Why Agribusiness Matters
"Solutions for Many Growing Problems"

1 WHY INDUSTRY-RELEVANT CONCERNS MATTERS TO OUR ECONOMY

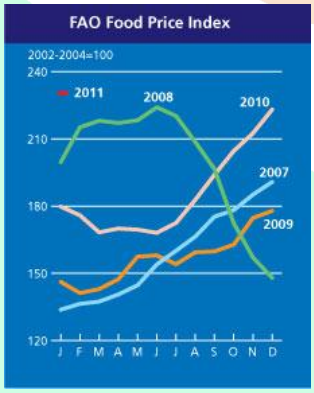
1. Agribusiness has a growing problem: It is the world's largest industry, global demand for food and food prices are at their highest levels ever, yet there are not enough graduates to fill industry vacancies to meet these future challenges. Less than 1.5% of students entering universities in Australia and the USA choose agriculture as a career (Romero, 2011).

2. The wider public perceive agriculture as 'just farming': i.e. raising livestock and growing crops. Yet less than 2% of agricultural employment opportunities are on farms. A myriad of agribusiness service industries are directly linked to agriculture; including food manufacturing, financial planning, lending, insurance, commodity trading, transport, export logistics, and natural resource management. Agribusiness is the most interdisciplinary study field of all.

3. The constant supply of well-trained graduates to agriculture/agribusiness is the best way any society can perpetually reduce the cost food, fibre, renewable fuels, and the threat of war and conflict caused by hunger, poverty, and poor living conditions.

2 IMPORTANCE OF PRIMARY INDUSTRIES

2.1 GLOBAL AGRIBUSINESS



1. Agribusiness encompasses half the world's labour force, half the world's assets, and 40% of consumer purchases (Goldberg, 2011). It drives the public policy issues in economic development, food security, trade, nutrition, the environment, natural resources, protecting plant and animal diversity, intellectual property, genetics, and social and economic priorities.

2. The foreseeable outlook is for surging world food prices (*FAO Food Price Index* at a record 231 points and trending strongly upwards).

3. Agriculture is too important to ignore and too valuable to forget.

4. Agribusiness not only needs to advocate for agriculture and its supporting industry, but also for education and the need to teach our children about agriculture and how the world is nourished.

2.2 AUSTRALIAN AGRIBUSINESS

1. Mining (1st) and Agribusiness (2nd) are Australia's two largest wealth-creating sectors in the Australian economy. Mining and agriculture are the wealth creators in all regional areas.

2. In 2009-10, there were 373,560 people directly employed in agriculture, forestry, and fishing (with a multiplier of 10, over 3.7 million jobs reliant upon agricultural production). There are 137,000 farm-related businesses in Australia occupying 50% of Australia's land mass (Agribusiness Association of

Australia, 2011). Farmer's earned Australia $28.5 billion in export income, and spent $3 billion on natural resource management.

3. The $108b Australia food industry is our largest manufacturing sector. It employs 312,000 people, including half of all employment in rural and regional areas.

4. There are 6,000 graduate vacancies in agribusiness each year (statistics vary depending upon the source).

5. Australian only produces 700 agricultural graduates per year from all its Universities and agricultural colleges (Pratley & Copeland, Agricultural Graduation Rates, 2008). In WA, that figure is well below 100.

6. Only 7% of people farming or servicing agriculture has a degree compared to 21% across all other industries (Productivity Commission, 2005). Tertiary education has failed the agricultural sector over the last 40 years.

2.3 The Key Talking Points

1. When every parent thinks of their children, their first priority is to ensure the best possible education for their children. Similarly, the holy grail of any regional development policy is to ensure the constant supply of graduates to the regions with skills that are directly relevant to the industry underpinning that region (in Australia, that is predominantly mining and or agriculture). Primary industry education, especially in the regions, is the key to development of the all of Australia's regions.

2. The "7% issue" points to the long-term failure of Australia's higher education sector to meet primary industry needs, despite primary industries being the main wealth-creating industry upon which we base our economy. Why should those who are part of the system that created the problem, be entrusted with 'more of the same'. The system is broke, it needs fixing (along the lines proposed by the "MOCA Model").

3. The last Federal election highlighted the poor state of regional education in all disciplines; but situation is particularly dire for the industries underpinning the economy of all regions (there is widespread recognition of skills shortages in both these key industries).

4. Despite being economic powerhouses in the economy, their influence within tertiary education institutional governance (particularly universities) is minimal. The hegemony of larger universities swamps these disciplines, in both staff and student numbers, and the high costs of running regional campuses further exacerbates the problem (traditionally the 'home' of industry graduates).

5. Both single purpose agricultural campuses and agricultural faculties within in larger city-based institutions have already closed or are declining. If this is the case, and given over 40 years servicing the industry that we find that even the collective wisdom of some 20+ world class institutions cannot meet the industry's needs, then the current system is broken, and new approaches are needed in the national interest. This shows that the agricultural academic discipline needs are subservient to the institutional needs, since no genuine State-wide, nationwide, or industry-wide approaches have been

successful. Therefore, industry should take matters into their own hands at the national level and seek new solutions (and not entrust future policy development to those who created the current situation).

6. No government in Australia has a formal process or funding mechanism that directly connects industry graduate demand needs to the supply of graduates arising from higher education outcomes. The current approach rewards institutions for enrolling generic low cost students and no institutions receives funds to produce graduates to meet State and national 'wealth-creating' industry needs (because of their higher costs). In this respect, the market has failed completely, failed partly because of market signal distortions, and partly because they failed to respond to the full gamut of industry needs in a timely way.

7. Industry demand for agribusiness graduates is at its highest known levels, and the supply of students to tertiary agricultural schools has never been higher, yet the higher education graduate output from has never been lower. WA produces less than 100 agribusiness graduates per year. Muresk & WASM graduates contribute 100% to regional development since:
   - About 50% of their graduates return to live in the regions with high-level industry-relevant skills
   - About 45% return to the city to specialise in delivering industry-relevant services to the regions (includes FIFO)
   - Even if the remaining 5% end up working in other industries, their training sees them retain empathy with rural, regional, & remote Australia and they remain ambassadors to the 'regional cause'.

8. Australian statistical measurement methods underestimate agribusiness economic activity by commonly measuring primary industry output only, and sector-wide 'whole value-chain' is not measured properly because of collection methods that identify the more generic primary, secondary, and tertiary industry classifications, and not their value-chain relationship to the core primary industry product. Consequently, not all of the agribusiness value chain identifies itself as 'related economic activity' and relevant statistics are not gathered and or published for use by the industry.

9. The problem is that all higher educational institutions are State owned & legislated, but federally funded. This is further exacerbated by the fact that
   - There are higher costs of operating in regional Australia
   - Special funding schemes such as Regional Loading Scheme are always insufficient (since the true costs are not fully covered), especially when the city-based parent university skims off the regional loading funding and it does not arrive at the regional campus.
   - "Out of sight, out of mind" city-centric paradigms
   - Urban political hegemony always beats low regional population

10. Food Security is a rising public policy issue worldwide; Australia is not immune from it. Recently, Australia became a net importer of food and grocery products.

11. Every agricultural college campus (except one) has recently closed or is in decline. The successful exception (Marcus Oldham) is also the only one that is not subservient to another to a larger multi-purpose institution, and it was the only one to have full control of its marketing budget. Even it is struggling to survive.

12. Industry needs all types of graduates, however there is an urgent need for graduates with a combination of science and business skills with advanced practical 'can do' *in situ* skills usually obtained in a regional context (i.e. in the field: on the farm, down the mine). In this sense, the habits of universities in organising and teaching in single discipline scientific-reductionist approaches mitigates against the holistic-systems approaches favoured by most employers.

13. Most industries' organisations conduct business steeped in historical practices, or at least methods that derive and grow from bases that are more 'traditional'. As a result, there is an inertia militating against a need to re-structure the industry representative bodies and their business methods to best meet new challenges in the global business environment. Agribusiness has no natural industry peak body and new business networking models will better advance the interests of the sector.

14. Curtin University emasculated the most successful agribusiness degree course in Australia (The Bulletin, 1991), conducted at Muresk, by gradually replacing experiential systems-based components with reductionist science-based approaches.

15. The rate of productivity increase in agriculture is slowing (and it seems directly related to decreases in graduation rates and agriculture-related R&D expenditure).

3 RECOMMENDATIONS: ACTIONS TO FIX

1. Devise cogent practical methods to increase primary industry enrolment and graduation rates to meet industry needs (Having a larger pool of highly diverse students in the agricultural, food, and life sciences arena will translate into a more dynamic and vibrant agricultural industry that is better equipped to serve the Australian economy and an increasingly hungry world).

2. Join the Agribusiness Association of Australia (AAA): A professional networking group that arranges breakfast functions and conferences to facilitate the interchange of ideas amongst industry professionals.

3. Agribusiness Alumni Association Inc. (AAAInc.): Create an umbrella group to leverage all international networks of agricultural and agribusiness industry-oriented, but mostly institutional-based, alumni groups. These are the future leaders of the industry [Note: since created, see www.agribusinessalumni.com].

4. Agribusiness Council of Australia (ACA): Form a new peak-industry lobby-`group that incorporates the entire agribusiness sector value-chain (to ensure a global systems approach involving participants from raw material accumulators to producers to consumers to waste recyclers) [Note: since created, enquiries info@agriculture.org.au].

5. Agribusiness Leaders Convocation (ALC): Conduct an annual meeting of Australia agribusiness leaders in Canberra around the time of the Federal Budget (for input into the following budget).

    - Note: Since created. The inaugural ALC was held in the Senate Hearing Dooms, Parliament House Canberra on 12 May 2011. Agribusiness Leaders resolved to create the ACA, seek to conduct a Senate Inquiry (since completed), and related matters.
    - A second ALC (WA version) was held in the Legislative Council Chamber on 16 September 2011. The meeting endorsed the directions of the inaugural LAC meeting.
    - Arrangements to conduct third and subsequent meetings in other Parliaments is underway.

6. Australian Agribusiness Advancement Trust (AAAT): Establish, over 10 years, an A$1 Billion capital trust fund to eliminate the cost of running regional campuses, and provide other financial support to agribusiness tertiary educational institutions [Note: the target has been raised to $5b].

7. Australian Agribusiness University College (AAUC): Create industry-governed approaches and create a new type of internationally competitive, specialist, university college.

8. Ensure Regional Campuses become multi-user campuses governed by Independent Boards (limit of ten members).

9. Conduct a National Independent Inquiry into improving formal processes to provide relevant higher education outcomes directly related to the needs of Australia's wealth-creating Industries [Note: Senate Inquiry since completed and tabled in the Senate in June 2012].

10. Improve statistical measurement methods in both public (ABARE/ABS) and private institutions (ASX Agribusiness Index).

11. Implement the Cowan Report in Western Australia immediately (but also advise the State Government that solely implementing the Cowan Report will only 'hold the fort' for about 3 years, and more substantial 'fixes' will be required before the commencement of the 2013 academic year).

12. Legislate and regulate the Agribusiness Education via national policy frameworks via the Ministerial Standing Council on Primary Industries (not the Educational equivalent), i.e. a national priority.

13. Require more public transparency and reporting in Higher Education in:
    - enrolment preferences, enrolment, and graduation rates in higher education;
    - industry consultation mechanisms, standards, and outcomes; and,
    - auditable and audited adherence to legislated functions (particularly in relation to the Nation's and the State's major wealth-creating industries).

14. Our industries compete internationally: they need national policy solutions, not state or institution-based solutions (which, to date, have failed to produce educational outcomes to support primary industry needs, and consequently the needs of the national economy).

4 APPENDICES

TABLE 1: THE FATE OF AUSTRALIA'S AGRICULTURAL COLLEGES (LAST 40 YEARS)

Name	Opened	Acquired	Acquiring Institution	Closed [to Tertiary Education]	Comments
Dookie (Vic)	TBA	TBA	Melbourne University	TBA	Closed
Gatton (Qld)	TBA	TBA		TBA	In decline, now main campus for Veterinary Science
Glenormiston (Vic)	TBA	TBA	Melbourne University	TBA	Closed (Glenormiston Old Collegians' Association (GOCA))
Hawkesbury (NSW)	TBA	TBA	University of Western Sydney	TBA	Closed, last enrolments in 2012.
Longerenong (Vic)	1898	TBA	Melbourne University	TBA	Closed (sold to local private TAFE)
Marcus Oldham (Vic)	TBA	TBA	Private	TBA	Financially successful and growing, run as private. Marcus Oldham College Old Students Association (MOCOSA)
Muresk (WA)	1926	1969	Curtin University	2012	Closed 2006 as a separate entity, total withdrawal from campus before the end of 2012. Muresk Old Collegians' Association (MOCA) established in 1930.
Orange (NSW)	TBA	TBA	1st New England 2nd Sydney 3rd Charles Sturt	TBA	In decline (3 different universities has managed this campus)
Roseworthy (SA)	TBA	TBA	University of Adelaide	TBA	Closed (Roseworthy Old Collegians' Association (ROCA))
Wagga Wagga (NSW)	TBA	TBA	Charles Sturt University	TBA	Now part of CSU. Enrolments in decline.

5 DEFINITIONS OF KEY TERMS USED

1. Agribusiness: In agriculture, "agribusiness" is a generic term for the various businesses involved in food, fibre, and renewable fuel production and consumption chains: including farming, fishing, and forestry, contract farming, seed supply, agrichemicals, farm machinery, wholesale and distribution, processing, financing, marketing, transport, export logistics, and retail sales. The formal definition fused by the ACA is "**Agribusiness refers to the whole constellation of activities and supporting institutions that are involved in the world's complex food and fibre system**" (Goldberg, 1997).

2. Agriculture (and Farming): Agriculture is the artificial cultivation and processing of animals, plants, fungi, and other life forms for food, fibers, and other byproducts. Agriculture was the key implement in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of much denser and more stratified societies.

3. Alumni: An alumnus (pl. alumni) is a graduate of a school, college, or university. An alumnus can also be a former member, employee, contributor or inmate as well as a former student.

4. Alumni Association: An alumni association is an association of graduates (alumni) or, more broadly, of former students. In the past, they were often considered to be the university's or school's *old boy network*. Today, alumni associations involve graduates of all age groups and demographics.

5. Food Security: Food security is achieved when all people at all times have physical and economic access to sufficient, safe, and nutritious food to meet dietary needs and food preferences for an active and healthy life (FAO, 2011).

6. Tertiary Education: Tertiary Education = Higher Education (TAFE or VET sector) + Universities

7. Value-Chain: The value chain, also known as value chain analysis, is a concept from business management that was first described and popularized by Michael Porter in his 1985 best-seller, *Competitive Advantage: Creating and Sustaining Superior Performance* (Wikipedia, 2011).

8. Wealth-Consuming Industry: The economic activity of an industry that consumes or expends public receipts collected by governments as tax (e.g. health, education, law enforcement)

9. Wealth-Creating Industry: The economic activity or an industry that generates genuine wealth through the profit making efforts of organisations and individuals; Government's then tax these profits which become a Government's revenue (i.e. public receipts).

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