May 2005 House of Representatives Standing Committee on Agriculture, Fisheries & Forestry

Submission to the 2005 Inquiry into Rural Skills Training and Research

This is an important and timely inquiry. Australia's agricultural industries will be facing new levels of challenge in attracting, building, harnessing and best utilising human capital and knowledge, as they strive to compete in changing global marketplaces.

The following inputs are based on my three decades of career experience from research implementer and employer through to analyst and director roles in agricultural industries (wool, meat, dairy ...), through to Founding Director of the Australian Centre for Agriculture and Law at The University of New England in 2003. I have reviewed and analysed a range of across-sector, discipline and agricultural/agri-business education issues over these years.

- Agricultural industries, like others sectors, have reported increasing difficulty in finding appropriately trained, skilled and thinking employees to work in all types of roles; on-farm, in agri-businesses or as specialist advisers, researchers and educators. This could be part addressed with **pay and reward structures that are routinely more competitive**. Other industries, regionally (mining) and in the cities are facing this reality, and competition will grow. Even in the 1970s, agricultural scientists ranked lowest on graduate pay scales.
- It will be reasonably argued most agricultural industries cannot afford to pay much more for human resources. This sets an ongoing challenge for education providers, researchers and industry and enterprise leaders. New technologies, practices, work environments and career paths that close this gap will be vital. They should aim to bring the (evolving) needs of farmers and agri-businesses closer to the (changing) interests, options and capacities of categories of rural employees and contractors, current and likely future.
- **Inventive and integrated thinking** is required to address difficulties in attracting people to agricultural industry work, whether on-farm, in large or small processing plants, in service businesses, as researchers or educators. More productive workers/thinkers implementing new ways will have higher reward expectations and different ongoing education needs.
- Demographic trends are changing the ground-rules. For instance, across Australia regions have long reported the exodus of youth, especially young women who cannot find interesting, continuing work. They are followed by capable young men. Farming still involves many physical operations. Researchers breeding larger animals or designing new machines might consider the physical strengths of men, women and older people so all can do work the successfully and positively, and so couples can readily run contract services. Agribusinesses in regions might benefit from innovative processes that harness the maturity and experience of semi-retirees into win-win contract arrangements.
- Similarly, for scientists, researchers, business graduates etc careers dipping in and out of agricultural industries should be accepted and encouraged to attract talent. This can start with usefully linked multi-disciplinary studies. While agriculture should be a mainstay of the Australian economy and vital to regions all this century, for many young people (and their parents) tying a 50 year working future to agriculture alone would be a daunting idea.

The industries should have expertise to specify training needs, but I suggest beliefs about sources of skills warrant review. Rural industries, leaders, employers and educators need to see cities as a major source of future talent and actively adjust attitudes. Australian agricultural industries risk becoming 'closed cultures' with shrinking pools of capability. There are two sides to the city-country divide criticised by rural leaders. While bright young people from regions go to cities for careers in finance, communications, law or design, and are embraced by employers, a 'from the land' barrier appears to stand in the way of career-building in agriculture. Looking around, I see men who have given 30 plus years to research or services in agriculture, still located on the margins of rural industries, at times dismissed, rarely embraced. Family or corporate farm ownership seems to be a prerequisite to being a 'player' in agricultural industries. See for example the credentials listed for officers on agri-organisation websites.

Student numbers and performance are also indicative. In addition to tackling general trends away from science and engineering, factors such as the location and culture of agricultural courses warrant review. Without changes, it is difficult to responsibly advise any young city-person to favour a long-term career in agricultural production or processing, even in vet-science, or agriculture-business-law (areas with considerable work potential).

- If Australia's economy is strong in 2020, it will be partly because agricultural business is
 a trade pillar and this is recognised by policymakers and citizenry including youth from all
 over. Like Education, Sport, Tourism, Agriculture needs to be proudly owned by all in
 the economy and not seen as the province of a seemingly protected few. Agricultural
 Australia should show off long-term successful agri-businesses that contribute to regions,
 the nation and world, while moving away from adjustment schemes and signals of decline.
- Global market trends in agriculture, trade, education and aid policy are relevant to this review. Within Australia, the need for skills at all levels to deal with complex work and business calls including regulation is increasing. Those great markets for Australian rural produce in return offer potential workforces, including researchers, either to work here or via outsourcing. These people will need training to work here or in their homelands and this may boost economies of scale in support of new multi-national agri-education systems.
- Agriculture is an international front-line for Australian science and research. This
 alone, brought to life in inquiry-based courses, may attract some top students. Expertise
 in agriculture, bioscience, food manufacture, environmental science, through to business,
 trade and regulation can open doors for global careers. It is not surprising that some major
 city universities retain Agriculture as a research and teaching forte, and it is important to
 agricultural industries that this continues (perhaps with strengthening of regional programs).
- Conceivably, the Committee will find a number of focussed and effective vocational and university programs, a current excess of agricultural education capacity and some mismatch with needs and workstyle trends. Ideally, future plans including competitive funding, would enable truly innovative providers in the changing education services marketplace to reflect on, invest in and deliver strong suites of linked ag-education products. These would respond to changing career markets, inspire a spectrum of students into agriculturally-oriented education from school to research degrees, and meet short to long term skill needs. Investment in current facilities would be a consideration, but at this stage ideally should not override critical evaluation, strategic rethinking and creative initiatives.

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