

## Agriculture Competitiveness Green Paper

### Submission from the University of Tasmania

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The University of Tasmania welcomes the opportunity to respond to the Australian Government's Agriculture Competitiveness Green Paper and has framed its response to be constructive and suitable for further policy development. The University of Tasmania supports an open dialogue and can provide further details as needed.

#### ABOUT THE UNIVERSITY OF TASMANIA

The University of Tasmania has a core strength in agricultural research, development and extension via its investment in the Tasmanian Institute of Agriculture (TIA), a joint venture between the University of Tasmania and the Tasmanian Government. TIA is the only such fully integrated research partnership in Australia. This partnership has brought together the human and physical resources of the Tasmanian Government with the scientific research and teaching capacity of the University of Tasmania to create a centre of excellence in agricultural research, development, extension, education and training.

The University of Tasmania regards the Green Paper as a much needed opportunity to re-examine agricultural innovation within the national innovation system. This should lead to policies that view agriculture as a dynamic and integral part of a much larger innovation system.

The University of Tasmania supports the submission made by the Tasmanian Government and by the Australian Council of Deans of Agriculture (ACDA).

The University's submission to the Green Paper is organised under the headings of the broad policy areas and the specifically numbered policy ideas provided in the Green Paper document. A précis of the University's response is provided in the summary section below, with more detailed comments in the following pages.

Please note that the opinions expressed in this submission reflect broad consultation with University staff but do not necessarily represent the position of the Tasmanian Government.

#### SUMMARY OF UNIVERSITY OF TASMANIA RECOMMENDATIONS

- Interventions to improve market competition need to be based on value chain research of chain practices and opportunities for improvement, rather than relying on 'price transparency' alone.
- Marketing approaches should shift their focus from 'supply and price' to 'demand and value', including the increased targeted marketing of products based on improving insights into consumer value attributes.
- Strengthening competition laws is important but the policy and regulation focus should be on facilitating retail competition and diversity, not constraining market share or increased compliance requirements that increase costs and are imperfectly implemented;

- Cooperative structures can be improved by examining new types of collaborative business models, including ideas such as ‘production and marketing clusters’ and ‘cooperative competition’ that have proven successful in other jurisdictions and other industries.
- The Green Paper does not sufficiently address the central role that education, including higher education and research, will play in guaranteeing the future growth of Australia’s agricultural sector. A focus on agricultural innovation systems needs to be embedded in curricula at all levels, and supported through greater investment in research centres that can work with industry and governments.
- Labour availability could be improved by establishing clear pathways for international students studying agriculture in Australia to have the opportunity to then go on and work in agriculture in Australia.
- The emphasis on irrigation infrastructure development is supported, but needs to be complemented by a commensurate increase in research, development and extension into the associated economic, social and environmental impacts. ‘Hard’ irrigation infrastructure investment must be underpinned by investment in knowledge-infrastructure to fully unlock the economic, social and environmental potential of investment in irrigation. ‘Just add water’ is poor risk management.
- Improving RD&E will require action to reduce the disincentives currently faced by students considering a research career in agriculture.
- A new RDC for strategic, transformational, public good and multi-sectoral research is needed. Greater adoption by RDC’s of peer-reviewed publication would help to establish an extra quality assurance mechanism to provide clear and transparent links between scientific research and practical outcomes.
- Strengthening Australia’s overseas markets can best be supported by promoting the adoption of modern value chain management approaches that reflect contemporary practice in many of our potential export markets.

## UNIVERSITY OF TASMANIA DETAILED SUBMISSION

### **COMPETITION AND REGULATION**

#### ***Policy idea 7 — Improving market competition***

- a. introduce options to increase price transparency throughout the domestic supply chain*

#### **University of Tasmania Comments:**

Focusing on “price transparency” is promoting a single factor solution to a problem driven by multiple factors, is likely to be cost-prohibitive and focuses on the old paradigm of supply chain push.

- The investment in the ABARE capacity needed to monitor and collect price data would be prohibitively large.
- Further, the collection of contract-based price data is subject to commercial privacy issues. Universal pricing within a contract for a specific product does not take into account the need for the diversity of economic contexts and business needs of growers.

#### **University of Tasmania Recommendations:**

The focus of interventions should be on:

- Industry-based tailored interventions in part facilitated by the RDCs; and
- Interventions based on value chain research of chain practices and opportunities for improvement.

*b. introduce new marketing mechanisms that might restore balance of power to the producer*

#### **University of Tasmania Comments:**

Focusing on what share of the profit each value chain member receives merely encourages increased conflict within value chains. Value chains need to be transparent and equitably share profits and risks (see also ACDA submission).

#### **University of Tasmania Recommendations:**

- Shift the focus from 'supply and price' to 'demand and value'.
- Grow markets and identify new markets through increased targeted marketing of products based on improving insights into consumer value attributes.

#### **University of Tasmania Comments:**

Non-market based mechanisms to redress the balance of power will neither be sufficiently broad nor as efficient as the introduction of new forms of chain governance and new business models to provide diverse market opportunities for farm producers.

#### **University of Tasmania Recommendations:**

The focus of interventions should be broadened to:

- Improving the delivery of value to consumers through co-innovation and targeted marketing.
- Focus on adapting to future supply chain trends such as emerging new channels to market, collaborative physical logistics, demand fluctuation management, eco-efficient assets.

- The diversification of business models, marketing mechanisms (Idea b) and the employment of new cooperative structures (Idea c) increases the potential for collaborative innovation to add value for specific market niches.

*c. facilitate greater use of cooperative structures*

**University of Tasmania Comments:**

More diverse, modern forms of cooperative structures are essential for re-balancing the power structure of the agrifood industry, improved efficiency and accessing global markets.

**University of Tasmania Recommendations:**

Facilitate the consideration of broader, more modern approaches to collaboration such as:

- New business models such as alliances, joint ventures, associations, unit trusts, private or public companies (Tasmanian Institute of Agriculture 2012);
- 'Production and marketing clusters' which have been successfully used in the European Union and Canada (Phillips et al. 2012); and
- Cooperative competition or 'co-opetition' (Nalebuff & Brandenburger 1996) widely used in manufacturing (Fraser & Henderson 2007).

*Policy idea 8 — Strengthening competition laws*

**University of Tasmania Comments:**

A focus on the problem of retail concentration is only part of the solution and ignores systemic agrifood value chain problems in Australia.

- The average Return on Capital Employed (ROCE) for farming of 4.2% or, excluding asset appreciation 1.1% (Green Paper p. 5) compares poorly with that of the supermarkets. This disparity with the two major supermarkets (Woolworths ROCE 26%; Coles 9.5%) appears to support the contention that supermarkets are leveraging their power to generate super-profits.
- The suggested changes to the CCA, the identification of barriers to agribusiness consolidation and increasing resources to the ACCC (Green Paper p. 32) are all supported.
- The concentration of food retailing is driven by consumer demand for lower prices. Regulating market share would produce higher food costs for Australian households through bureaucracy, reduced scale-efficiency and increasing supply complexity.

**University of Tasmania Recommendations:**

- Focus policy and regulation on facilitating retail competition and diversity, not constraining market share or increased compliance requirements that increase costs and are imperfectly implemented.
- Introducing a “supermarket ombudsman” (Green Paper p. 32) should only be considered after thorough investigation of the critical success factors experienced by other countries. The UK Groceries Code Adjudicator was only established on the 25 June 2013 and should be monitored for cost/benefit to the retailing system.

***EDUCATION, SKILLS AND TRAINING, AND LABOUR******Policy idea 14—Strengthening agricultural education*****University of Tasmania Comments:**

- The submission by the ACDA notes that there were only 18 lines devoted in the Green Paper to higher education. In a document addressing the future of one of the most important sectors of our economy, this appears inadequate. No distinction is made between undergraduate and postgraduate (research higher degrees and coursework Master programs) education, yet these are distinct issues relating to the present and future of agriculture and agribusiness. The focus on production education should not detract from the education needs along the value chain which have largely been ignored in the Green Paper.
- Better articulation between the vocational training sector and the public and private extension sector is needed to enable efficiencies in adult learning.

**University of Tasmania Recommendations:**

- The University of Tasmania supports the establishment of Centres of Excellence and similar research and education frameworks that are based on strong institutional partnerships.
- The University of Tasmania supports the need to articulate an industry-wide model for education and training, addressing the whole of the agriculture value chain and extending across the VET and higher education sectors and the private and public extension sector.
- The University of Tasmania supports the Government’s review of the Australian curriculum and note its intention to ensure flexibility in teaching so that schools can improve understanding of food and fibre production, agricultural and primary industries in Australia.

- The University of Tasmania emphasises the need to assess the visibility of agriculture and food business as career opportunities and to ensure that agriculture, food and sustainability are integrated in a cross-curriculum priority approach.
- The University of Tasmania supports the submission by the ACDA that recommends the introduction of a ‘food year’ in primary schools where ‘food’ becomes a theme throughout the curricula<sup>1</sup>.
- The University of Tasmania supports the Government’s Agriculture in Education program and note its objectives to develop new resources to help teachers better understand food and fibre production and processing, and promote the range of agricultural careers available.
- The University of Tasmania supports the introduction of improved educational pathways through school, VET and Higher Education. Flexible pathways are required to attract people into the industry, to transition students from schools through appropriate direct or scaffolded pathways to VET qualifications and to higher education, and to support the upskilling of those already within the industry. Awareness building is a critical adjunct activity in order to ensure uptake.
- Greater involvement by private industry in education (e.g. endowed Chairs, undergraduate scholarships, research scholar stipend top-ups, work experience, research investment, public-private partnerships) in universities could be facilitated by government.
- The Green Paper notes that the agriculture workforce has a lower attainment of formal qualifications compared to the rest of the Australian workforce. Hence, the University of Tasmania supports the ACDA’s submission calling for a study with the aim to reconcile the sometimes conflicting needs and ambitions of employers (particularly SMEs) and employees (cheap labour vs a highly qualified workforce).
- The University of Tasmania supports the implementation of the national Learning and Teaching Academic Standards for undergraduate degrees in Agriculture. The national

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<sup>1</sup> We urgently need to overcome the wide-spread misconception that ‘agriculture’ equals ‘farming’. Only a small proportion of the population realise that farming is only a small, albeit very important, sub-set of what we mean by ‘agriculture’. We need to explain to the general public that agriculture it is a fundamental pillar of the Australian economy—in fact, it is a fundamental pillar of nearly every economy in the world. This needs to begin with a better structured curriculum starting with Primary School:

- a. There is a low awareness of agriculture and food businesses as career opportunities in Australian high school students with the narrow perception of agriculture being related mainly to traditional farming.
- b. Currently “Food and Nutrition” is taught in Health and Physical Education (HPE) from a strongly nutritional viewpoint although its scope includes “providing students with opportunities to learn about where their food comes from, how it is produced and how they can prepare it”.
- c. Currently “Food and fibre production” is taught in Technologies and should cover “the production of the food they eat, fibres they use and the environment in which they live. Learning will address key processes of production, marketing, consumption, sustainable use of resources and waste recycling”.

Improvements to the organisation of the Australian school curriculum so that agriculture, food and environment/sustainability are integrated in a cross-curriculum priority approach (instead of the currently narrow “Sustainability” priority) would help give students a clearer perception of the importance of the agriculture and food industries and raise the profile in career choice.

(OLT) Learning and Teaching Academic Standards Statement for Agriculture (AgLTAS Statement) has been developed through an extensive consultation process between academics, industry and students across Australia and is endorsed by the Australian Council of Deans of Agriculture. It will facilitate the implementation of academic standards by the agriculture discipline community, inform curriculum design and assist in the identification of marketing opportunities for degrees (Botwright Acuna et al. in press).

- The University of Tasmania encourages Australian Government investment for innovation in tertiary education with the aim to transform teaching programs into flexible delivery modes. Flexible learning options have the potential to significantly improve access to educational opportunity for students commencing vocational and tertiary qualifications, as well as for those already in the workforce and seeking to upskill. Flexible learning options include a mix of fully-online and blended learning models since coursework content that requires access to laboratories or attendance at field sites can only partially be offered online.
- The University of Tasmania encourages an explicit focus on agricultural innovation systems (AIS; Klerkx et al. 2012) that links innovation and agricultural education and strengthens outcomes for the agri-food sector. This includes mentoring networks for young farmers, 'knowledge and innovation brokers' who provide portals to formal education, training and electronic extension and form an integral part of the proposed 'Centres of excellence'.
- The University of Tasmania recommends the development of curricula that consider the whole agriculture value chain rather than training involving only pre- or post-farm gate topics.

#### ***Policy idea 15 — Strengthening labour availability***

#### **University of Tasmania Comments:**

In tertiary education and training, there is an ever-increasing proportion of international students. Many of these students desire to become Australian residents, and many organisations funding postgraduate research would like increased capacity to remain within Australia. There are ample examples of where industry/government funds are limited to training only Australian residents, which drastically reduces the pool of qualified students.

#### **University of Tasmania Recommendations:**

The University of Tasmania recommends linking Australian scholarships and other support to schemes with clear paths towards residency along with incentives (e.g. some type of payback) to remain in Australia. Pathways would also be strengthened by creating degrees where students enter a curriculum in their home country and end up in Australia. This should also involve active participation of potential future employers who help 'pull' students from the degrees into their companies.

## ***WATER AND NATURAL RESOURCE MANAGEMENT***

### ***Policy idea 18 — Improving water infrastructure and markets***

#### **The University of Tasmania Comments:**

The University strongly supports the emphasis on irrigation infrastructure development. Irrigation provides the greatest opportunities to intensify Australian agriculture and meet national and global challenges. Intensification based on irrigation also comes with additional economic and environmental risks that farmers need to manage. ‘Just add water’ is inappropriate given the size of the opportunity and the investment. Hence, ‘hard’ infrastructure investment must be underpinned by investment in the knowledge-based infrastructure to fully unlock the economic, social and environmental potential of investment in irrigation.

#### **The University of Tasmania Recommendations:**

With the encouragement from the Australian Government, the RDCs should provide additional resources to accelerate agricultural productivity and profitability by targeting a range of critical industry needs for irrigated agriculture including:

- Rapid adoption of new technologies and cross-sectoral business models.
- Development of new industries made possible by the secure supply of water (e.g. a hyper-yielding feed grains industry in Tasmania to support the expansion of dairy).
- Irrigation investments that remain productive and profitable into the long term future.
- More profitable farms, viable rural communities and improved natural resource management outcomes.
- Adoption of cost-effective precision agriculture.
- Better business models and value chains.

## ***RESEARCH, DEVELOPMENT AND EXTENSION***

### ***Policy idea 20 — Strengthening the RD&E system***

#### **University of Tasmania Comments:**

The submission by the ACDA highlights the appalling conditions for research higher degree students that act as a disincentive for attracting people into research. A considerable proportion of agricultural research is undertaken by these students. The following key blockages deter young people from considering a research career in agriculture:

- Stipends on or below the poverty line,

- Tax limitations on stipend top-ups,
- Lack of increments and superannuation entitlements,
- Poor career prospects and security of tenure for early career researchers, and
- HECS debt accumulation during study.

These are clear disincentives, particularly when immediate job opportunities in the commercial sector are highly attractive for recent graduates. Unless action is taken, the pipeline of early career researchers is likely to dry up soon.

#### **University of Tasmania Recommendations:**

- Remove the disincentives for higher degree students as outlined above.
- Make ‘extension’ and ‘extension research’ a legitimate activity for Australian universities. Resources for agricultural extension need to become a standard component of Category 1 funding.
- Collaboration of public and private providers of RD&E requires a set of principles and mutually-agreed, efficient and practical processes for effective co-operation.
- The resourcing of foundational and trans-disciplinary activities, including monitoring and evaluation, should be factored into each RD&E investment.

#### ***Policy idea 21 — Improving the rural RDCs***

#### **University of Tasmania Comments:**

The levy-based RDC system of research funding is one of Australia’s key strengths. It also contains risks and missed opportunities. While the Australian Research Council (ARC) focuses on foundational research, the RDCs focus on translational research, i.e. a very strong focus on ‘paddock level outcomes’. Increasingly agricultural R&D priorities fall in between these two objectives and much of this high priority research into cross-cutting, systems oriented and multi-commodity areas remains unfunded. Further, the RDCs place relatively little value on peer reviewed publication of research outcomes (see also the submission by the ACDA). This situation is at odds with the innovation system driven by the Australian universities nationwide evaluation system, Excellence in Research for Australia (ERA), and the ARC. Publications are a fundamental component of the research process. They are an essential pillar that underpins accountability, transparency and quality control of science. University funding as well as academic promotions are in parts based on publication. Focusing on on-the-ground impacts to the exclusion of scientific publication is counterproductive. Not only does it undermine the principles of good science, it also increases the risk of duplication of effort as publications are often the only public record that remains after the successful completion of a research project. Better synchrony between the different Category 1 research providers (ARC and the RDCs) would be highly desirable.

**University of Tasmania Recommendations:**

- That Government create a new RDC for strategic, transformational, public good and multi-sectoral research.
- That peer reviewed publications are adopted by RDCs as an additional quality assurance mechanism for research investment.
- That the ARC develop metrics for impact as an important component of research quality in agricultural research.

**ACCESSING INTERNATIONAL MARKETS*****Policy idea 24 — Strengthening Australia's overseas market efforts*****University of Tasmania Comments:**

Re-focusing many Australian agrifood sectors on exports when there is little export expertise and domestic chains have not adopted global best practice in value chain management may inhibit success, have high failure rates and act as a disincentive to export.

**University of Tasmania Recommendations:**

In addition to the Policy ideas discussed above, enhancing export capacity must:

- Promote the adoption of modern value chain management approaches;
- Marketing structures that facilitate scale and specialisation of labour.

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<sup>2</sup> NOTE: the Consumer Goods Forum is made up of the 70 largest retailers in the World.