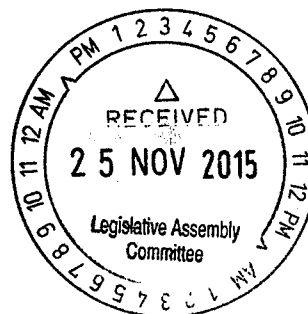




Our reference: DGC151319-1

11 November 2015



Ian Blayney, MLA
Chairman
Economics and Industry Standing Committee
Parliament House
PERTH WA 6000

Dear Mr Blayney

**ADDITIONAL INFORMATION: INQUIRY INTO TECHNOLOGICAL AND
SERVICE INNOVATION IN WESTERN AUSTRALIA**

Thank you for the opportunity to provide further information to support the Department of Agriculture and Food (DAFWA) submission to the Economic and Industry Standing Committee's (the Committee's) Inquiry into Technological and Service Innovation in Western Australia.

Please find our responses to the Committee's request in Attachments 1 and 2.

Yours sincerely

Rob Delane
DIRECTOR GENERAL

Q1. DAFWA's submission outlines the principles and activities through which it will improve its service provision to industry. These include:

- **Facilitating industry to take a leadership role for commercial and private-benefit activities.**
- **Increasing co-design with, and co-investment from, industry and businesses.**
- **A focus on improved competitiveness and profitability for the whole supply chain.**
- **Empowering Industry – DAFWA will support a mature, empowered industry that leverages its competitive advantages to meeting Agrifood 2025+.**

Please provide specific examples of the work that DAFWA is undertaking in these areas. Please also advise how DAFWA will determine the outcomes of this work.

A1. The Department of Agriculture and Food (DAFWA) supports industry through an increased focus on facilitation, co-design, supply chain competitiveness and industry empowerment. The following examples detail some of the work DAFWA is involved in that will improve its service provision to industry.

Facilitating industry leadership:

DAFWA's Dairy Transformation Strategy works with WA industry and new international partners to firmly position the WA industry on a sustainable growth path that will secure long term competitiveness and increased international market share.

DAFWA also works closely with Western Dairy to facilitate industry to take a leadership role for private-benefit activities. The DairyCatch project is one example where DAFWA and Western Dairy work together with farmers to develop and implement best management practice for sustainable dairying.

This strategy will support the development of a market-focussed expansion of the WA dairy sector, differentiated and innovative high-value products, and disciplined and integrated value chains to consistently deliver exceptional quality products to demanding customers in Asia.

DAFWA has entered into a three year funding agreement with Dairy Australia, the outcome of which is industry taking leadership of dairy research and development (R&D) through the Western Dairy Hub, a research centre focused on increasing the productivity and profitability of dairy producers.

Increasing co-design:

In 2012/13, the Sheep Industry Leadership Council (SILC) developed its WA Sheep Industry Strategic Plan 2025+ and has since begun implementing it in partnership with DAFWA's WA Sheep Industry Business Innovation Royalties for Regions project. This partnership seeks to address the critical issue of Western Australia's declining sheep flock.

SILC will engage in a broad industry consultative process in early 2016 to review the strategic plan and develop the suite of activities that will be undertaken to deliver on it.

DAFWA, in conjunction with SILC, has identified clear investment directions which will provide a focal point for the coordination and continuous development of the strategy over the coming years. SILC are looking for industry to continue to co-invest in the strategy with the potential for further initiatives.

The members of SILC also sit on the reference group for the Sheep Industry Business Innovation project, where their extensive industry knowledge and reach will assist them to act as a barometer between industry and the department on the progress of the project.

Outcomes for this project will be a sheep industry that is profitable, progressive, integrated and contributing \$2 billion annually to the WA economy by 2025, which aligns with the Agrifood 2025+ strategy of doubling the value of agricultural production.

For this to occur, current and prospective participants need to be confident that they can reap consistent and adequate returns on their investment. To restore confidence, there needs to be a paradigm shift from open market sourcing to demand driven value chains, development of transformational partnerships that create mutual value, improved industry confidence along with new investment and business models, more efficient and resilient businesses reinvesting and attraction of new investment.

Improved competitiveness and profitability:

The Northern Beef Futures (NBF) Project aims to double the value of the northern beef industry through a market driven or market "pull through" approach. The NBF is targeted at increasing exports to diverse markets and the communities and businesses in the Kimberley and Pilbara that are reliant on agriculture - largely pastoral beef production - as their primary source of employment and income.

The NBF project aims to 'reset' the northern beef industry by providing agribusinesses with the ability and confidence to grow and prosper through improved supply chains and market diversity that leads to increased productivity, management capacity and Aboriginal economic development.

By working with industry to increase the Gross Value of Agricultural Product (GVAP) from Kimberley and Pilbara Beef, reduce reliance on a single export market and increase Aboriginal employment levels in the northern cattle industry, the project will result in a more profitable, prosperous, sustainable and resilient northern beef industry.

Empowering industry:

DAFWA is empowering industry by helping it implement biosecurity Industry Funding Schemes (IFSs) under the *Biosecurity Agriculture Management Act 2007*, whereby producers can raise funds to tackle priority pests and diseases that may threaten the viability and sustainability of the industry.

The IFS regulations provide the foundation for empowering industry – it is the regulations that give authority to industry (via the Industry Management Committees) to make the decisions around if, when and to what extent the scheme is used. DAFWA provides support to the IFS committees and the IFSs. This support is critical in enabling industry to utilise the legislation to develop and implement effective Schemes and Committees. The support DAFWA provides is important in building and encouraging industry ownership of the IFSs, thereby empowering industry to, as a whole, address its biosecurity priorities.

An Industry Management Committee oversees the management of each scheme. Members of the committees include participants in the schemes (that is, producers), appointed by the Minister for Agriculture and Food.

The management committees determine which pest and disease threats require action, how best to deal with the threats, and what contributions will be needed from industry to tackle the problem. This allows producers to raise funds to self-manage serious pests and diseases that may threaten the viability and sustainability of their industries.

Outcomes of the work are an increased industry and community awareness and participation in IFSS to manage biosecurity risks relating to animal and plant pests, weeds and diseases.

Q2. In discussing the Department's ongoing commitment to biosecurity and natural resource management, DAFWA's submission states that its 'role will be to support the success of industry through transformational development of':

- ***Robust and cost competitive supply chains;***
- ***Access to high-value markets;***
- ***Targeted research and development investments;***
- ***Strong access to and management of resources;***
- ***Sufficient access to capital; and***
- ***Effective adoption of tailored knowledge.***

Please advise what DAFWA means by 'transformational development' and how this will be achieved in each of the above areas. Please provide details on any particular programs that may be in place to help DAFWA fulfil its role.

A2. The above dot points are the six, widely-recognised, key characteristics common to successful, growing agrifood sectors worldwide. Our transformational development activities with industry help the sector to achieve these characteristics.

We define transformational development as a fundamental change in the mix of products, business models or markets: this can be applied at the sector, industry or individual business level.

For example:

- We are supporting the sheep industry to transform to produce a more profitable and resilient industry tuned to customer needs through our RfR Sheep Industry Business Innovation project. With industry we are developing new dedicated value chains (lamb and hogget carcasses, breeding stock and slaughter ready stock), improving business and technical skills in the industry, and developing a web portal for industry knowledge sharing.
- We are transforming the model for grains research and development in Western Australia through the establishment a proposed not-for-profit company with the working title of GrainsWest. This will move the grains industry from relying heavily on state-government funded R&D to being able to attract its own more secure, targeted R&D investments from local and international sources.
- We are transforming how we assist WA agribusinesses to find markets for their products. We are using a network of DAFWA staff in Perth, Tokyo, Shanghai and Dubai who work directly with local and overseas businesses, potential investors, the Western Australian Trade and Investment Offices, and AusTrade. Our staff are identifying in-market businesses that our exporters can partner with, helping them gain access to new markets and consumer groups. Our RfR-funded Asian Market Success project is our flagship program in this area.

- In September 2014, we launched the Agrifood Labour Initiative with the Chamber of Commerce and Industry WA (CCIWA). This is a two year program funded by DAFWA and managed by CCIWA which has given agribusinesses access to a dedicated advisory service on new labour pools, industrial relations and workforce development. In addition, our RfR Sheep Industry Business Innovation project, the Sheep Leadership Council and CCIWA are partnering to pilot traineeships for the WA sheep industry. These initiatives are ensuring our sector has strong access to resources.
- We are providing information to industry on transforming the way agriculture sources capital to fund innovation and improved competitiveness. Our 2015 report to industry *The Road to Riches: driving investment in Western Australian agriculture* investigates non-traditional sources of capital and using alternative business structures already employed in the corporate sector. It outlines factors that need resolution to enhance the investment potential of agriculture, and recommends ways agribusinesses can become investment ready.
- We are transforming of the way we assist producers to effectively adopt and apply tailored knowledge by developing mobile applications (apps) that give producers access to information when they need it, where they need it – in the field. We have developed multiple apps, including the MyCrop and MyPest apps. In addition, our current Royalties for Regions e-Connected Grainbelt project is focussing on helping grain producers manage risk in their business model by providing improved electronic tools for decision-making.

Q3. DAFWA's submission provides information on the state government's Seizing the Opportunity program and notes that DAFWA is implementing 10 of the 15 projects in this program. DAFWA's Annual Report 2015 briefly outlines five of these projects.

Please provide details of the 10 projects that DAFWA is leading in this program, including the project aim, timeframe, funding, any partnership arrangements and the measures that will be used to determine each project's outcome. Please also provide this information for DAFWA's Going for Growth project, which is also mentioned in the submission.

A3. Detail on the 10 Seizing the Opportunity projects DAFWA is leading is in Attachment 2, including information on the proposed Going for Growth project.

Q4. DAFWA's submission outlines the following four key growth areas:

- ***Growing markets***
- ***Growing profitability***
- ***Growing productivity***
- ***Growing people***

DAFWA's Annual Report 2015 also notes these growth areas in its Strategic Intent and Investment Priorities for the period 2014-2017.

Please provide information on any specific policies or initiatives that are in place to achieve these goals and what progress has been made in their implementation.

A4. DAFWA delivers through over 100 projects/operations. These projects and operations are mapped to our strategic priorities of growing markets, growing profitability, growing productivity, growing people, sustaining natural resources and boosting biosecurity.

DAFWA's Seizing the Opportunity projects are examples of specific initiatives in place to achieve our strategic priorities. Detail on these projects and their progress is outlined at question 3.

Q5. The Committee understands that while there might be considerable innovation on Western Australians farms, the largest proportion of farm costs relate to post-farm gate activities. Given DAFWA's focus on growing profitability, including business and supply chain development, please advise if DAFWA is involved in any activities seeking to introduce post-farm gate innovation.

A5. DAFWA is involved in several projects to help industry capitalise on potential markets and growth opportunities post-farm gate. The following examples provide a snapshot of DAFWA's work across different industries and components of the supply chain.

The Asia Market Success Royalties for Regions project is designed to identify growth opportunities in premium Asian markets for products directly related with WA's production and supply conditions.

This will be achieved by an assessment of what premium food products, from both temperate and Mediterranean environments Asian consumers want; WA's competitive advantage in these food products; and identification of key in-market import partners for our WA agrifood businesses. Once businesses have an understanding of the potential market, the project will implement a \$3 million grants program to be offered to certain willing and capable WA agri-food businesses to capitalise on the establishment of supply chains into premium markets with in-market partners that have a strong consumer focus.

DAFWA supports industry by facilitating relationships between industry and potential in-market partners to strengthen and diversify the supply chain. This support includes facilitating the supply chain development program between WA's largest red meat processor, Bunbury-based V&V Walsh, and China's largest red meat importer and distributor, Heilongjiang Grand Farm Group.

From a grains perspective, post farm gate innovation is mainly handled through the Australian Export Grains Innovation Centre (AEGIC). AEGIC is a not-for-profit, private company jointly owned by the Grains Research and Development Corporation and the Western Australian government through DAFWA. Its purpose is to provide national leadership and coordination in research directed at export grain quality, functionality, processing innovation and market and supply chain analysis. AEGIC has provided a detailed submission to this Standing Committee on this inquiry.

Q6. Please advise of any collaboration (not mentioned in response to the above questions) that DAFWA has with universities and industry participants to encourage service and technological innovation.

A6. DAFWA collaborates widely with universities and industry participants to improve outcomes throughout the supply chain. For example, in the grains sector:

DAFWA collaborates with InterGrain to breed better varieties. Intergrain Pty Ltd. is a cereal breeding company established in 2007, developed in partnership with the Grains Research and Development Corporation (GRDC) and the WA State Government as DAFWA transitioned out of wheat, and later, barley breeding. In 2010 Monsanto became a shareholder of InterGrain, providing an injection of capital and bringing a large network of scientists and breeders.

InterGrain wheat and barley breeding programs service the major cereal growing areas across Australia. Both cereal breeding programs have been highly successful and as a result InterGrain varieties occupy a significant proportion of the area sown to cereals in Australia.

GRDC is a critical partner with DAFWA investing in R&D on behalf of growers. GRDC currently invests more than \$90 million in projects with DAFWA (excluding AEGIC) and has an increasing influence beyond its traditional R&D portfolio, expanding into extension and practice change, farm business management, grains biosecurity, market intelligence, wheat classification and industry capacity building.

Similarly, DAFWA collaborates with AEGIC on market intelligence and identifying export opportunities and makes this information available to WA agribusiness.

DAFWA collaborates with the Grower Group Alliance (GGA) to support strategic links between grower groups, agribusiness and research providers to increase the exchange of ideas and uptake of research results in order to help maximise the productivity of the WA broadacre agriculture industry.

DAFWA collaborates extensively with both WA and other Australian universities on a wide range of projects. Table 1 includes some of the DAFWA's existing work.

University of Western Australia	<p>We collaborate in relation to:</p> <ol style="list-style-type: none"> 1. DAFWA-led GRDC project DAW00252 – Innovative approaches to managing subsoil acidity; 2. DAFWA-led GRDC project DAW00238 – Development of lupin molecular markers tagging yield QLT genes and yield-related phenology traits; 3. DAFWA-led Royalties for Regions funded project to identify and assess innovative opportunities in carbon farming; 4. DAFWA-led HIA Ltd project AP12036 Bridging the knowledge-gap to breed high-value flavonoid-rich apples 5. UWA-led Australian Research Council Linkage Project LP140100046 - Characterisation of Soil Microbial Interactions for Increased Efficacy of Herbicides Using Novel Fertiliser Management Practices
Murdoch University	<p>We collaborate in relation to:</p> <ol style="list-style-type: none"> 1. DAFWA-led GRDC project DAW00248 Effective genetic control of Stagonospora nodorum blotch 2. Murdoch-led Royalties for Region funded project reducing feral pig disease risks through the use of

	<p>aerially deployed infrared sensors and habitat modelling</p> <ol style="list-style-type: none"> 3. DAFWA-led Pork CRC project 2A-112 On-farm immunoassay test kit for inflammatory diseases to test the immune status of a herd 4. Murdoch-led GRDC projects in relation to barley genetics 5. UWA-led Department of Agriculture project for innovative livestock systems to adapt to climate change and reduce emissions
University of Adelaide	<ol style="list-style-type: none"> 1. DAFWA-led GRDC project DAW00234 determining yield under frost - one degree at a time 2. DAFWA-led GRDC project DAW00241 farming systems to improve crop tolerance to frost 3. UA-led Australian Research Council Linkage Project with Luoda Pharma, Zoetis Australia Research & Manufacturing, Department of Agriculture, Fisheries and Forestry (Qld), Department of Primary Industries (NSW), University of Sydney and University of Queensland Superbugs and veterinary drugs; are multidrug resistant zoonotics pathogens residing in Australian animals? 4. UA-led GRDC project UA00149 Improving IWM practice in emerging weeds in southern and western regions
University of Melbourne	<ol style="list-style-type: none"> 1. UM-led GRDC project UM00049 Management of insecticide resistance in RLEM and screening new MoA chemistry 2. UM-led GRDC project with Marcroft Grains Pathology, Department of Primary Industries (NSW), South Australian Research and Development Institute and Commonwealth Science and Industrial Research Organisation national canola pathology program including new molecular knowledge, pathogen evolution and control techniques.

Q7. Based on DAFWA's long experience with the agrifood sector, please advise what you see as the key challenges the sector faces in relation to developing new technologies, products and services.

A7. Key challenges to being able to develop new technologies, products and services include the need for the sector to:

- have access to comprehensive mobile coverage across the agricultural region
- improve its leadership and management capacity
- attract new entrants
- achieve a sustainable and contemporary skills base
- gain access to increased capital
- have a coordinated approach to international trade development
- improve the profitability of agricultural businesses and costs
- ensure it is meeting the needs of target markets
- improve productivity growth to remain competitive in a global marketplace

Q8. In relation to the 'Growing people' growth area and the importance of having skilled people in the sector, please advise what DAFWA sees as being the key skills and attributes required in the agrifood business and whether appropriate training in these areas is available in Western Australia.

A8. High calibre business management is one of the most important determinants of long term agrifood business success. Agrifood producers must be committed to running their enterprises as professional business managers, in a similar way to those higher up the value chain. They must be able to talk business, understand business, and learn from and work with other businesses outside of agriculture.

Specifically, producers need to:

- have improved entrepreneurial, planning and financial management skills to enable good decision making;
- understand and be able to apply new:
 - business models
 - supply/value chain efficiencies
 - production systems
 - technology
 - marketing arrangements
 - business succession planning;
- have enhanced ability to attract investment;
- have enhanced capacity to manage business, environmental and social risks; and
- invest in their continual professional development.

As with all industries, the training and development needs of individual businesses and their managers depend on current skill level and areas of improvement required. Generic business training programs provide a benefit and are available through public and private sector providers. Agribusiness-specific training is more difficult to access than generic business management programs. Furthermore, access to appropriate training is more difficult for those residing in remote areas. It may also come at an increased cost to participants due to travel costs and time.

One of the proposed Royalties for Regions Seizing the Opportunity projects, Boosting Business Skills (Attachment 2), proposes a comprehensive suite of programs to address many of the above-listed training needs.

Project	Project period	Project aim	R4R funding (\$M)	Partnership arrangements Co-contributors to funding	Measures/project outcomes	Alignment with Minister's 6 priorities	Status
✓ Bold indicates approved by Cabinet ✓ indicates STO projects							
✓ Boosting Grains R&D	2014-18	<p>The project will see the creation of a focused grains research and development (R&D) entity and operating model. The development of the Grains R&D Entity (GrainsWest) will provide the engine to drive transformational change in the grains industry through new R&D infrastructure, strengthened regional research networks, and new private sector investment supporting applied R&D in Western Australia.</p> <p>Four focused R&D projects will also be delivered: reducing the impact of frost on crop production; growing grain more profitably in low rainfall conditions; overcoming soil and crop health constraints in high rain fall scenarios; and regional agronomy systems.</p>	20	Grains Research and Development (GRDC)	<ul style="list-style-type: none"> Prepare the Grains Industry for further growth and achieve increased value of the WA grains industry. Greater numbers of grain growers adopt new technologies developed under the project and practice to innovate. Greater co-investment in regionally based grains R&D by public and private sector. Development and adoption of a sustainable business structure and funding model for regional Western Australia, with a Grains R&D Entity established by July 2015 with a mechanism in place for ongoing investment. Establishment of long term grains R&D research and technical positions in regional WA, with the establishment of a vibrant regional research network of grain growers, agribusiness and research community 	Growing productivity	Project underway
✓ Northern Beef Futures	2014-18	<p>This project is designed to be the catalyst to stimulate innovation and transformational change within the Western Australian Northern beef industry. Through a series of positive interventions and dynamic agents of change, the NBF project will challenge and alter historical 'business as usual' settings in order to 'reset' the Northern beef industry.</p> <p>The project aims to bring about the following two key outcomes:</p> <ol style="list-style-type: none"> 1. A more prosperous, sustainable and resilient Northern Beef Industry. 2. Aboriginal participation and economic development. 	15		<ul style="list-style-type: none"> A more prosperous, sustainable and resilient Northern Beef Industry, with reduced reliance on a single market through the establishment of a minimum of five alternate, economically viable beef export markets. Increase in the Gross Value of Agricultural Production (GVAP) from Kimberley and Pilbara beef, with increased employment levels in the northern cattle industry. Increased Aboriginal participation and economic development in the Northern Beef Industry through the provision of opportunities to willing Aboriginal enterprises to develop and integrate Aboriginal pastoral supply chains. 	Growing markets	Project underway
✓ Sheep Industry Business Innovation	2014-18	<p>The investment in the WA sheep industry over four years will support growth to capitalise on new market opportunities for sheep meat in Asia (in particular China) and the Middle East. The project will make this happen by introducing a new business paradigm that will move the industry away from a dependence on the open market sourcing (participants working in isolation) to integrated value chains (closer cooperation between participants).</p> <p>The work planned is divided into two key focus areas:</p> <ol style="list-style-type: none"> 1. The Sheep Value Chain Transformation Strategy, that will drive the introduction of new integrated value chains, investment, business models and partnerships; and 2. The Sheep Business Centre at Katanning that will drive human and physical capacity building. <p>This project will support WA agri-food businesses to have the confidence to invest in accessing and developing premium export markets.</p>	10	MLA (Meat and Livestock Australia) and Sheep Co-operative Research Centre (CRC)	<ul style="list-style-type: none"> Increased average Gross Value of Agricultural Production (GVAP) per head of meat and wool, a larger state flock size alongside increased production of boxed meat and live exports. Development of four new dedicated export value chains based on lamb and hogget carcasses, breeding stock and slaughter ready stock to supply international consumers. High levels of participation from industry, leading to business practice change contributing to increased business profitability and sustainability. Increase in the number of technical and/or business training opportunities made available to Aboriginal people. 	Growing profitability	Project underway
✓ Asian Market Success	2015-18	<p>Specifically, the project is designed to boost the confidence and capacity of WA agri-food businesses seeking to export to Asia by providing market intelligence, guidance and support to encourage those businesses to achieve their ambitions of successfully exporting WA produce to high</p>	6	Grant recipients will be required to contribute a minimum of 25% of grant funding received.	<ul style="list-style-type: none"> Identification of twenty high growth, high value opportunities for WA agri-food businesses in Asian food and beverage markets. Research information that provides investment options available to restructure, diversify and grow businesses, business models that attract preferred investors for their business; and investors positioned to commit capital to WA agri-food business development opportunities within Asia. Development and promotion of an Export Market 	Growing markets	MOU in development

Project	Project period	Project aim	R4R funding (\$M)	Partnership arrangements Co-contributors to funding	Measures/project outcomes	Alignment with Minister's 6 priorities	Status
<p>Bold indicates approved by Cabinet</p> <p>✓ indicates STO projects</p>		value premium markets in Asia.			<p>Development Grants process, with awardees making a co-contribution to the funds provided.</p> <ul style="list-style-type: none"> Trade officers operating in key target market countries, with a documented remit of role requirements. 		
<p>✓ Food Industry Innovation</p>	2015-18	<p>This project will facilitate businesses working together, with expert knowledge and co-investment, to reduce the risk of financial burden from failures in joint ventures.</p> <p>The project aims to enhance the viability and growth of regional food businesses by assisting them to work together to innovate, develop new approaches to accreditation and promotion and apply leading edge technologies to underpin competitive growth.</p>	4.5	Industry	<ul style="list-style-type: none"> Regional producers experience increased productivity and competitiveness through the use of leading edge production technologies Development of a Premium Food Centre (focusing on organics and low-input production), assisting an additional 50 regional producers to convert to organic production. Regional food businesses experience reductions in costs and improved scale of production. A Specialist Food Centre (SFC) is established. 	Growing profitability	MOU in development
<p>✓ Boosting Business Skills Of Agrifood Businesses (pending approval)</p>	2015-18	<p>This project will deliver high-quality business management and marketing skills to WA agrifood businesses. It will equip businesses with the professional management, planning, financial and marketing skills needed to build on their success in producing world-class food products.</p> <p>The project will deliver: New programs to support the emerging skill development needs of the agrifood sector;</p> <ol style="list-style-type: none"> A grants scheme with a focus on: <ul style="list-style-type: none"> Core business and financial management skills New business models Market access and growth opportunities Investment and export readiness; Outreach/mentoring officers to support and guide participants; and An awards program. 	20		Not yet approved	Growing people	In approvals process
Going for Growth	2015-18	<p>Going for Growth is a business case being developed that will focus on supporting agrifood industries that are smaller, that are emerging or are on the cusp of significant growth.</p> <p>Resources will be directed toward industries that are willing and able to grow significantly and that have identified specific and strategic actions that will enable their transformation.</p> <p>This will be seen as a significant contribution to the Agrifood 2025+ goal.</p>				Growing people	In development

