing significant risks for the organisation. The Panel considers that the **government's early resolution of the** matters relating to the Lincoln Hub will **be critical to AgResearch's success. Within AgResearch's direct control**, and part of **the Board's** core responsibility, is the framing and execution of its wide-ranging change process. As noted in section 5.1 above, the Panel believes that the Board could usefully strengthen its own project management capability, and adopt more rigorous and integrated monitoring of its execution processes to ensure optimal delivery of the FFP over this next period.

Strategic context

Government funding decisions in recent years, including the diversion of both old and new resources to co-funded and collaborative initiatives such as Primary Growth Partnerships (PGP) and more latterly the National Science Challenges, have led to reductions in the funding of a number of traditional AgResearch programmes. These funding shifts have been significant and have forced a fundamental re-evaluation of the organisation, its structure and focus, and its revenue models.

In response to these changes, and recognising the organisation's dated facilities, AgResearch identified a bold strategy involving the rationalisation of existing farm assets and the consolidation of its principal activities onto the Lincoln (behind the farm gate) and Palmerston North (post-farm gate) campuses. These changes - and the related asset sale and capital reinvestment plans - are outlined in its first FFP business case adopted in 2012, and confirmed by government in subsequent AgResearch SCIs. Since that time further moves towards consolidation and collaboration in the research sector have seen the Lincoln proposal amended to include Lincoln University and other parties in an expanded **"Lincoln Hub"**. **This is reflected** in an updated FFP business case that was adopted by the Board in December 2015 and signed off by the Minister contemporaneously with this review.

Future Footprint Programme

The FFP involves significant change and disruption across AgResearch, and the process has already been running for some five years. The shift to new facilities will happen over the next two to three years, and **approximately one third of AgResearch's staff will** be relocated to new locations. There has been - and remains - considerable uncertainty over significant aspects of the final outcomes, especially around timing. In addition to this transitional uncertainty, **AgResearch's "Size and Scope" review last year resulted** in a number of research activities being discontinued and others being restructured, with a resulting 61 redundancies. All of these factors have contributed to very weak staff engagement survey results and some organisational fragility.

For all of these reasons, and given the fundamental importance of the FFP **to AgResearch's future** viability, the Panel invested considerable time into understanding the FFP, its current status, and its challenges.

The Panel is aware of the heavy reliance AgResearch has **on Lincoln University's participation in the establishment of the Hub, s 9(2)(b)(ii)**

It is the Panel's understanding that a **number of aspects of Lincoln University's - and consequently the Hub's -** future are in direct government control. The timely resolution of these wider questions is, in the

Panel's view, one of the most significant contributions the government could make to improving AgResearch's position, both now and into the near and longer term future. The Panel notes that the move into new premises at Lincoln is now some three years behind the schedule outlined in the 2012 business case.

The FFP proposals relating to Palmerston North appear to be clear, well considered, and to now **have good momentum. Given the site's role in AgResearch's future, and the various** interconnections with the Lincoln Hub in the context of the reorganisation, the Panel considers that maintaining momentum at the Palmerston North site is very important. In particular, the **'Food HQ' joint venture with Massey University, the development of 'The Factory'** relationship, and the building of new working facilities will all be important tangible indicators of progress to AgResearch staff, helping establish a much-needed sense of momentum and progress.

Strategic positioning

Within this changing and increasingly funding-constrained environment AgResearch continues to focus on core forage and animal genetics programmes that are likely to be central to future improvements in agricultural productivity in New Zealand. Increased collaboration with other research providers - both locally and internationally - and client stakeholders is a significant feature of this new research and funding environment, and AgResearch is positioning itself accordingly. The current economic context is also relevant, with weak dairy prices expected to flow into reduced industry levies, in turn materially reducing the amount of research co-funding available to science providers.

The Panel heard consistent themes from a number of stakeholders relating to an increased interest from global customers around environmental impact, food safety, added value, integrated systems approaches, and food provenance considerations. These issues are receiving increased attention from the AgResearch Board through the use of its discretionary Core Funding and the Panel considers that this response is an appropriate way to build capability and capacity in these new areas.

There did appear to be some disconnect between end-product customer (and therefore client stakeholder) interest in greenhouse gas and similar climate change-related issues on one hand, and the availability of research funding for this purpose from central government and other **sources. That said, a number of AgResearch's programmes** - such as breeding more drought-resistant forage crops - speak directly to the practical aspects of these emerging issues.

This combination of the organisational **transformation, needing to maintain major 'business as usual' research programmes, the commitment to the collaborative hub model, and weakening** near-term revenue opportunities from industry partners together create a significant set of

fundamental challenges for an already stressed AgResearch business model. As a result, the Panel considers that revenue forecasts and business viability will need to be particularly closely monitored over this next two to three-year transition period.

Strategy execution

AgResearch has identified four strategic focus areas for attention over the next business planning period, being:

1. Future Footprint Programme;
2. Core Business Processes;
3. Technology and Analytics; and
4. People Development.

The Panel's observations during the review and as outlined in this report can be considered consistent with, and supportive of, these overarching themes.

The Panel notes that the current FFP change initiative dates back to as early as 2010-11, being confirmed by the 2012 FFP business case, and that it has been characterised by considerable and ongoing uncertainty over that period. This in turn has led to significant disengagement by parts of the workforce, as evidence by successive surveys. The Panel accepts that some aspects of this uncertainty, **and especially those relating to Lincoln University's involvement in the Lincoln Hub, are beyond AgResearch's direct control. This has undeniably made the execution of the organisation's strategy extremely difficult for the Board and the executive team** in a number of respects. Given these significant constraints, the Panel acknowledges the progress that has been made to date in less than ideal circumstances.

Equally, a number of aspects of execution are under direct Board and senior management control. The Panel looked closely at the plans around the various facets of the change process and, generally, found everything that they would expect to see in these circumstances and that, generally, the subprojects were tracking to plan. The Panel notes that senior management has been using the FFP **as an intentional vehicle for reviewing and updating all of AgResearch's core operational policies and functions**, and supports this approach.

The Panel was, however, surprised to find that some aspects, such as the IT and communications strands of this transitional work for example, have been initiated late in the process. While these subprojects do not appear to be major obstacles to the transition currently, any major slippage would likely impact negatively on the wider change initiative. It appears to the Panel that there are a number of contributing factors to these subproject delays, including:

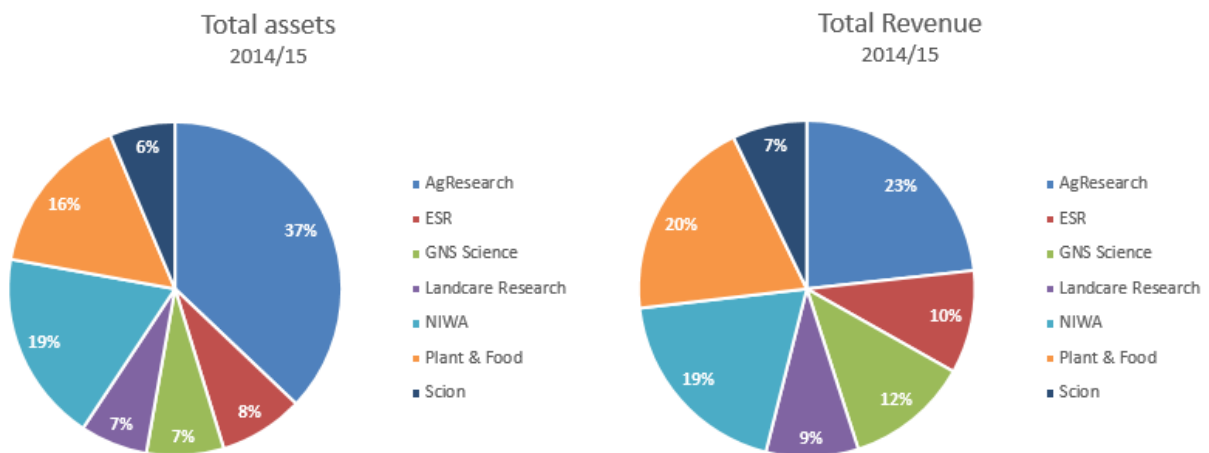
- the general uncertainty about the FFP, its scope, and the timing, all meaning that making decisions too early would have carried greater risks;
- **difficulty in hiring critical staff, and the resultant 'lag effect' in implementation;**
- a tendency on the part of management to not put projects up to the Board for approval until they are at a very advanced stage of planning;
- the sheer weight of change initiatives being carried simultaneously by the organisation; and
- a relative lack of strong capital project management skills and experience at this scale, at both the Board and senior management levels.

The Panel found all the expected strategic documents, plans and implementation reports in place for the transformation programme, but did not find them particularly well linked or integrated. Further, as noted in section 5.1 above, the Panel was surprised that there was not a clearer reporting of detailed milestones at the Board level. The Panel believes that greater oversight of performance metrics by the Board would support greater clarity and urgency around execution, and provide more effective linkages between the governance and management layers more generally.

5.3 Financial viability and sustainability

AgResearch is the largest CRI in terms of total assets and revenue, as can be seen in Figure 1 below. **AgResearch's assets (\$270m) account for around 37% of total CRI assets while AgResearch's revenue (\$155m) make up approximately 23% of total CRI revenue.**

Figure 1: **CRIs' assets and revenue, 2014/15**



AgResearch's financial performance over the past four years has been poor relative to the other CRIs. As seen in Table 1 below, AgResearch has reported one of the lowest returns on equity (RoE) of all the CRIs.

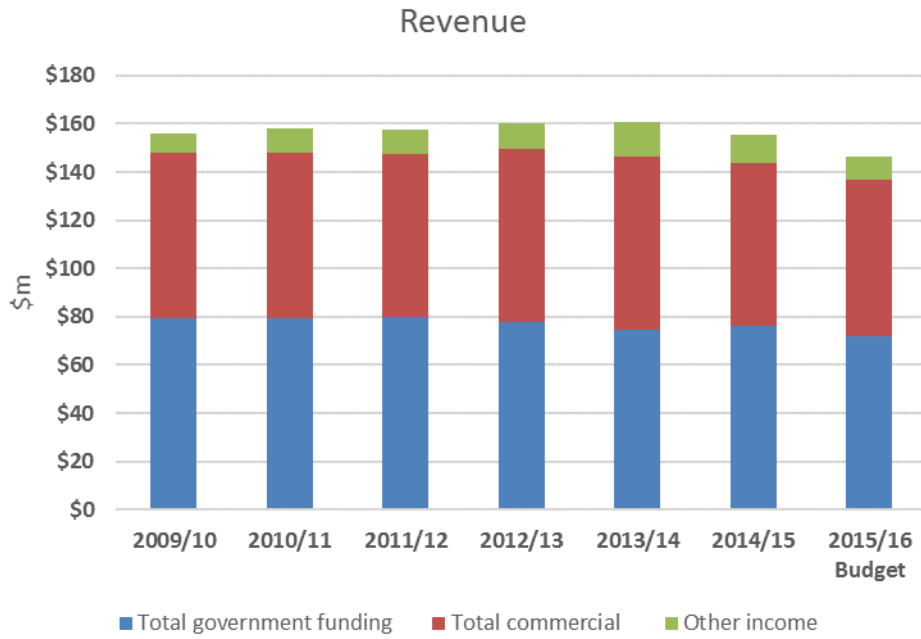
Table 1: Reported financial performances of CRIs (2011/12 to 2014/15)

Average financial performance of CRIs (2011/12 to 2014/15)							
	Ag Res	ESR	GNS	Landcare	NIWA	Plant & Food	Scion
Return on equity	3.9%	3.7%	7.8%	4.9%	5.3%	5.5%	7.2%
EBITDAF/Revenue	9.3%	11.7%	9.8%	10.4%	15.7%	8.8%	12.7%

AgResearch's reported return on equity (RoE) over the period averaged 1.4% p.a and 3.9% when adjusted for asset revaluations. This is well below the 6% to 8% target RoE for CRIs. However, it should be noted that AgResearch forecast a return below the 6% to 8% target in its SCIs and that its financial performance has been adversely affected by restructuring costs and the costs of the FFP (refer Table 3 below).

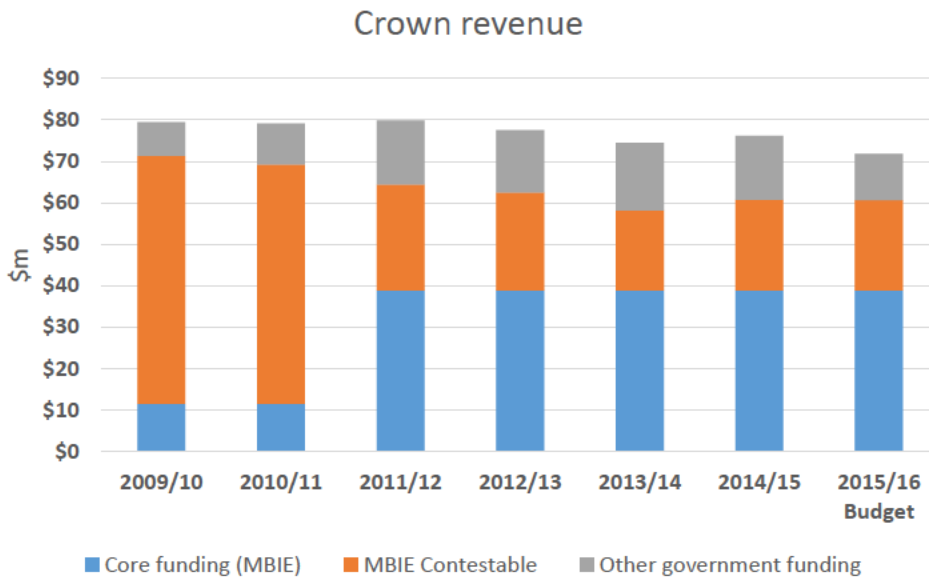
The company's relatively weak financial performance is driven largely by the declining revenue in recent years, as seen in Figure 2 below. Budgeted revenue for the 2015/16 financial year is \$146m, a decline of 6% from 2009/10 levels and a decline of 9% from the 2013/14 peak. AgResearch's revenues were adversely affected during the period by the sale of the Ruakura abattoir and some farms.

Figure 2: Revenue 2009/10 – 2015/16



Crown revenue has gradually declined over this period from 2011/12 as can be seen in Figure 3 below.

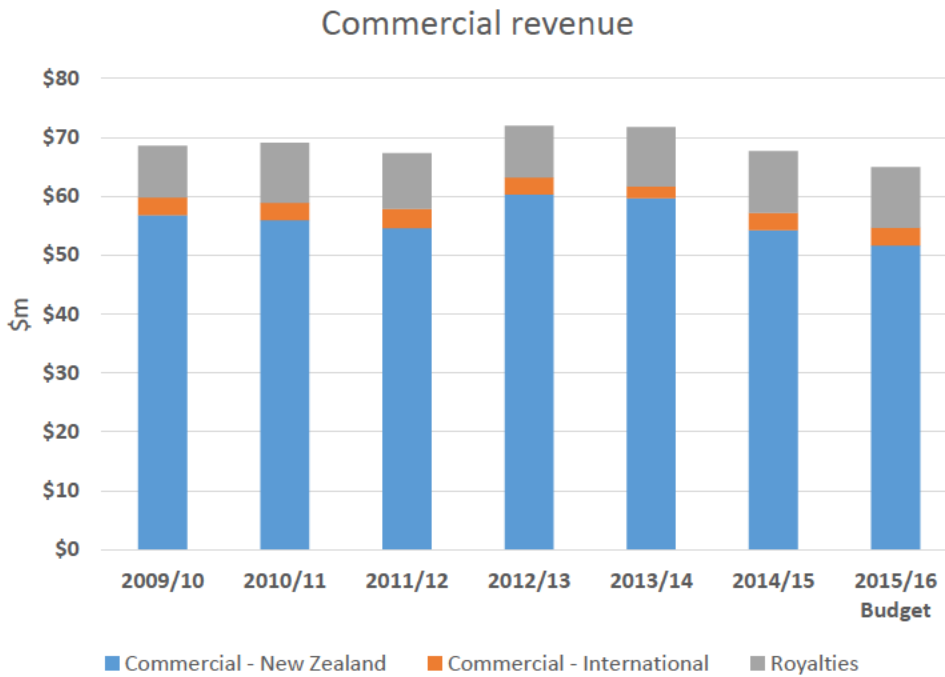
Figure 3: Crown revenue – 2009/10 to 2015/16



MPI revenue (excluding PGPs) declined in the three years since 2012/13 by \$4.2m or 60%, with a significant drop in the period FY15 to FY16. AgResearch indicates that modest improvement is expected into FY17 and FY18 as more funding becomes available for climate change and Green House Gas (GHG) studies. Other government (mainly MFAT) revenue also declined and over the same four-year period, dropping by approximately \$2m (81%). CRI and university funding has also declined over the four-year period by \$2.5m (27%) reflecting a general tightening of financial conditions.

Commercial revenue is also at its lowest levels over the 2009/10 – 2015/16 period as seen in Figure 4 below.

Figure 4: Commercial revenue – 2009/10 to 2015/16



A number of external events outside AgResearch’s direct control accounted in part for the poor financial performance in recent years. 2012/13 was a drought year impacting farm and science revenues. Asset sales, in preparation for major upcoming investment, also resulted in falling revenues (and a corresponding increase in cash reserves and one-off gains in comprehensive income on some of the sales). AgResearch is expecting revenues to recover in the coming years and is forecasting modest revenue growth across many areas of its business, as can be seen in Table 2 below.

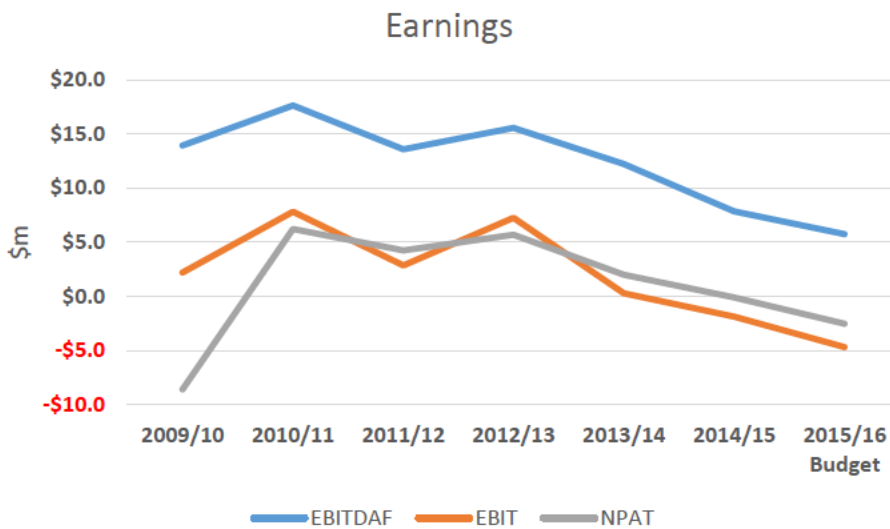
Table 2: Revenue growth, actual and forecast

Revenue growth per annum*	Actual (2012-16)	Forecast (2016-20)
Core funding (MBIE)	0%	0%
MBIE Contestable	-4%	8%
Other government funding	-8%	4%
Commercial - New Zealand	-1%	3%
Commercial - International	-3%	0%
Royalties	2%	3%
Other income	-2%	-9%
Total	-2%	2%

*Per annum calculated as compound annual growth rate

Declining revenues have translated into decreased earnings, in terms of EBITDAF, EBIT and NPAT, as seen in Figure 5 below.

Figure 5: AgResearch's earnings, 2009/10 to 2015/16



There has been a steady fall in earnings from 2010/11 to present:

- EBITDAF has fallen from \$18m to a budgeted \$6m;
- EBIT has fallen from \$8m to a budgeted -\$5m; and

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- NPAT has fallen from \$6.2m to a budgeted -\$2.5m.

As can be seen in Table 3 below, EBIT volatility from 2010/11 to 2015/16 has been exacerbated by the FFP, restructuring costs, write downs and asset sales.

Table 3: Contributions to EBIT volatility⁴

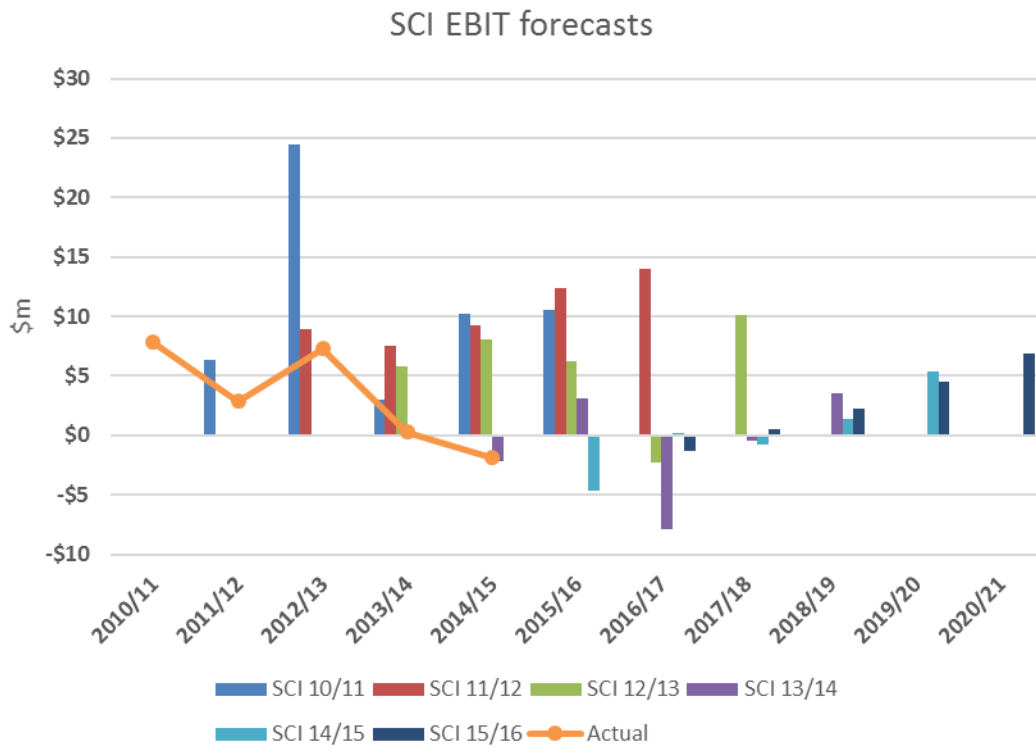
Contributions to EBIT volatility	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	Total
Restructuring costs	(\$2.2m)	(\$1.0m)	(\$1.1m)	(\$1.1m)	(\$1.6m)	(\$4.0m)	(11.0m)
FFP costs			(\$0.4m)	(\$1.4m)	(\$2.8m)	(\$3.4m)	(\$8.0m)
Write downs	(\$1.1m)	(\$5.9m)	(\$0.8m)		(\$2.5m)	(\$1.7m)	(\$12.0m)
Divestment income			\$2.7m	\$2.8m		\$2.7m	\$8.2m

Valuation write downs and asset sales occur in many organisations for a variety reasons and AgResearch is not unique in this respect. However, the slow restructuring process and the costs **associated with the FFP have had a material negative impact on AgResearch's earnings over the past six years.**

SCI forecasts of earnings seem to become more accurate as projections approach nearer term, as would be expected. However, there is still a distinct contrast, as seen in Figure 6 below, between the declines in actual earnings over time and the continued upward trend in forecasts.

⁴ Data from AgResearch.

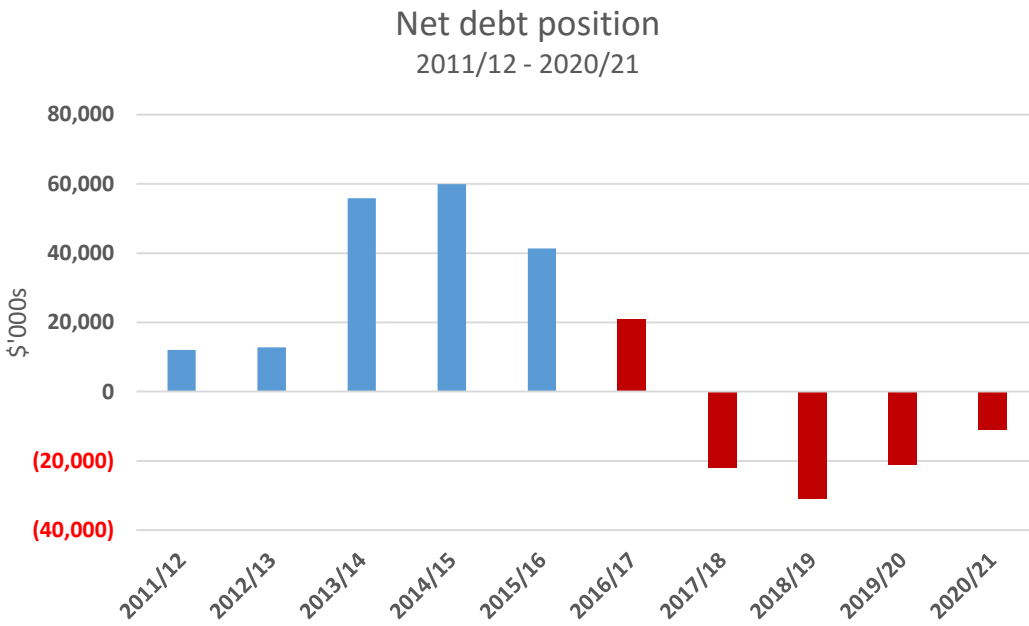
Figure 6: SCI EBIT forecasts vs actual EBIT



For four of the last five years actual EBIT has underperformed budget EBIT. In response to the financial challenges in late 2014 AgResearch undertook a Business Model review with a focus on new science revenues and performance, process and pricing improvements. There are some early signs of improvements as the plan is being implemented.

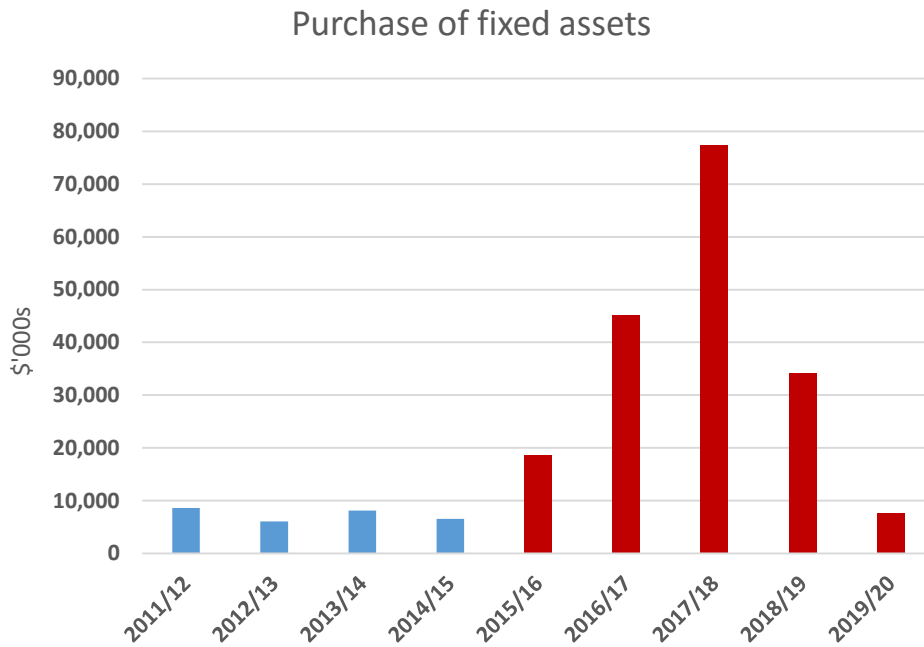
The challenge going forward for AgResearch is to increase revenues and monetise the impacts it makes on the agricultural sector. However, the overall outlook is fairly weak, and AgResearch is undergoing considerable change. As indicated in Figure 7 below, reserves have been built up by selling assets (for example, the sale of the Ruakura abattoir in 2014/15 and the Flock House dairy farm in May 2014).

Figure 7: Net debt position



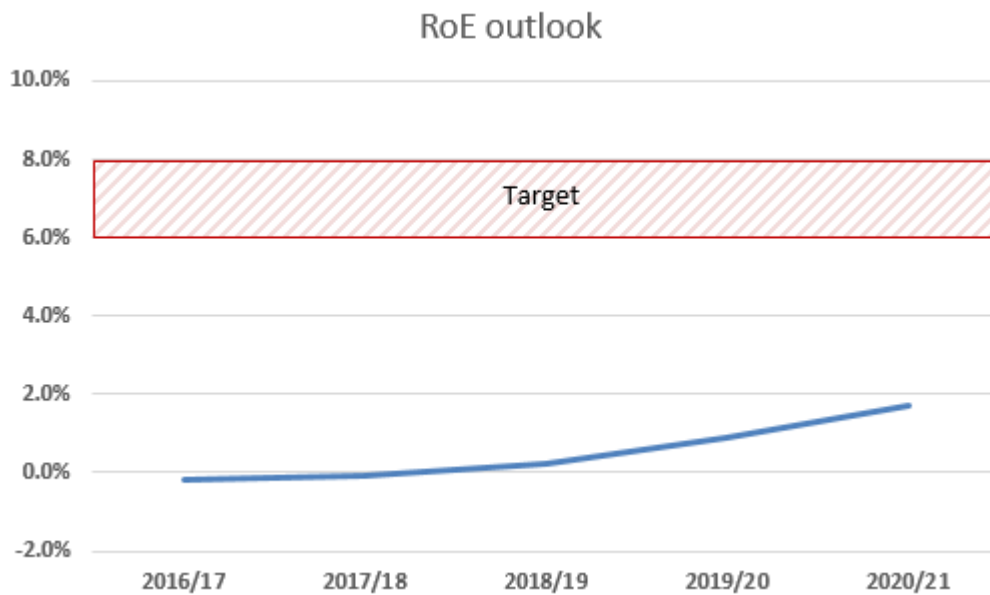
These reserves are in preparation for major FFP-related investment which will be partly funded by debt (peaking at \$34m in 2018/19). As seen in Figure 8 below, investment over the next four years will be considerably higher than investment in recent years (reaching \$77m in 2017/18).

Figure 8: AgResearch's investment in fixed assets



AgResearch, in its latest SCI forecasts, projects a low RoE for the coming five years. 2016/17 and 2017/18 are expected to be marginally negative and the average RoE over the five-year period is projected to be 0.5%. This is substantially below AgResearch's target level of 6-8% as illustrated in Figure 9 below.

Figure 9: RoE outlook



Looking ahead, AgResearch faces several risks that could impact on its revenues and financial performance. These risks include:

- changes to government funding levels;
- a sustained degeneration in dairy prices (this would affect levy income);
- the investment appetite of agri-business; and
- **the returns from AgResearch’s research farms**

5.4 People and culture

Consistent with all large organisations, people are key to realising the vision of AgResearch. The staff of AgResearch are committed to scientific research and are its most valuable resource.

AgResearch has embarked upon significant change to an organisation highly regarded and valued by the rural sector. The evidence available indicates that AgResearch’s strategy is bold, carefully planned and well documented. There has been extensive consultation with affected parties, including staff and external stakeholders.

Planning is for staff redundancies and relocations as well as for implementation of a coaching capability programme as the science focus widens to include Farm Management Systems and

Applied Sciences. As noted in section 3.1 above, in the period since 2009/10, the total staff complement has reduced from 824 FTEs to 625 (April, 2016).

AgResearch is also an organisation under some considerable stress as it adjusts to changing patterns of demand from its stakeholders, shifts its scientific focus, and as it implements its FFP:

- staff numbers have been reduced from 824 FTEs in 2009/10 to 625 in April 2016;
- considerable relocation of staff is planned in the coming years (see Table 4 below);
- assets are under-utilised, with an average utilisation rate of around 60%; and
- revenues are declining, down from \$161m in 2013/14 to \$146m in 2015/16.

The scale of the adjustments involved with the FFP is illustrated in indicative terms in Table 4 below. Staff numbers at Ruakura and Invermay are expected to decline by more than half, with the major increases in staff numbers expected at Lincoln.

Table 4: Location and indicative number of AgResearch staff before and after the FFP

Headcount		Ruakura	Grasslands	Lincoln	Invermay	Total
Before	Science	135	197	87	61	480
	Non-science	97	47	35	30	209
	Total	232	244	122	91	689
<hr/>						
After	Science	50	237	169	22	478
	Non-science	35	45	114	13	207
	Total	85	282	283	35	685

Risks abound with such a major organisational change and among the 59 risks documented on the Risk Register as at 20 January, 2016, are five which relate to the impact of change on staff:

- number 1: the risk of distraction or disengagement of staff with the transition and relocation of staff, resources and equipment between campuses;
- number 25: staff disengagement - as a result of restructuring or failure to adhere to previous commitments made to staff;
- number 42: staff focus during Lincoln Hub planning and design. (The Panel notes that this could well be expanded to include rationalisation of the other three sites);

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- number 50: Overseer - loss of critical personnel. (The Panel notes that this could well be expanded to include all areas of significant reorganization); and
- number 55: staff morale - which would impact on productivity, reduced engagement and increased staff attrition. (The Panel notes that this risk replicates that signalled in Risk number 1).

Notably, the Register does not include the risks of:

- significant change to **the AgResearch's ability to deliver** "business as usual" **contracts**, or
- delays in recruiting key staff, notwithstanding that this appears to have had a material impact on implementation of the FFP in recent times.

There has been careful planning around facilities and core staff competencies in **order to 'right size'** the organisation for the future (for example, with regard to capability, facilities and location). Planning has included involving the Scientific Advisory Panel in consideration of the Science Plan. That Panel in April 2015 acknowledged the challenges **including that of recruiting 'thought leaders' internationally, cautioning that such people are hard to find and attract to New Zealand.**

Good initiatives include succession plans, retention plans and relocation plans, and a relocation assistance package has been put in place. Staff have the opportunity to express views about the FFP change management process and there is an undertaking that feedback will be provided to all staff who submit comments. Other initiatives, such as the active recruitment of additional post-doctoral students - including from overseas - provide workforce flexibility and introduce fresh thinking into the organisation.

s 9(2)(b)(ii)

The CEO and Board are keenly aware of this feedback from staff.

It is clear that uncertainties around the Lincoln Hub approvals, the consequent delays to the change programme, uncertainty about job security and sheer change fatigue are all impacting negatively on staff morale. To ensure consistent messaging throughout the organisation, reporting from the Board and CEO down could be more formalised. Continued clear communication cascading down from the CEO to his direct reports will be important. Consistent messaging may help address many of the negative responses in the staff survey. The Panel also heard a view that it would be helpful if the CEO and senior managers were more visible internally and reinforced the message that staff have a vital role to play in securing the future of the organisation.

5.5 External relationships and communications

The Panel met with a number **of AgResearch's key stakeholders over three days**. The list of interviewees is attached as Annex 4. While this series of meetings was not intended to be exhaustive, the Panel endeavoured to meet with a representative sample **of AgResearch's major** and strategically important stakeholders. Interviewees were forthcoming and candid in their comments, and some common themes emerged. These were reinforced by the findings of an AgResearch-commissioned stakeholder relationship research report dated July 2015.

AgResearch is viewed as:

- open, honest, collaborative and helpful by almost all external stakeholders;
- being knowledgeable, professional, and having strong science capability;
- being innovative in its research, exhibiting for example, considerable flair in its applied research into GHG emissions;
- **having some "dream teams"** comprised of some of the best in their field internationally;
- being expensive but nevertheless adding significant value to its stakeholders; and
- being prepared to make the big, hard decisions (for example, the closure of the Wallaceville site and the strategy around FFP).

The Panel heard almost unanimous commentary about the length of the FFP change process and the considerable toll it was seen to be taking on staff morale, with related concerns about impacts **on AgResearch's capability and capacity**. Interviewees were all aware of the scale of the changes associated with FFP and felt that AgResearch had on balance done a good job of keeping them **informed given the organisation's principal responsibility to its staff**. It was, however, also recognised that the restructuring had been drawn out and difficult for many, and there is a clear view that the company now needs to be advancing the Lincoln Hub as quickly as it possibly can.

Many stakeholders noted that the company had become more inward-focused and harder to work with during recent years as a result of the protracted implementation of FFP. As one stakeholder put it:

“It is time now for the company to raise its head above the parapet and engage with its stakeholders in building meaningful long-term relationships again.”

The company was seen by some as acting more as a contracted R&D provider rather than a strategic partner to its stakeholders. Several stakeholders sought more engagement at the senior level, including at the CEO-to-CEO and Board-to-Board levels. In this regard it is encouraging to see that the number of stakeholders who prefer to work with AgResearch has increased in **AgResearch’s latest stakeholder survey**. Engaging in more innovative pricing strategies was suggested as one way of encouraging blue-skies thinking and building longer-term relationships. For example, one major company the Panel spoke with would be open to exploring a multi-year retainer, rather than just a fee-for-service basis, for its relationships so as to incentivise capacity retention and more blue-sky thinking by AgResearch. On balance, the Panel was left with the impression that AgResearch is probably not yet very systematic or proactive about selling strategic services.

5.5.1.1 Working with government

Central and local government are key stakeholders and funders of AgResearch. MBIE contestable funding accounts for around 14% of its revenue and government funding in total accounted for around 49% in the 2014/15 financial year.

Some government agencies expressed concerns about AgResearch losing its capability and capacity. Two agencies also noted concerns about its ability to deliver on its contractual **obligations. MBIE noted that in 2012/13 AgResearch was the worst performer amongst the CRI’s** in terms of its ranking against contracted deliverables. MBIE also noted that AgResearch had responded well more recently **and was “now getting some golds”**.

Table 5 **below provides MBIE’s assessment of AgResearch’s delivery against its contracts for the period 2012-2015.**

Table 5: MBIE assessment of AgResearch's delivery against contract

MBIE's Assessment of AgResearch's Contract Delivery					
	Gold	Green	Amber	Red	Total
2011/12	1	16	4	0	20
2012/13	0	14	2	1	17
2013/14	0	11	4	0	15
2014/15	3	11	1	0	15

The four **contracts** rated **amber** in **2013/14** accounted for **25%** of **AgResearch's** contracts with MBIE by value for that year.

Most importantly, the Panel is concerned that AgResearch faces a significant challenge to adapt to the changing priorities of the central government in science funding. The Panel understands, for example, that the government is encouraging more applied research, a greater focus on post-farm gate research, and more industry-led and co-funded research. It is critical, **in the Panel's** view, that AgResearch is anticipating, and flexible enough to respond to, the changing priorities of its largest funder and that these changing priorities are communicated clearly by the government to AgResearch

5.5.1.2 Research partnerships

AgResearch has some strong international collaborations through major international project teams such as, for example, those involved in methane-related studies of animal rumens and diet, and farmer-led mitigation strategies in response to climate change. Its international reputation is strong enough to attract highly talented post-doctoral research staff and scientists from around the world.

AgResearch is **seen as being at the heart of many of the government's science programs**; leading **the 'Our Land and Water'** National Science Challenge and being involved in six others. It was seen as working well with the universities, which in turn respected the high quality research undertaken by AgResearch. Beyond the universities, collaboration with other New Zealand research organisations seems to operate well at a researcher level. Examples range from work with industry bodies, such as Beef + Lamb, to projects with Waikato Tainui and the Waikato Regional Council in the context of restoring water quality in river catchments.

5.5.1.3 Commercial contracting

Companies that have engaged AgResearch to provide technical expertise were complimentary about the commitment and deep expertise of its staff. **AgResearch's brand and independence are**

valued, and while it is viewed as expensive, stakeholders consider that it typically provides value. Much product innovation has come from AgResearch, with examples given including OVERSEER, nutrient management tools like nGuru and MitAgitor, and SustaiN which accounts for 50% of fertiliser company **Ballance's nitrogen sales**. **AgResearch's overheads were seen to be high** but it was recognised that pastoral science is increasingly capital intensive. Interviewees all recognised the importance of maintaining an integrated approach to farm system level issues.

It was suggested by some that AgResearch could do more to leverage its brand internationally, and that the company also needs to better demonstrate the importance of its science so as to secure its future cashflows. Suggestions included the establishment of medium-term research plans with stakeholders, and encouraging staff to terminate unfruitful projects earlier in the knowledge that the funding would still be available for other potentially more productive activities.

The AgResearch-commissioned stakeholder relationship report shows stakeholders recording improved satisfaction levels for both service delivery and contribution to strategy in 2015. Both of these scores are still behind the results from the 2013 survey, however. Consistent with the **panel's** findings elsewhere, the 2015 report also shows an almost unanimous concern amongst stakeholders about the negative impacts of the prolonged FFP transition process and negative media coverage **on AgResearch's service quality**.

Stakeholders also considered blue skies research to be important: "If Henry Ford had asked his customers **what they wanted they would probably have said a faster horse**". Stakeholders considered that core science is fundamental to meeting the increased productivity, profitability, and lowered environmental footprint challenges faced by the agricultural sector.

Communications

A communications team was established in 2012 with less focus on marketing and external communications and more focus on internal communications and stakeholder engagement. A review in 2014 identified the need to refocus the function in the context of:

- evolving strategy and business model;
- ongoing organisational change;
- changing communication needs; and
- growing demand.

A Communications and Marketing Roadmap for the period 2015-2018 was approved by the Board in March 2016 and recruitment for a full-time Communications and Marketing Director is now underway. The Roadmap details key findings including the feedback of staff who report:

- lack of clarity about AgResearch's future vision, direction and strategy;
- lack of trust in internal communications;
- negative perceptions of senior leadership; and
- low engagement scores.

In particular, Level 3 Leaders emphasised the importance of communications to AgResearch's success including that communications need to be clear, more consistent and aligned both internally and externally across all management layers and communication channels.

The Communications and Marketing Roadmap is a valuable document which discusses media analysis, the focus, scope and evolution of the communication function. It includes recommendations regarding communications with impact, evidence of recent progress made over several fronts and detailed discussion of strategic goals. It will be important that this function is adequately resourced. The Roadmap contains an implementation plan through to 2017/18. Detailed implementation planning will include key performance indicators for the delivery of the Roadmap including:

- tracking shifts in external stakeholder and staff trust, confidence and understanding of AgResearch through stakeholder and staff engagement surveys;
- media monitoring and analysis to track performance against key indicators as benchmarked in the 2014/15 survey completed to inform the Roadmap; and
- analysis of communication channel performance.

Associated risks identified include that more investment in communications function may attract criticism. Against that, AgResearch does need to invest in better relationships with internal and external stakeholders for staff morale and marketing purposes. There does not seem to have been significant focus in past board reports on this function. Given its importance, the Panel considers that there should be clear communications deliverables which are monitored and reported on monthly through to the Board.

5.6 Working with Māori

Through the adoption of a Māori Business Case in May 2015, and as confirmed in its 2015 SCI, the AgResearch Board has committed to strengthen its iwi/Māori stakeholder support function and the organisation's general capability in this area. The Panel was impressed with the level of detail in the business case, and its integrated approach to this largely nascent sector, including specified targets and staff accountabilities. In the Panel's view the approach being taken recognises the reality and challenges of building deep organisational capacity in a technically and culturally demanding area, and proposes a realistic way to advance this over time.

In wide-ranging conversations with many different team members across the organisation the Panel found consistent recognition and appreciation of the initiatives underway, and a universally-held view of the significant opportunity for AgResearch to both add value to **iwi/Māori and to simultaneously** develop long-term fee-paying clients to help underpin its own research efforts. AgResearch has a small number of longstanding and successful relationships with for example **s 9(2)(ba)(i)**, while other relationships, such as those **withs 9(2)(ba)(i)**, while still very early stage are now growing.

Some AgResearch staff with outward facing roles made **observations about iwi/Māori enterprises having “some of the best farm managers in the business”, and the owner entities having more holistic outcome objectives** which included social/cultural, environmental and financial outcomes. Given the increased prominence of **‘social contracts’ and environmental and climate change-related issues** in wider society – **a trend that appears, from the Panel’s interviews with customers and producers, to be strengthening** – the Panel wonders if new approaches developed with the **emerging iwi/Māori sector might usefully, and profitably, inform all of AgResearch’s product and service offerings** over time.

For any of these potential benefits to be realised, however, AgResearch will need to invest an appropriate level of time, resources and organisational authority into establishing its own capability and capacity. This is especially so, given the deep relationship building required as a **prerequisite to any sustainable transactional business with iwi/Māori enterprises. In the Panel’s view the iwi/Māori development function is not adequately resourced at present to make a material, let alone sustainable, difference to AgResearch’s capacity or capability in the long run.**

The directly accountable iwi/Māori roles must meet the needs of their internal clients, as well as **have the time to undertake the extensive relationship building work required with iwi/Māori** stakeholders. This is widely recognised as a demanding and challenging space, with roles often being high stress and therefore of short average tenure. The Panel accordingly considers that a greater critical mass of staff capacity is important for both short-term staff support and longer-term succession planning reasons.

In summary, the Panel considers that this function deserves greater support in light of the maturing market, the consistency with wider market trends (such as social license and environmental considerations), the shared AgResearch-wide view of the opportunity to both add and receive value, and the solid planning framework that is already in place. In addition to considering that additional budgetary and staff resources should be made available to this team, **the Panel’s view is that the placement of the iwi/Māori development function at a more senior level in the organisation would add considerably to its credibility and influence in the eyes of both internal and external stakeholders.**

5.7 Risk management

AgResearch has begun establishing a robust risk management process throughout the organisation. This is a major culture change for any organisation and it is reasonable to expect this could be a three-year journey before changes are embedded in a fully-aligned and integrated risk management framework. AgResearch commenced this process using the principles and guidelines of the AS/NZ ISO 31000:2009. The Panel rates the risk management programs as “early stage” at best. The journey has commenced, although much more slowly than the Panel would have expected in light of the WPC80 report of 2014.⁵

The brand damage as a result of WPC80 was not helpful and - the merits or otherwise as to the fairness of that report aside - the case provides a number of powerful reminders of what procedures should be carried out in risk management generally.⁶ Examples include, “Risk assessment: staff must receive adequate training in risk assessment procedures, which should be systematic, transparent and credible”. Noting that this report was released two years ago, the Panel was surprised that, notwithstanding the Christchurch earthquakes and their direct impacts on AgResearch, the organisation does not have Business Continuity Plans or a Crisis Management Plan in place. It is noted that a Crisis Management Plan is now being developed.

On reviewing the Risk Register, as at the 20th January 2016, the Panel considers that many of the controls which are stated as mitigating the inherent risks need to be tested. It is important to confirm that the controls and assurance programmes are functioning, so that the Board can have comfort that the risk is in fact being mitigated down to the residual risk level.

Overall, the risk management function has not, **in the Panel’s opinion**, been getting the focus that such an important area requires, especially in the context of the high-risk FFP implementation. The risk management function currently reports into the Finance team. While such a reporting **line is not unusual, in the Panel’s view** AgResearch could usefully consider establishing a dedicated position, such as a Chief Risk Officer for example, whose primary role would be to act as a single point of integration for all risks the organisation faces. The role would be responsible for ensuring that all risks have been properly assessed and rated in accordance with an embedded Risk Matrix framework. It would also facilitate the various assessments throughout the organisation. Any such position should have a dotted reporting line into the Chairperson of the Audit & Risk Committee and could sit at the executive team level. Although it is not unusual for

⁵ “**The WPC80 Incident; Causes and Responses** Government inquiry into the whey protein concentrate contamination incident November 2014”.

⁶ See, for example, the lessons section on pages 10 and 11 of the WPC80 report cited above.

Health and Safety to be separate there is no reason why these two risk areas should not be combined.

Finally, the Panel notes that of all of the 59 risks outlined in the Risk Matrix only one (being funding from the government) is recorded as a high residual risk. All others are rated as being either moderate or low; the lowest ratings on a five-point scale. While management appears to have a high level of confidence that these other risks are well under control, the Panel does not consider this to be credible and suggests that the risk management framework be reviewed as a priority.

5.8 Information services

While a review was carried out on AgResearch's information services (IT) systems (both infrastructure and software) in 2012 that recommended various changes, including increased investment, **not enough progress appears to have been made with respect to AgResearch's IT infrastructure and software from 2012 to 2015.** Data is core to the success of AgResearch long term, especially in the area of genetic research and the related analytics. It appears that there is considerable work required to bring AgResearch's data management up to best practice. A strategy to address this is important as it is not a quick fix.

The Panel was pleased to see that the newly-appointed Chief Information Officer is moving quickly to implement a robust strategy around disaster recovery, and is upgrading equipment and aligning software. In addition to increasing the security and resilience of the system, these measures will also improve costs in the longer term and enable staff to be more effective and efficient.

The data held by AgResearch is critical intellectual property, **and is increasingly valuable in a "Big Data" world.** Accordingly, data integrity, ease of access, and system speed and reliability is critical. Establishing and embedding appropriate policies and enforcement processes will take time and consistent attention.

Maintaining the integrity of its data is part of **AgResearch's** SCP, and it appears the policy to date has been a "one-size-fits-all approach". The Panel has not seen any reporting or measurements on data integrity at the Board level, and believes that this should be instituted

The Panel was again surprised that this core organisational function, that is both mission critical **and a core plank of AgResearch's envisaged future, appears** until recently to have not received the required level of investment or management priority. Greater focus and investment will be required to ensure that AgResearch has the technical platforms in place to support its future research programmes and market opportunities.

ANNEXES

Annex 1: Statement of Core Purpose for AgResearch

Purpose

AgResearch's purpose is to enhance the value, productivity and profitability of New Zealand's pastoral, agri-food and agri-technology sector value chains to contribute to economic growth and beneficial environmental and social outcomes for New Zealand.

Outcomes

AgResearch will fulfil its purpose through the provision of research and transfer of technology **and knowledge in partnership with key stakeholders, including industry, government and Māori,** to:

- increase the value of these industry sectors to the New Zealand economy through the development of high-value pastoral-based products and production systems that meet current and future global market needs
- position New Zealand as a global leader in the development of environmentally sustainable, safe and ethical pastoral production systems and products
- **ensure that New Zealand's pastoral sector is able to protect, maintain and grow its global market access**
- increase the capacity of rural communities and enterprises to adapt to changing farming conditions in ways that balance economic, environment, social and cultural imperatives.

Scope of Operation

To achieve these outcomes, AgResearch is the lead CRI in the following areas:

- pasture-based animal production systems
- new pasture plant varieties
- agriculture-derived greenhouse gas mitigation and pastoral climate change adaptation
- agri-food and bio-based products and agri-technologies
- integrated social and biophysical research to support pastoral sector development.

AgResearch will work with other research providers and end-users to contribute to the development of the following areas:

- biosecurity, land, soil and freshwater management
- climate change adaptation and mitigation
- food and beverage sector (including foods for human nutrition and health, food technologies and food safety).

Operating principles

AgResearch will:

- operate in accordance with a Statement of Corporate Intent and business plan that describes how AgResearch will deliver against this Statement of Core Purpose, and describes what the shareholders will receive for their investment
- meet its obligations as a Crown Company and remain financially viable, delivering an appropriate rate of return on equity
- develop strong, long-term partnerships with key stakeholders, including industry, **government and Māori, and work with them to set research priorities that** are well linked to the needs and potential of its end-users
- maintain a balance of research that both provides for the near-term requirements of its sectors and demonstrates vision for their longer-term benefit
- transfer technology and knowledge from domestic and international sources to key **New Zealand stakeholders, including industry, government and Māori**
- develop collaborative relationships with other CRIs, universities and other research institutions (within New Zealand and internationally) to form the best teams to deliver its core purpose
- provide advice on matters of its expertise to the Crown
- **represent New Zealand's interests on behalf of the Crown through contribution to science** diplomacy, international scientific issues and/or bodies as required
- seek advice from scientific and user advisory panels to help ensure the quality and relevance of its research
- establish policies, practices and culture that optimise talent recruitment and retention
- **enable the innovation potential of Māori knowledge, resources** and people
- maintain its databases, collections and infrastructure and manage the scientific and research data it generates in a sustainable manner providing appropriate access and maximising the reusability of data sets
- seek shareholder consent for significant activity beyond its scope of operation.

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This statement provides key guidance to the AgResearch Board for developing its Statement of **Corporate Intent, which sets out AgResearch's strategy for delivering against its core purpose.** **AgResearch's** performance will be monitored against the outcomes and operating principles in this statement.

Annex 2: Brief biographies of the members of the Review Panel

Philip Barry (Panel Chair)



Philip Barry is a founding Director of TDB Advisory Ltd, a boutique corporate advisory company. Phil has widespread and in-depth expertise in corporate finance, economics, public policy analysis and regulatory reform. Phil has chaired a number of taskforces and reviews in recent years, including the Parliamentary Appropriations Review Committee; the **government's Technical Advisory Group on Air Quality Standards**, and three previous four-year rolling reviews of Crown Research Institutes. As a former Director at the Treasury and Advisor at the Department of the Prime Minister and Cabinet, Phil provided strategic advice and led the implementation of structural change and regulatory reform in several parts of the New Zealand economy. During the mid-1990s, Phil served as Counsellor Economic in New Zealand's Permanent Delegation to the OECD in Paris. Phil has an MBA in Finance and Accounting from the University of Rochester, New York (where he was awarded membership of Beta Gamma Sigma) and a BA Hons (1st class) in Economics from Victoria University, Wellington. He is a NZ National Research Council scholarship, Reserve Bank scholarship and Fulbright Fellowship holder.

Rob Flannagan



Rob Flannagan is a Director of Airwork Holdings Limited, Chairman of New Zealand Guardian Trust Limited, Chairman of the Financial Services Council of New Zealand, Advisory Director to Global Film Solutions Limited and also to the Ministry of Education Infrastructure Services. He was a former Manager Director of the Tower insurance Group of companies. CIO of the Promina Group and Managing Director of Guardian Trust Limited. An experienced Director in a range of entities, from small private companies to publicly listed companies (NZX and ASX), including start-ups, mergers and acquisitions and sale of entities. He has considerable experience in leading strategic reviews, risk management and change in governance requirements as a result of a changing regulatory environment, in New Zealand, Australia, Fiji, Samoa, American Samoa, Tonga, PNG. In 2013/2014 he was a member of the KiwiSaver Default Provider Evaluation Team responsible for evaluating and recommending to Government the Default KiwiSaver providers for the next seven years. He is a Chartered Accountant, OPM (Harvard Business School), Fellow of the Institute of Directors and a Justice of the Peace.

Anake Goodall



Anake Goodall is a Director of Meridian Energy, and Chairs the Ākina Foundation and the Hillary Institute of International Leadership. He is also an Adjunct Professor at the University of Canterbury's Ngāi Tahu Research Centre, is a trustee of The Gift Trust, and is on the establishment board of Tē Pā o Rākaihautū, a special character school based in Ōtautahi Christchurch. He is a past establishment board member of the Environmental Protection Authority, and past member of the Te Waihora Co-Governance Group, the Canterbury Earthquake Recovery Review Panel, and two previous four-year rolling reviews of Crown Research Institutes. He has also held roles in numerous private, start-up and community organisations. Anake has previously been the CEO of Te Rūnanga o Ngāi Tahu and before that was responsible for managing all aspects of Ngāi Tahu's Treaty settlement process. He has a Master of Public Administration from Harvard's Kennedy School of Government and an MBA from Canterbury University; and is a New Zealand Harkness Fellow.

Dame Alison Paterson



Dame Alison's career commenced as a chartered accountant operating a sole farm accounting practice specialising in taxation, estate and trust planning. She served on the Reserve Bank Board from 1996 until 2010 including as deputy Chair and Chair of the Audit Committee. Dame Alison served as Chair of several organisations including Landcorp Farming, Abano Healthcare, Crown Irrigation Investment and Waitemata Health and as Director at Metrowater and Transpower. Dame Alison has also served two terms on the Massey University Council including as Chair of the Audit Committee and Pro-Chancellor. She has nine current governance roles, chairing six including the Forestry Industry Safety Council, the FarmIQ PGP and the commercial development arm of Te Aupōuri Rūnanga. Dame Alison was the Top 200, QBE Insurance Chairperson of the Year in 2010. She was inducted into the Business Hall of Fame in 2015. She is a Fellow of the University of Auckland, a Distinguished Fellow of the Institute of Directors, a Fellow Chartered Accountant and was awarded a Doctor of Commerce degree from Massey University in 2009.

Annex 3: List of documents / information provided to the Panel

DOCUMENT / INFORMATION
A. Understanding the business
1. Statement of Core Purpose
2. Statement of Corporate Intent
3. Copies of the detailed workings for the 5 year SCI Budget
4. Annual Reports
5. Quarterly and six-monthly reports
6. YE management accounts for the past 3 years and any reconciliation to the year-end financial statements
7. AgResearch Balance Sheet Review
8. AgResearch Stakeholder Survey
9. Key Stakeholders list
10. AgResearch Organisation Charts
11. AgResearch matrix structure
12. AgResearch Strategic Issues Letter to the Minister
B. Business structure overview
1. A brief memo providing an overview of each of AgResearch's business units, the activities undertaken, their capabilities (including technological platforms and R&D specialisations) and the market(s) that they serve
2. A brief memo providing an overview of each of AgResearch's subsidiaries, associates and JVs with a brief description of the activities undertaken, AgResearch's equity stake (%), revenue (\$) and assets (\$) and governance
C. Management accounting process
1. A copy of the last review of the company's financial systems
2. A copy of the latest review of the company's computer systems
D. Historic management accounts
1. A breakdown of AgResearch revenue for the last 3 years by business unit and location including the following revenue categories
i. from non-MBIE central government
ii. from other CRI / universities / local government
iii. commercial (NZ)

DOCUMENT / INFORMATION
iv. commercial (international)
2. A contracted revenue maturity profile breakdown
3. Expenditure trends for the last 4 years by major categories of expenditure
4. Detail of capital injections from and distributions to the Crown have been made over AgResearch life (dates and \$ amounts)
E. Forecasts
1. Latest forecasts of revenue for the next 5 years broken down into the categories in D1 above
2. What are the key assumptions underlying the above forecasts?
F. Investments
1. A list of planned capex and other investments (type and \$ amount) for each of the next five years (Future Footprint business case)
2. Intellectual property best practice
3. Intellectual property policy
G. Key governance documents
1. A copy of any strategic reviews undertaken of AgResearch in the last five years
2. A copy of the risk register
3. A copy of the legal register
4. Details of the Board self-assessment process
5. Details of strategic planning days
H. Personnel
1. Detail of areas of science and engineering specialisation and excellence
2. The annual turnover rate of professional staff for the last 5 years by group
3. A bell curve of the years since graduation for all professional staff
4. A breakdown of the term (years) to retirement of professional staff
5. Information on current industrial disputes, if any
6. Information on redundancy agreements
7. Succession planning documents
8. Details of the processes in place within universities in regards to recruiting PhDs and how these are managed
9. Staff satisfaction survey results

DOCUMENT / INFORMATION
10. Benchmarks of AgResearch salaries against comparable institutions
11. Staff management strategies around managing changing priorities and staff development
12. Utilisation rates of staff across the organisation
I. Outcomes
1. Paper stating the key desired outcomes of the government that AgResearch is contributing to and the evidence available that AgResearch outputs are having a significant effect on the desired outcomes
2. Documents reporting on the assessment of outcomes; reviews or evaluations of outcomes
3. Senior management response to reviews undertaken – including details of what management has learnt from these reviews and taken forward
4. Case studies of AgResearch projects
5. Measurements of how well AgResearch is monitoring, measuring and improving its science quality.
J. KPIs
1. Internal KPIs that are not published but provided internally to the Board and senior management
2. Time series of KPIs
K. MBIE documents
1. Report of the CRI Taskforce
2. MBIE Vision Mātauranga
3. AgResearch bidding history
4. 2016 Letter of expectation from Minister
5. RAGG status
L. Additional documents requested by the panel
1. Additional financial data including for subsidiaries
2. Board packs
3. Government whey inquiry report (November 2014)
4. IT strategic plans
5. Risk assessment guide and workflow
6. Performance management system
7. Presentation from the Board (April 2016)
8. Future Footprint Programme overview (May 2016)

Annex 4: Stakeholders whom the Panel met with or spoke to

Meeting	Position
A. 13-15 April 2016 at AgResearch, Palmerston North	
Sam Robinson	Chair
Barry Harris	Deputy Chair
Michelle Alexander	Board Member
Teresa Ciprian	Board Member
Jeff Grant	Board Member
Andrew Macfarlane	Board Member
Paul Reynolds	Board Member
Tania Simpson	Board Member
Peter Stone	Board Member
Tom Richardson	CEO
Warren McNab	Research Director
David Godwin	Finance & Business Performance Director
Greg Murison	Partnerships & Programme Director
Andrew McSweeney	Shared Services Director
Deidre Hill	Communications & Marketing Director
s 9(2)(a)	Vision Mātauranga team
s 9(2)(a)	Science group leaders
s 9(2)(a) s 9(2)(a)	Young scientists
B. 26-29 April 2016 at MBIE Wellington (or by phone)	

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Meeting	Position
s 9(2)(a)	s 9(2)(a) Livestock Operations, Landcorp
s 9(2)(a)	s 9(2)(a) , Beef & Lamb
s 9(2)(a)	s 9(2)(a) , Meat Industry Association
s 9(2)(a)	s 9(2)(a) Pastoral Greenhouse Gases Research Consortia
s 9(2)(a)	s 9(2)(a) Overseer
s 9(2)(a)	s 9(2)(a) Fonterra
s 9(2)(a)	s 9(2)(a) , Pastoral Genomics
s 9(2)(a)	s 9(2)(a) Dairy NZ and Beef & Lamb
s 9(2)(a)	s 9(2)(a) Dairy NZ ,
s 9(2)(a)	s 9(2)(a) Farm IQ
Peter Crabtree	GM Science, Innovation and International, MBIE
s 9(2)(a)	s 9(2)(a) , Ballance Agri-Nutrients
Naomi Parker Ian Ferguson Gerald Rys Trish Ranstead Mike Hayward	Manager Science Policy, MPI Chief Scientist Principal Science Advisor Manager International Environment Team Manager Environmental Economics Unit
Prue Williams Max Kennedy Viv Smith	General Manager Science Investments, MBIE National Manager Biological Industries National Manager Environment and Society
C. 9-11 May 2016 at AgResearch Hamilton, Lincoln and Dunedin	
s 9(2)(a)	s 9(2)(a) , HR
s 9(2)(a)	s 9(2)(a) , Finance & Business Performance Director

Confidential

Meeting	Position
s 9(2)(a)	s 9(2)(a) Science Team Leaders
s 9(2)(a)	ITs 9(2)(a)
s 9(2)(a)	Portfolio Leaders
s 9(2)(a)	Chair, Science Advisory Panel
s 9(2)(a)	s 9(2)(a) Science Team or Impact Leaders
s 9(2)(a)	ITs 9(2)(a)
s 9(2)(a)	s 9(2)(a) Science Team or Impact Leaders
D. Other	
s 9(2)(a)	Former Board Member
s 9(2)(a)	Professor, University of Waikato