



Australian Government
Department of Industry

Agricultural Competitiveness Taskforce
Department of the Prime Minister and Cabinet
PO Box 6500
CANBERRA ACT 2600

Industry House, 10 Binara Street
CANBERRA CITY ACT 2601
GPO Box 9839
Canberra ACT 2601 Australia
Phone: +61 2 6213 7400
Fax: +61 2 6213 7677
Email: InnovationAustralia@Industry.gov.au
Web: www.ausindustry.gov.au
ABN: 74 599 608 295

By email: agricultural.competitiveness@pmc.gov.au

Dear Sir/Madam

Agricultural Competitiveness White Paper

As foreshadowed in the consultation with Taskforce representatives on 15 April 2014, on behalf of Innovation Australia (the Board), attached is our submission to the Australian Government's Agricultural Competitiveness White Paper.

The Board appreciated the time taken by Taskforce representatives to discuss the broader concept of innovation beyond the conventional narrative about productivity; and the need for strategies that consider agricultural value chains and investment models outside of traditional on-farm, agricultural and agribusiness examples.

The submission expands on the Board's four key focus areas of Productivity vs Innovation; Value Chain Scope and Efficiency; Agricultural Investment Opportunities and Models; and Regulation.

A copy of the Board's submission is provided for your consideration at **Attachment A**.

The Board is available for further consultations prior to the finalisation of the White Paper.

A profile of Innovation Australia is provided at **Attachment B**.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Nick Gruen', with a long horizontal flourish extending to the right.

Nicholas Gruen
Chair
17 April 2014

Attachment A: Submission

Attachment B: Innovation Australia Board Profile

Agricultural Competitiveness White Paper

(Submission by Innovation Australia)

Objective:

To frame the interest of Innovation Australia in providing a submission to this issues paper, we do so within the spirit of oversight of the innovation interests, needs and opportunities of multiple Australian industries; and providing clear advice to government about fostering and intensifying industry innovation.

Agribusiness, and the sector convergences arising from it that grow new industries and technologies, is one of Australia's largest and most diverse industries, in terms of ownership, segments and contributions.

Innovation Australia understands the challenges of the commercialisation of science and technology from all perspectives, including management, investment, research, development, skills development and extension; and believes that there are a number of common themes applicable to the agri-business sector and its convergences.

Key Messages:

1. Innovation Australia would encourage the adoption of a broad concept of innovation that extends beyond the conventional narrative about productivity and resonates strongly with farmers, manufacturers and other stakeholders.
2. Innovation Australia would encourage the scope of the paper to look at strategies that consider agricultural value chains and investment models beyond traditional on-farm, agricultural and agribusiness examples.

Contemporary research suggests that many of the biggest blockers to 'innovations whose time has come', exist not within systems which may function well themselves and be capable of substantial innovation, but between systems that must co-adapt to new approaches but which find it difficult to co-ordinate such co-adaptation. This would include important transitions towards adding more value to some of our agricultural produce and diversifying the market basket.

For example:

- packaged food processing within the agri-food sector;
- biomass processing within the alternative energy sector.

We encourage the inquiry to focus on how we can better make such transitions.

3. Innovation Australia would encourage careful consideration regarding the implementation of strategies and policy arising from this consultation process, with a view to increasing the necessary coordination across multiple departments while reducing the inherent complexity that arises from such coordination.

For example;

Agri-food:

Responsibilities for agri-food policy and program implementation are currently divided across several departments, (DAFF, Industry, Health, and Regional Development), which compromises efficiency and effectiveness through a loss of cross-sectoral leveraging.

A coordinated agri-food strategy is suggested, incorporating needs across the wider value chain, with the majority of actions for the sector being led and coordinated by one Department.

Further, Innovation Australia recommend a clearer articulation of agri- and science innovation strategy - and their alignment to national scientific priorities - to maximise innovation impacts and return on public funds.

Discussion Points

1. *Productivity vs. Innovation*

The paper deals extensively with the concept of “productivity”. This term is more commonly used in public sector and economic circles to refer to a wide range of efficiency mechanisms. To a business owner, it essentially encompasses a complex range of cost-reduction activities to increase margin.

Speaking the language of innovation encompasses both mechanisms by which businesses grow – growing revenue and reducing costs.

Innovation Australia strongly suggest that the inquiry’s report frame innovation as a means of achieving both, as resistance may be encountered from stakeholder groups who can no longer easily grow by increasing productivity measures alone. Indeed, some of our food manufacturers are highly productive, but not necessarily as profitable due to exposure to commodity pricing; and the profitability of our cattle industry being compromised by severe drought conditions despite annual improvements in productivity.

Example: The NZ Foodbowl

An example of government-investment enabled industry prototyping facilities to grow industry-led innovation in food processing SME’s around Auckland, New Zealand.

Catering for both productivity and new added-value product innovation needs for industry in this government – led initiative, the program has delivered learnings about how government can support industry innovation while ensuring effective use of public funds, including infrastructure ownership, closer understanding of innovation cycles and improving engagement with the applied research and development sector.

Example: Sense –T, Tasmania

Sense-T is at the forefront of “precision agriculture” with a world-first, economy wide intelligent sensor network that integrates and models the data from existing sensors around Tasmania into a ‘platform’ on which the data can be endlessly used, reused and repurposed, and on which ‘apps’ can be built to add value to the data. This is already being used to optimise agricultural performance in a range of industries such as viticulture, aquaculture and water management but it can be used in virtually all agricultural industries and industries requiring land management and spatial and environmental information.

Through best practice data policy and practice innovation, real time data gathered from new generation sensors is integrated with existing spatial and historical data to deliver new insights to government, utilities and businesses. These will be used to deliver new on and off-farm approaches to economic, social and environmental sustainability.

A live example of the technology is the application to oyster farming; where public health safety for the crop is a critical constraint on both growth and productivity. The Sense-T platform is now permitting much finer prediction of timing of harvesting for oyster quality maximising both yield and product safety.

Again, productivity and new innovation elements are demonstrated in this public and private sector partnership.

2. *Value Chain Scope and Efficiency*

Wider consideration beyond traditional primary sector and commodity focussed requirements is needed.

Agribusiness is a dynamic sector with increasing innovation convergences that are creating many new industries (alternative energy, pharmaceuticals, biotechnology, carbon abatement and sequestration). The value chains and needs of these convergent areas also require more consideration in this review, as they play a vital role in the generation of new products, technologies and productivity improvements that add value and reduce the commoditisation of agricultural outputs. Movement into new areas of activity is much more likely to justify some government involvement than the optimisation of the cost-efficiency of well-established industries.

We would also make the following points on agri- value chains:

- *Building value over volume:* Segment – specific, the concept of adding- value to food commodities is not a new one. It should not be followed slavishly, but with a firm foundation in market needs. There are some commodities that on a cursory inspection we should be adding value to, that have proven difficult to make progress in despite substantial government involvement and support. However it is also the case that moving into new areas of the value chain may involve various ‘chicken and egg’ problems which can be addressed with government involvement and greater strategic awareness and collaboration across industries. An example of government involvement is the New Zealand Foodbowl mentioned above. The value-adding concept is also fairly well accepted given the focus on this in the National Food Plan.
- *Globalisation:* Again segment specific, but to be competitive, there needs to be a constructive conversation around what parts of the value chain Australia must retain onshore in the interests of innovation and social / economic benefit, balanced with offshore expansion to capitalise on export opportunities.

There is also plentiful evidence that companies with a foreign footprint nearer to markets of critical mass are more successful in those markets than geographically remote exporters. Innovative programs led by the New Zealand government to assist in this regard include the establishment of foreign “beachheads” comprising tailored infrastructure and advisory services to clusters of food processing and consumer goods companies who directly invest in the business model.

Example: The Conversion of Biomass to Liquid Fuels

The necessity to transform Australia's energy systems to meet greenhouse gas emission reduction targets is creating major opportunities for the agricultural sector for new industries to service domestic and export markets. Demanding customers such as packaging companies (green chemicals) and airlines (renewable jet fuels) are creating the market.

An example is the production of renewable chemicals and fuels from high-volume biomass feedstocks which can be made available without competing for food production (e.g. lignocellulosic and other waste streams or production of specific energy crops such as algae).

3. *Agricultural Investment Opportunities and Models*

Innovation Australia has long dealt with funding issues for raising early stage venture capital in Australia. As such it has some experience in dealing with the large and growing pool of patient and investible capital within the Australian superannuation system and the appetite (or recent lack of appetite) for investing in certain illiquid asset classes, such as venture capital.

While venture capital is the natural focus of Innovation Australia's approach to this sector, it is noteworthy that the superannuation funds with which we are in contact regularly refer to difficulties in finding appropriate financial structures for investment in agriculture and other longer-horizon investments like private equity and infrastructure. This may be due to the highly regulated structure of the superannuation industry has led to excessive caution by the boards and managers of superannuation funds, which are under constant pressure by the regulator APRA to maintain liquidity. Alternative explanations may lie in the absence of intermediaries who can manage large parcels of venture capital at competitive prices for the larger superannuation funds

Clearly the long time horizon for superannuation funds is consistent with longer term investing and could easily couple with the need for patient capital of large agricultural holdings. This may be especially so as the opportunity for improved efficiency and competitiveness in the agricultural sector may be enhanced in some cases by up scaling ventures away from the traditional family-owned farm to a more corporate model. One superannuation fund referred to an interest, for instance, in taking a position in the Qld cotton venture Cubby Station but found it had little internal experience in assessing the risk/return profile of such a purchase. Another referred to a 'cow fund' which one of the major investment banks had proposed. Another fund has in fact taken a position in broad-scale eucalyptus plantations. But most funds explain they are reluctant to move on any controversial investment, like venture capital or other illiquid investments, without endorsement from asset consultants.

Innovation Australia suggests that an approach by the Department of Prime Minister and Cabinet to this sector - larger individual funds, asset consultants, industry bodies - might prove constructive.

4. *Regulation*

Innovation Australia supports the reduction of inefficient and costly regulation, whilst also recognising the need for prudent regulation to safeguard community social, economic and health interests.

There are specific examples where over-regulation has compromised the ability of Australia's agri-food and agribusiness sectors to create and grow value-added segments despite industry innovation and investment in these areas, allowing other global regions such to gain competitive advantage.

Example: The Novel Foods Act and the Functional Food Sector

Functional foods are foods about which health claims are made. They can be arrived at via two broad means; selective breeding (agricultural methods) or fortification (food processing methods). They have been shown to add new value to existing food categories through price premiums, targeting medical conditions augmented by dietary deficiency (eg. osteoporosis, heart disease).

Following on from early market entry by UK and Northern European countries in the mid 1990's, Australia's first functional foods with health claims were launched by Unilever (Proactive®) and Goodman Fielder (Logicol®) from 1998, ahead of specific legislation and regulation by the trans-Tasman food regulator, Australia New Zealand Food Authority (ANZFA).

Around 10 years and several iterations later, the legislation was still considered unworkable by the Australian and New Zealand food processing industry – including MNC food processors – such that the commercial viability of the class was considered negligible.

New Zealand, through their ability to “opt out” of the (now) Food Standards Australia New Zealand (FSANZ) regulation, chose to do so and have a high interest and track record in both functional foods from plant breeding and food processing development pathways. The development of their functional food sector, both domestically and internationally, has seen New Zealand capture markets at the expense of Australian manufacturers though covered by the same food treaty (for example; Frucor Beverages and Red Bull®).

Innovation Australia understands the extensive work undertaken in trans-Tasman regulatory harmonisation during recent years, and would be interested to learn of any updates concerning the innovation and competitiveness of Australian companies.

Conclusion

Innovation Australia supports the review of the competitiveness of the agribusiness sector with the above additional considerations and recommendations.

We would also be pleased to offer further assistance to scope specific innovation opportunities and efficiencies as part of the future Green Paper process.

Innovation Australia Board Profile

Innovation Australia is an independent statutory body under the *Industry Research and Development Act 1986* (IR&D Act) to assist with the administration and oversight of the Australian Government's industry innovation and venture capital programs delivered by AusIndustry. Membership of the Board comprises leading Australian business figures with professional and technical expertise across a broad section of industries, technologies and capital markets. Established on 27 September 2007, Innovation Australia assumed the roles, responsibilities and powers of the two former Boards and carries responsibility for past decisions made by the IR&D and VCR Boards.

The IR&D Act promotes the development of Australian industry and aims to improve industry efficiency and international competitiveness by encouraging research and development, innovation and venture capital activities.

The Board also has functions conferred on it by the *Pooled Development Funds Act 1992* (PDF Act) and the *Venture Capital Act 2002* (VC Act) in relation to the administration of the venture capital programmes. The Board evaluates and advises Government on the operation of the IR&D Act, the PDF Act, the VC Act and the Commonwealth's income tax law as they operate in relation to those Acts.