

**Commercial Sensitive**

**23 October 2007**

**[Out of scope material removed]**

<b>Subject</b>	<b>Agreement</b>
Innovation Systems (refer to Appendix 3)	<p>A package has been developed at a high level on broad initiatives and additional funding for innovation relating to New Zealand's pastoral and food-related industries. <b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b> This does not involve potential contributions from other parties such as industry good bodies which have not been involved in the discussions to date. These commitments are indicative from both the perspectives of the Government and Fonterra pending further detail that enables more substantive commitments to be made. These commitments will need to be approved by normal Board and Cabinet processes following consultation with interested parties.</p> <p>These high level commitments are subject to the following:</p> <ul style="list-style-type: none"><li>• Co-funded or government funded programmes will in general be open to broad dairy and food industry participation as part of creating a vibrant and innovative dairy industry in New Zealand.</li><li>• The additional resource commitments indicated would not all be on co-funded programmes. Fonterra is likely to apply a significant proportion of the additional indicated expenditure on internal programmes. Likewise, the Government retains the flexibility to apply additional resources to activities with no co-funding from industry.</li><li>• The commitment of additional expenditure would ramp up to the levels indicated based on confidence that key milestones and projected benefits are being met. Fonterra and other industry participants would expect to obtain sound commercial returns on programmes that directly affect their business while the government would expect wider innovation spillover benefits to be evident.</li><li>• Co-funded programmes that meet relevant criteria for government co-funding would, as currently, include those where a commercial enterprise may be the sole industry contributor and manager of the programme, retain ownership of the intellectual property produced, and retain other benefits that arise.</li><li>• The mix of additional Government and Fonterra expenditure on each of the priority areas identified may alter as the broad initiatives outlined in Appendix 3 are worked through in greater detail to ensure that quality outcomes are achieved from this</li></ul>

<b>Subject</b>	<b>Agreement</b>
	<p>expenditure.</p> <ul style="list-style-type: none"><li>• Where possible, existing programmes or infrastructure should be leveraged to reduce start-up costs and risks.</li><li>• Any Government funding should take place in accordance with New Zealand's international obligations.</li></ul> <p>To address the above issues, a process is envisaged under which officials and Fonterra management will develop governance and funding proposals in respect of each major priority area by the end of February 2008. Where these have implications for other stakeholders, a process of wider consultation will be necessary.</p> <p><b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b></p>

**[Out of scope material removed]**

## **APPENDIX 3: INNOVATION PROPOSAL**

### **Preamble**

1. As mentioned by Ministers on 17 October, the Government sees major opportunities for New Zealand's pastoral and food related industries. Likewise, Fonterra recognises that its success in key segments of the global dairy market requires a step change in innovation to realise its growth ambition. The Government considers it can support Fonterra in this endeavour and at the same time leverage significant benefits for the rest of New Zealand by similarly increasing the investment in the skills and resources a vibrant industry requires.
2. Ministers also stated that they are prepared to commit substantial funding to make this happen. They have directed officials to work with Fonterra and the wider sectors to develop high quality proposals for Ministers to consider. Ministers are expecting that the package of proposals will include substantial private sector contributions.
3. The Government's vision is for New Zealand to be an international magnet for food (particularly dairy-related) innovation based around New Zealand's competitive advantage in sustainable pastoral systems, dairy and other food products, systems and processes by building on existing strengths in research and development and by ensuring a supply of highly skilled people. The objective is to create a fertile environment for the development of the broader pastoral and food industries together with related and supporting industries and including new technologies and new products. Achieving this will require:
  - a significant and sustained increase in investment by all parties; and
  - collaboration between the Government, Fonterra, research and education organisations and other companies that are involved in the pastoral and food industries.
4. Together we will need to address fundamental building blocks such as education and basic research as well as technology and commercialisation. We will also need to include initiatives to encourage spillovers and linkages through such things as clustering and enhancing international connections.

### **A suggested approach**

5. Initiatives developed in the context of this agreement will be built around the following four areas.

- (a) **Sustainable pastoral systems** – Examples of potential outcomes would be to increase pasture production and reduce environmental impacts (such as reducing greenhouse gases and reducing nitrogen losses) and improve water efficiency. Other potential outcomes could be the development and demonstration of new technologies and management systems that could be also commercialised globally. This could build on the strategy underlying Pastoral 21.
  - (b) **Research and education capability** – The outcome would be to increase the number of high quality graduates and develop relevant basic research programmes. This could be done through activities such as targeted professorships that are being used successfully in the forestry sector through the Government initiated Forestry Industry Development Agenda (FIDA) and the Centres of Research Excellence (CoREs) such as the Riddet Centre. It will be important to invest in a range of skills from technical to high-end skills and a range of disciplines from agronomy through to biochemistry and food science.
  - (c) **Dairy/food innovation cluster(s)** – In response to the Food and Beverage Taskforce, work is currently being undertaken to assess the benefit of innovation clusters that would provide pilot scale facilities to enable firms to pilot and develop new products. Combined with education and research organisations such as universities and CRIs, these clusters would encourage firms to increase their innovation activities in New Zealand; and
  - (d) **Internationalisation of firms** –It is proposed to explore how to facilitate the internationalisation of firms within the dairy and related industries. There may also be an opportunity to establish a dedicated venture capital fund through an investment by Fonterra and others.
6. Developed proposals (including the phasing of activities to ensure capability to enable high quality expenditure) will be subject to the normal Cabinet and Board scrutiny.
  7. The Government's general approach will be to build capacity through strategic public good investment in new knowledge and the capacity of people.
  8. The package should be tailored so that within each area commitments are identified and secured from the Government, Fonterra and other industry participants within their existing interests that can be mutually beneficial and reinforcing. This means that while significant private contributions are expected to the package as a whole, the relative proportion within each initiative would vary depending on the benefits expected to accrue to different parties.

## **Food Infrastructure Project**

9. The Government has established the Food Infrastructure Project (FIP) to determine the case for and feasibility of pilot scale food processing and production facilities in Manukau, Waikato, and Christchurch. This project has been expanded to include consideration of the case for such a facility in Palmerston North (including how this might fit with the other proposals) which would complement the existing Palmerston North cluster of research capability. The objective of the projects is to achieve a collaborative solution which best serves the New Zealand food industry as a whole.
10. Determination of the details, however, including the relative merit of the different locations will be through the existing FIP process. Decisions will be made contingent on evaluation of the project's final results.

**[Withheld under Section 9 (2) (b) & 9 (2) (ba)]**

<b>Priority Area</b>	<b>Sustainable pastoral systems</b>
<b>Illustrative example of initiatives to achieve step-change</b>	Examples of potential outcomes would be significantly improved pasture and animal productivity while reducing environmental impacts (such as reducing greenhouse gases and reducing nitrogen losses). This will likely involve both plant and animal breeding and also improved management systems and technologies that could be commercialised globally.
<b>Key industry stakeholders</b>	Key stakeholders would include the Pastoral 21 partners, CRIs, universities, industry good bodies, associated agribusinesses, and other organisations such as the Pastoral Greenhouse Gas and Pastoral Genomics research consortia.
<b>Key current programmes and resourcing</b>	Estimated government spending is more than \$90m, mainly through FRST. Estimated industry spending in this area is over \$70 million.
<b>Funding options</b>	This would need to be discussed with all participants but would likely involve commitments over the medium term, but annually funded.
<b>Governance issues</b>	The governance issues will need to be worked through. The Pastoral 21 memorandum of understanding provides a potential model as it covers management and administration of joint investments, including intellectual property.
<b>Process to develop detailed series of programmes</b>	Government officials will work with the sector to build on existing strategies and underlying consultations to develop more detailed programmes.
<b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b>	<b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b>

<b>Priority Area</b>	<b>Research and Education Capability</b>
<b>Illustrative example of initiatives to achieve step-change</b>	Investment to increase research capability and education excellence to ensure a supply of highly skilled people and research programmes to deliver the next generation of pastoral and food outcomes. Three key initiatives are: <ol style="list-style-type: none"> <li>1. incentives for individuals to increase their skill levels (e.g. at school, undergraduate, post graduate and emerging researcher levels);</li> <li>2. attract top internationally-ranked academic chairs, with supporting packages to link teaching to research to core pastoral and food outcomes, focussing on the relevant disciplines with outcomes relating to farming systems, agribusiness and food processing; and</li> <li>3. creating world class critical mass in education/research centres/organisations (e.g. Riddet Centre, pastoral/food related Crown Research Institutes) focusing on national and international collaboration, both with other top research teams and linkages with firms.</li> </ol>
<b>Key industry stakeholders</b>	Universities, the Riddet Centre, Crown Research Institutes, Industry Training Organisations, Fonterra, Meat and Wool NZ, Dairy Insight, food manufacturers and industry bodies.
<b>Key current programmes and resourcing</b>	The Riddet Centre (\$20m over seven years), FRST's existing untargeted research fellowships (\$2m per annum), existing agriculture and food tertiary research and education capability and Fonterra's 'Dairy Industry Technology Growth Programme'.
<b>Funding options</b>	There is potential for endowments and direct funding.

<b>Governance issues</b>	Potentially partnership funding administered through TEC and FRST.
<b>Process to develop detailed series of programmes</b>	MAF will work with TEC, MED, MoRST and FRST to consult the pastoral and food industries and education and research providers.
<b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b>	<b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b>

<b>Priority Area</b>	<b>Dairy/Food Innovation clusters</b>
<b>Illustrative example of initiatives to achieve step-change</b>	<p>The creation of a world leading food research cluster in Palmerston North based around Fonterra, Crop and Food Research (CFR) and the Riddet Centre. It is proposed that there be three additional components:</p> <ul style="list-style-type: none"> <li>• a world class modular <b>industrial-scale pilot plant facility</b> that offers users confidential development of high-value foods, food ingredients and food concepts as well as a highly independent and auditable service;</li> <li>• <b>a food research complex</b> that could contain critical mass of CFR and Riddet Centre (pending Riddet Board approval) research and education staff,</li> <li>• <b>a customer unit</b> that will be a convenient hub at which multi-national food companies will place innovation 'scouts'.</li> </ul>
<b>Key industry stakeholders</b>	Fonterra, CRIs, Bio-Commerce Centre, Riddet Centre, Massey University, other Food Innovation Centres (if applicable), other dairy companies, food processing firms.
<b>Key current programmes and resourcing</b>	The Government has established the Food Infrastructure Project (FIP) to determine the case for and feasibility of pilot scale food processing and production facilities in Manukau, Waikato, and Christchurch. This project has been expanded to include consideration of the case for such a facility in Palmerston North (including how this might fit with the other proposals).
<b>Funding options</b>	Capital and operational contributions by Government, Fonterra and other partners. Fonterra to be a cornerstone customer providing a guaranteed level of utilisation.
<b>Governance issues</b>	Ownership and governance of the Food Innovation Centre (including the pilot plant component) to be determined but will need to be based on the principle of competitive neutrality and open access to all players.
<b>Process to develop detailed series of programmes</b>	The Palmerston North Innovation Centre proposal is being developed and assessed alongside proposals for Manukau, Waikato and Christchurch through the Food Infrastructure Project. The objective of the project is to achieve a collaborative solution which best serves the New Zealand food industry from both a regional and national perspective, provides for well co-ordinated investment, builds on existing strengths and minimises duplication.
<b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b>	<b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b>

<b>Priority Area</b>	<b>Internationalisation – ancillary business development</b>
<b>Illustrative example of initiatives to achieve</b>	As Fonterra further expands internationally, there will be advantages in having specific New Zealand capabilities available in-market. Some of

<b>step-change</b>	these capabilities may be embodied in single firms or groups of firms. The Government may have a role in assisting these firms (or groups) to establish an in-market presence.
<b>Key industry stakeholders</b>	Companies in related and supporting industries.
<b>Key current programmes and resourcing</b>	-
<b>Funding options</b>	No specific resources committed at this stage – decisions will be made on a project by project basis. If funding is required, Government funding likely to come from existing NZTE programmes and Fonterra funding decisions will be determined on a project business case.
<b>Governance issues</b>	Fonterra and Government commit to working together on these issues. Governance arrangements will be worked out on a project basis.
<b>Process to develop detailed series of programmes</b>	Government and Fonterra will work together on these issues on a project by project basis, as opportunities or needs arise.
<b>High level resource commitments once fully implemented (range)</b>	None

<b>Priority Area</b>	<b>Internationalisation – Venture capital fund</b>
<b>Illustrative example of initiatives to achieve step-change</b>	Establishment of a venture capital fund to invest in pastoral, food and other related businesses.
<b>Key industry stakeholders</b>	Potential co-investors, NZVIF
<b>Current programmes and resourcing</b>	-
<b>Funding options</b>	Capital contribution from Fonterra, appropriately matched by NZVIF.
<b>Governance issues</b>	Investors appoint a fund manager who will manage investments
<b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b>	<b>[Withheld under Section 9 (2) (b) &amp; 9 (2) (ba)]</b>