Response to
Recommendations on the NSW Industry Action Plan for Agriculture

April 2014
About Charles Sturt University

Charles Sturt University (CSU) is Australia’s largest regional university, with more than 35,000 students and approximately 850 staff. Established in 1989 the University traces its roots back to the formation of the Bathurst Experimental Farm and Wagga Wagga Experimental Farm in the 1890s. In one form or another, agricultural education and research has been integral to the University’s character and mission for more than a century.

CSU is a multi-campus institution with Australian campuses at Albury-Wodonga, Bathurst, Canberra, Dubbo, Goulburn, Orange, Port Macquarie and Wagga Wagga, and a Regional Study Centre in Wangaratta. The University’s commitment to the development and sustainability of rural and regional Australia is informed by the partnerships it has formed with each of its campus town communities, and with the broader rural and regional communities it serves.

CSU offers a broad suite of agriculture specific and agriculture related courses, including courses in agricultural science, agricultural business management, horticulture, water management, sustainability, environmental science, wine science, viticulture, food and nutrition, animal science and veterinary science. This diversity of programs has arisen from continual reflection and review in order to respond to the changing needs of industry and community, and the strength of the industry links CSU has developed and maintained are in part reflected by the consistently high graduate employment rates CSU agriculture and veterinary students enjoy.

CSU has established successful partnerships with other providers in order to create pathways for students into University level agriculture education, and to offer agriculture courses in areas of industry need. For example, the University offers a pathway program through Goulburn-Ovens TAFE Wangaratta campus into the Bachelor of Agricultural Business Management and the Bachelor of Agriculture. This year, CSU has also been able to offer the Bachelor of Agricultural Business Management from the Muresk Institute campus in Western Australia, through a partnership with the CY O’Connor Institute.

CSU’s agriculture related research centres help drive improvements and innovation in the sector, and leverage industry partnerships for the benefits of the University’s students and communities. These centres include:

Graham Centre for Agricultural Innovation – an alliance between CSU and the NSW Department of Primary Industry. The Centre aims to address the challenges facing the agriculture industry in Australia, such as declining rural profits and changing demography, climate variability, soil health and erosion, water quality and globalisation.

Institute for Land, Water and Society (ILWS) – established in 2005 with the aim of undertaking internationally recognised research in sustainability to enhance the livelihoods and lifestyles of people in rural and regional Australia.

National Wine and Grape Industry Centre (NWGIC) – integrates the viticulture and wine science expertise of staff from CSU and the NSW DPI, with funding from the University, the Department and the NSW Wine Industry Association. A commercial winery,
supported by a high quality vineyard in Orange, support the University’s programs in wine science and viticulture.

‘Functional Grains’ ARC Industry Transformation Training Centre – a research training hub linking industry, students and researchers from CSU, NSW DPI and CSIRO focussing on rice, pulses and canola. Partners include GrainGrowers, MSM Milling, Flavour Makers, Tey’s Australia, Woods Grains, Grains and Legumes Nutrition Council, Grains Research and Development Corporation and Rural Industry Research and Development Corporation.

Food Soil Research Centre – a partnership with Port Macquarie Hastings Council focussing on sustainable agriculture, food quality, food security and environmental science.

CSU is also a participant in a number of relevant agricultural cooperative research centres including:

Collaborative Research Centre for Cotton Catchment Communities – undertakes research, education and commercialisation activities to benefit the Australian cotton industry and rural communities.

Collaborative Research Centre for High Integrity Australian Pork – identifies ways of improving the efficiency of conversion of feed into live weight in growing pigs. This includes improvements in the quality of feeds and the reproductive efficiency of the national herd.

Collaborative Research Centre for Future Farm Industries – developing new and adaptable farming systems for Australia by creating new land-use systems which will make agriculture more productive adaptable to climate variability, sustainable and diverse.

CSU is also rapidly developing strong international RD&E and training links in SE Asia, China and India with funding from the Australian Centre for International Agricultural Research (ACIAR).

CSU’s location in the heart of the most productive agricultural districts in the Murray Darling Basin, and across rural and regional NSW and Victoria, allows it to work alongside producers, processors and agribusinesses to identify challenges and opportunities, and deliver practical solutions in collaboration with industry.

Our students are predominantly drawn from agricultural communities, and return to those communities to address workforce need and shortages in key agricultural sectors.

Today, CSU is one of the largest tertiary agricultural educators in Australia, and has extensive engagement with industries located in close proximity to our rural and regional campuses, continuing a 100 year tradition of engagement and leadership in agricultural education and research.
Introduction

Charles Sturt University (CSU) welcomes and supports the draft recommendation to government contained in the Taskforce Recommendations on the NSW Industry Action Plan for Agriculture (hereafter the ‘Taskforce Recommendations’). These address matters of critical importance to the NSW and broader Australian economy, and to the future health and resilience of NSW’s regional and rural communities and physical environments.

As is noted in the Taskforce Recommendations and other recent government policy statements, there are many opportunities to further increase the economic returns from the food and fibre industries through focusing on meeting the demands of the rapidly increasing middle-class in Asia and the anticipated requirement for world food production to increase by 60-70% or more by 20501-3. The Taskforce Recommendations complement those of the ATSE report3 and the Chief Scientists’ statement of Strategic Research Priorities4 in clearly recognizing and supporting that rural research, development and extension (RD&E) is vital to the assuring growth in the productivity and competitiveness of NSW’s rural economy and to grasp these export opportunities.

It has been signalled in these and other5 documents – and CSU strongly supports – that whilst we must continue to seek profits through input efficiencies, we must also act to drive smarter production and supply chain systems focusing on enhancing product quality and value, and better meeting market needs. These foci require a greater understanding of the scientific and management principles governing farming systems but also of the ways in which this new knowledge can be most effectively transferred to and adopted by farmers to increase productivity and profitability. Strategic planning and management will also be required to develop the agricultural workforce and the processing, logistical, and marketing systems to better facilitate NSW agricultural products reaching profitable markets and we support the Taskforce’s recommendations in advancing these goals.
CSU's responses to the Taskforce Recommendations

For convenience our responses mirror the structure adopted within the Taskforce Recommendations document, as follows:

1. **Recommendations regarding profitability, productivity and innovation**

CSU supports the broad thrust of recommendations 1-9.

In respect of recommendations 1-3 we support that investments by Government should focus on transformational, long-term research with appropriate funding models and incentives used to support greater industry investment in near-market applied R&D. In the production sector, grower groups have a vital role to play and we believe the greatest benefits will accrue when these can be seamlessly linked into regional, state and national RD&E frameworks.

Government can foster these relationships and mechanisms by working with industry to fund Regional Centres of Research Excellence and Postgraduate Training Hubs, supporting both career pathways for progression of PhD students through Postdoctoral Scientist posts into research or academic careers, and promoting working arrangements that facilitate the flexible interchange of staff between the partner organisations. Investment in the regions will provide the specific expertise and technologies to drive the improved farming systems and other innovations that ultimately will deliver gains in productivity and profitability across the whole agricultural value chain.

More broadly, we support that future Government and private investment in the sector should aim to increase the overall value of production (rather than volume) through moving products up the value chain to extract greater profit, including through more extensive or smarter processing of products in NSW.

2. **Recommendations regarding workforce and skills**

CSU supports the broad thrust of recommendations 10-17.

CSU strongly endorses recommendation 10 regarding implementation of the Review into Agricultural Education and Training in NSW (the ‘Pratley Review’). Thus CSU advocates not only increased Government and private investment in RD&E (as above) but also their input to assure and enhance the quality of education and training provision at all levels, and interventions to attract the ‘brightest and best’ into agricultural careers.

CSU actively seeks to increase the number of students entering Agricultural careers through strategies which reflect key recommendation of the Pratley Review, including:

(a) Appropriate targeting of student recruitment initiatives, including participation in career fairs, field days, agricultural shows, and running outreach activities with local schools and Aboriginal communities.

(b) Increasing students’ interest in and aspiration towards Agriculture and related degree programs, including through supporting the Primary Industries Education Foundation (PIEF) and the Australian Council of Deans of Agriculture’s (ACDA) ‘CareerHarvest’ initiative.

(c) Providing accessible pathways for students to progress to tertiary study, especially through TAFE articulations and online distance education.

(d) Better supporting teachers in the delivery of agricultural-related curricula.
CSU also recommends the formation of Regional Collaborative Agricultural Networks to link schools, VET institutions, Universities and Industry, as proposed in the Pratley Review. The focus of such networks should be to promote better infrastructure sharing and coordination, programme designs that facilitate accessible pathways for study, and programme evaluation. There are benefits for all parties in minimising duplication of resources with applied research facilities centred on universities and NSW DPI, and TAFEs as key suppliers of practical skills and training, with both supporting general and agricultural high schools within their regions.

In regard to recommendations 11 and 17 CSU agrees that there is now a unique opportunity for Government to support an enhanced model for extension and adoption of R&D, building on recent changes to the traditional delivery model. CSU advocates that the principles of the US Land Grant model be adopted, which will harness the resources and expertise of universities, ideally in partnership with DPI and private providers, to assure both the training of the next generation of extension specialists and the provision of more effective extension services to the farming sector. Mechanisms could be introduced within such a framework to also accredit new and established industry consultants.

CSU, through the Graham Centre, would welcome the opportunity to help develop and pilot such an approach. Universities such as CSU offer a unique combination of facilities, equipment, knowledge and experience that is difficult to replicate in other institutions and the Land Grant model has demonstrated these resources can be leveraged to achieve significant benefits to agricultural productivity, profitability and sustainability. Adoption timescales have traditionally been long (10-25 years) and must be reduced in future to maximise the opportunities for NSW agribusinesses to extract the greatest competitive advantage from the new markets that are presenting, particularly in Asia. We agree with the Taskforce’s recommendation that adopting and tailoring the Land Grant model can provide such benefits.

In regard to recommendation 12, CSU recommends that post-graduate training in agriculture also requires attention, particularly in relation to meeting the needs of the future RD&E and academic workforce sectors, but also for Australian agricultural consultants and specialists to capture the expected opportunities for RD&E services in international markets. Again, CSU advocates the building of strong, productive and sustainable regional relationships to further this facet of agricultural education. The alliance between CSU and the NSW DPI in the Graham Centre for Agricultural Innovation has delivered effective joint supervision of PhD students and postdoctoral fellows supported by funding from the Rural Research Development Corporations, such as the Grains Research and Development Corporation and Meat and Livestock Australia, and from the private sector.

3. Recommendations regarding business and regulatory environments

CSU supports the broad thrust of recommendations 17-26.

We strongly endorse recommendation 21 and advocate that governments continue their efforts through state and federal agencies to harmonise risk-based phytosanitary, livestock health and welfare, and other relevant regulations. These should employ on a
risk-based approach founded on the latest peer-reviewed scientific evidence to foster and simplify market access and to reduce transactions costs through supply chains.

More broadly, CSU supports continued Government planning and investment inputs into regional infrastructure development to achieve necessary reductions in the cost per tonne (and carbon outputs per tonne) of transporting agricultural products to ports and processing plants. Clarity and consistency of Government policies and leadership in infrastructure development will foster confidence in further private investment across both farming and non-farming sectors of the rural and regional economies.

4. **Recommendations regarding investment and ownership**

CSU supports the broad thrust of **recommendations 27-29**.

5. **Recommendations regarding market and export opportunities**

CSU endorses **recommendations 30-36**.

We strongly endorse **recommendation 34** (and similarly, **recommendations 38-40**). Environmental and animal stewardship delivered through conservation farming, improved animal husbandry systems, improved systems for weed and resistance management, gain in water use efficiency and optimal management of environmental flows, and robust food safety management systems should all be acknowledged and promoted to local and international consumers by both industry and Government. This is vital to assure confidence in the safety and sustainability of NSW (and more broadly, Australian) agricultural products and the continuing social licence for their operation and development.

In respect of **recommendation 36** we contend that the speed and reliability of access to information is critical to the dissemination and uptake of new knowledge and technologies. Therefore investment in infrastructure must as a priority address the provision of reliable, fit-for-purpose communication system: the NBN must deliver against this need through the support of governments at all levels.

6. **Recommendations regarding connecting with community**

CSU endorses **recommendations 37-41**.

We have commented on **recommendations 38-40** above. In respect of **recommendation 41** we note there has been a trend of migration of people from smaller rural and remote communities to larger regional centres over many years. It is important that government creates an environment in which smaller rural and remote communities remain viable places to live and work. This will ensure that older Australians can maintain connection with their home and community as they age, as well as providing the distributed labour force needed to support dispersed agricultural industries.

Charles Sturt University is of the view that Regional Development Australia Committees (or their successors) should be asked to develop a Small Rural and Remote Community Linkages Plan for their region, in collaboration with regional service providers and local government, to identify the types of frequency of services required by these communities to be sustainable, and how these can be maintained and adapted as the needs of the community changes over time.
Agriculture is an important component of the social and economic activity of many rural and regional communities. However, the future of rural and regional communities will depend on diversification of their economic base beyond agriculture. This will require more consistent coordination of planning at a regional level, with strong support from Federal, State and Local governments to an integrated planning approach.

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References:


