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

17th April, 2014

Dear Sir/Madam,

Re: Submission of the Rural Innovation Research Group, University of Melbourne

Please find attached our submission in response to the *Agricultural Competitiveness Issues Paper*, as part of the current White Paper process. I lead the Rural Innovation Research Group (RIRG) and make this submission on behalf of the group. We are a group of applied social scientists within the Department of Agriculture and Food systems at the University of Melbourne, in operation since 2002.

The core of our expertise is in extending knowledge of innovation as a social process, as applied to agriculture, natural resource management and rural community development. We apply this expertise as both researchers and tertiary education providers.

We strongly endorse the need for the *White Paper* process and agree that this is an ideal time to be framing a long-term vision for agricultural futures in Australia that is tightly aligned with the national interest in general, and with the interests of regional communities in particular.

In our submission, we draw on evidence from our research, teaching and broad experience in Australia's agricultural sector over 25 years, and on our understanding of international trends in the areas of interest to the inquiry, gathered through our involvement in the international scholarly community.

In summary our submission is that:

(1) The definition of competitiveness needs to be broadened to include effectiveness as well as efficiency, and to internalise aspects of product quality as well as cost;
(2) Innovation to advance agricultural competitiveness needs to be understood as a systemic process grounded in well-orchestrated relationships between multiple stakeholders, including farmers and communities (and *not* as adoption of science, technology and practice change messages);
(3) A focus on the quality of agricultural jobs, human resource management and on opportunities for diversification and value-adding is needed to enhance agriculture's contribution to rural communities.
(4) Better alignment and co-ordination of the education and training sector for supporting agricultural competitiveness objectives is required.

As well as our position statement on each of these themes we have provided a list of possible policy directions, and a list of key references. We are happy to present more detail if required as part of the development of the *Green Paper*.

We thank the Taskforce for the opportunity to make this submission.

Yours sincerely,

Ruth Nettle

Associate Professor Ruth Nettle & Michael Santhanam-Martin

Melbourne School of Land & Environment

Building 142, The University of Melbourne
Phone 03 8344 4581 Mobile 0419 569 684

www.land-environment.unimelb.edu.au
ranettle@unimelb.edu.au

1. A broader understanding of competitiveness

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Discussion		
The *Issues Paper* proposes "competitiveness" as the central goal of agricultural policy, and defines it as "the ability to efficiently use our nation's land, water, human and other resources to achieve sustainable improvement in the standard of living for all Australians and growth in profit for our businesses". We endorse "competitiveness" as a goal, but in our view this definition is overly narrow in 4 aspects:		
(i)	Profitability is certainly a necessary component of farm business success, but farmers also pursue a range of other goals, including social and community responsibility, land stewardship, and responsibilities to the next generation (Waters, Thomson *et al.* 2009). For agriculture to be competitive in attracting investment, and a workforce, it needs to facilitate the achievement of all these goals, not business profitability alone.	2.6, 3.1, 4.2, 5.4
(ii)	"Improvement in the standard of living for all Australians" suggests a focus on aggregate national statistics such as GDP. Maximising agriculture's contribution to community well-being (particularly in regional communities) will require a focus on economic processes at sub-national scale, which are not adequately captured by aggregate measures.	5.2
(iii)	Equating competitiveness with efficiency narrows policy options by focusing on lowering the cost of production. "Least cost" agriculture will not meet the needs and aspirations of farmers and regional communities, or of increasingly demanding markets. For example focusing on least cost in the area of farm workforce has been shown to be counterproductive for overall business and industry success (Nettle, Semmelroth *et al.* 2011; Jiang, Lepak *et al.* 2012).	1.2, 2.6, 5.4, 6.4
(iv)	We note that there is more than one way to compete in domestic and global markets. In particular there have been a number of recent calls for Australia to focus on competing for high-value, premium markets, rather than generic commodity markets (Cooper 2014; Cawood 2014). Doing this will require that other metrics beyond cost be included in definitions of success, including market access and quality.	1.2, 2.3, 8.1,
Policy directions		
•	The definition of competitiveness should address effectiveness as well as efficiency. Policy goals that position agriculture to achieve a range of purposes, including economic development for regional communities, and environmental stewardship are needed.	5.2, 6.1
•	Measures of quality, including social and environmental sustainability, need to be internalised in our understanding of competitiveness, to facilitate competition in demanding and higher-value markets and to position Australia in the global food security agenda.	1.2, 6.1
•	Policy and Agricultural research, development and extension (RD&E) to support both commodity *and* premium positioning of Australian agricultural products, and support to farmers around these options is required.	
•	There is a role for government in stimulating place-based government-community-industry initiatives as a way to mobilise regional and local resources into local competitive advantage (e.g. current Victorian Government action with SPC Ardmona).	

Reference documents

Deloitte (2014). Positioning for prosperity? Catching the next wave.

Dairy Australia (2012). Enhancing livelihoods, Improving wellbeing, Reducing environmental impact: A Strategic Framework for keeping the Australian dairy industry in business for the long term

Horizon 2020 (2013). Horizon 2020 Future Scenarios for the Australian Dairy Industry: Final Report to the Project Board from the Working Group, January 2013.

Unilever's Sustainable Living Plan and Sustainable Sourcing

* These are references to the "Questions for consideration" on Pages 6 & 7 of the *Issues Paper*, with the questions numbered as per the order in which they appear in that listing.

2. Agricultural Research, Development and Extension (RD&E): From adoption pipelines to innovation systems

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Discussion The *Issues Paper* focuses on farmer decision making as the point of influence for improving farm gate returns. We view farmer decision making as an outcome of stakeholder interactions within an 'innovation system' and not as the end point of a delivery pipeline of research outputs and practice change messages (Klerkx and Nettle 2013; Nettle, Brightling *et al.* 2013). Improved farm gate returns will arise from well-orchestrated interactions between stakeholders in the knowledge system, and an engaged research sector as a key capacity for innovation. This includes recognition of farmers as generators of innovation and ideas, and the role of extension (public and private) in brokering knowledge and practices. Such a view of innovation is supported by the 2008 *Cutler Review of the Australian Innovation System*, and more recently by the Australian Farm Institute. An innovation systems view is particularly needed if the additional attributes of competitiveness identified above (quality, sustainability) are to be successfully addressed and to increase returns from research investment, whether that be in applied or more basic research. Our recent research has focused on applying an innovation systems perspective to the issues of the farm workforce in the cotton and dairy sectors (Nettle, Oliver et al. 2008; Nettle and Moffatt, 2014) and also comparing outcomes from different approaches to innovation including "top-down", "bottom-up", and innovation systems perspectives in the dairy sector (Klerkx and Nettle, 2013; Nettle, Brightling et al, 2013).	1.2, 1.3 2.1, 2.2, 2.3 6.3, 6.4
The existing Rural Industry R&D Corporation model is generally well equipped to support an innovation system approach, and this co-investment model should be preserved. However the increasing diversity of farm business is posing challenges. Both large agribusiness players and specialist/niche producers are getting increasingly frustrated with what they see as low returns on their levy investment. This same dynamic has undermined support for co-investment models internationally and needs to be addressed.	6.5
There is an assumption in the *Issues Paper* that with declining public investment in the extension function, industry and the private provider sector will step in. There are serious constraints to the fulfilment of this expectation emerging in Australian extension services, mirrored internationally. Specifically, the capacity of the private sector to generate future skilled advisory capacity previously built through strong public sector and tertiary institution engagement in this function, and the capacity to respond to changes in advisory demand. International evidence suggests that the first link that is broken with privatised extension is the link between private sector advisers and research (Klerkx and Proctor, 2013). An unintended consequence then of a privatisation of extension functions could be envisaged to be reduced return on investment from research. Without addressing these issues, the capacity of the R&D system to create innovation will be severely constrained until the private sector achieves a critical size.	2.1, 2.2, 6.2
Policy directions • The commonwealth to adopt and advocate an innovation systems approach, aligned with a broadened innovation agenda around competitiveness. • Work with the States and R&D corps to provide support for place-based farmer innovation networks (e.g. Birchip Cropping Group). • Review incentives for R&D corporations to be responsive to the increasing diversity of their constituent businesses. • Explore incentives for the private sector to build future advisory capacity. • Harness findings for Australia from the European Review into Farm Advisory Services.	2.3, 6.2, 6.5

Reference documents
Laurens Klerkx: Using an innovation systems approach to achieve remarkable change
New Zealand's Primary Growth Partnership
ACIL Allen's review of Horticulture Australia and the horticulture levy system

* These are references to the "Questions for consideration" on Pages 6 & 7 of the *Issues Paper*, with the questions numbered as per the order in which they appear in that listing.

3. Enabling agriculture's contribution to regional communities

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Discussion We welcome the *Issues Paper*'s focus on what is needed to revitalise rural communities, and agree that farm business profitability is a necessary condition for this to occur. However seeking profitability via a narrow focus on economic efficiency and reducing the cost of production (often pursued through enterprise expansion) is often directly detrimental to the social and economic vitality of rural communities. Larger, more economically efficient farm businesses often have lower labour requirements, and also spend a larger proportion of their revenue remotely.	
This phenomenon has been recognised for many years. While this is something that is difficult for government and industry to influence within a market-governed, competitive industry policy framework, it nevertheless needs to be acknowledged. Growth in aggregate agricultural production or even farm revenues will not necessarily equate to revitalised rural communities, as the experience of the last 40 years clearly indicates. The *Issues Paper* suggests that small rural communities may continue to decline as people relocate to larger regional centres. In our view this is not a complete solution since some industries (e.g. dairy) rely on keeping people and the farming operation in close proximity, and also because it is in part the self-identity and local culture of farming communities that produces new farmers. We also note that many rural people value their communities greatly and wish to defend them (McManus, Walmsley *et al.* 2012; Pritchard, Argent *et al.* 2011).	5.3 5.1, 5.4
Farm employment is one area where outcomes that are more in accordance with communities' social and economic needs can be sought (Santhanam-Martin and Nettle 2014). Government can work with industry and training providers to structure farm employment around long-term, skilled and well-rewarded jobs, with career prospects, that can build the permanent social and economic base of communities.	5.2, 5.3, 6.3, 6.4
Niche and premium products, localised supply chains/networks and additional processing and value adding within rural communities and regions are also options that can improve local economic and social value capture (Rose and Larsen undated), although often less suitable for more remote regions.	5.2
Policy directions • A focus on improving the quality of jobs on farms, via government-industry collaboration on workforce development (including, but not limited to the training system) and farmers' skills as employers	6.3, 6.4
• A stronger link between agriculture policy and regional development policy, such that regional development funding is available for strategic investments to enhance community economic and social outcomes, including from agricultural diversification and food manufacturing.	5.2, 5.3
• Place-based partnerships between communities, industry and government to plan and direct such investment (e.g. the Alpine Valleys Dairy Pathways Project in NE Victoria).	5.2, 5.3

Reference documents
From field to fork: The value of England's local food webs
North East Dairy Regional Growth Plan and Workforce Development Strategy
NRAC Report on the workforce planning capabilities of agricultural employers

[*] These are references to the "Questions for consideration" on Pages 6 & 7 of the *Issues Paper*, with the questions numbered as per the order in which they appear in that listing.

4. Improving the competitiveness of inputs to the value chain - skills

Discussion

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We note the recognition that "there has been a decline in the numbers of students enrolled in agricultural courses, affecting the potential supply of skilled labour over the longer term." We note that all agriculture faculties around Australia (including ours) have received increased enrolments in 2013-2014. Associated issues regarding recruitment, remuneration, upskilling and training are identified with roles highlighted for the education sector.

There have also been several recent and somewhat overlapping State-based and Federal enquiries into these areas, we above all highlight the opportunity to synthesise the submissions and findings from related enquiries with a view to setting priorities within the broad training and education agenda. 6.2

The recent Victorian "Agrisummit: Can educational providers meet agriculture industry needs?" (Bendigo, February 2014) highlighted a compelling need for structured and ongoing discussions between training and education stakeholders, industry, communities and government. Albeit focussing on regional Victoria and NSW training and education needs, we believe that this summit mirrored the national challenge.

In the current education policy climate, ensuring on-going supply of high-quality training and education programs basis is challenging. The reality is that education providers are operating under the same constraints and pressures as the rest of the economy (McSweeney and Rayner 2011). Viable program maintenance is modelled around sufficient student demand (i.e. scale) supported by an appropriate funding model relative to institutional costs. 6.2

In terms of higher education, with which we are more familiar, there is an ever-present threat of program consolidation. So keeping robust and highly visible applied science programs e.g. agriculture, at undergraduate and postgraduate level, remains a challenge into the future to which national agricultural competitiveness policy can contribute.

Policy directions

- Stimulate relationships and collaborations between all stakeholders to ensure that training and education to meet current and future skilled workforce needs and priorities are systematically mapped and planned for.
- Consider investment in innovative programs within agricultural faculties to address broader capacity building needs of the private sector, future researchers and farmers.

Reference documents

University of Melbourne, School of Land and Environment, Submission to the 2011 Parliamentary Inquiry into Agricultural Education and Training in Victoria

Various submissions by the Australian Council of Deans if Agriculture

Inquiry into the Capacity of the Farming Sector to Attract and Retain Young farmers and Respond to an Ageing Workforce. Final Report

NRAC Report on the workforce planning capabilities of agricultural employers

[*] These are references to the "Questions for consideration" on Pages 6 & 7 of the *Issues Paper*, with the questions numbered as per the order in which they appear in that listing.

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Waters, W., D. Thomson and R. Nettle (2009). "Derived attitudinal farmer segments: A method for understanding and working with the diversity of Australian dairy farmers." Extension Farming Systems Journal **5**(2): 47-57.