Agricultural Competitiveness White Paper
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Birchip Cropping Group
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Submission

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Birchip Cropping Group (BCG)

Preamble

Birchip Cropping Group is a not-for-profit agricultural research and extension organisation led by farmers from the Wimmera and Mallee regions of Victoria. Its stated mission is "to improve the prosperity of farmers and agricultural communities through farmer-driven research and innovation."

Criteria:

1. Food Security

How will Australian agriculture address the increasing world concern about food security?

BCG experience in the area of food security has led to the inescapable conclusion that the answer to continued production growth lies in well-funded, high-quality targeted scientific application and the continued development of Research, Development and Extension facilities that work with food producers to deliver productivity gains all along the food chain. (see below, 6)

The so-called **Green Revolution** consisted of series of research, development and technology transfer initiatives, occurring between the 1940s and the late 1960s. Led by the "Father of the Green Revolution", Norman Borlaug, this initiative boosted agriculture production worldwide and in the developing world; it was credited with saving over a billion people from starvation in the beginning, most markedly in the late 1960s. It involved the development of high-yielding varieties of cereal grains, expansion of irrigation infrastructure, modernization of management techniques, distribution of hybridized seeds, synthetic fertilizers, and pesticides to farmers.

This is an early example of the progress and success of innovative agricultural research during last century and continuing into this one.

The twenty-first century can aim for such highly significant and revolutionary programmes, providing individual farmers, groups and governments with a scientific basis for decision making and progressive policies. Investment in, and wide use of, technological developments will lie at the core of such practices.

Australia will continue to have advantages because of its high capital efficiency production, and its deserved 'clean and green' reputation (which includes traceability of food to its source).

2. Means of improving market returns at the farm gate.

What alternative actions or measures by governments, farmers or others would result in improved financial performance at the farm gate?

- Improved returns could be gained by investment in RD&E targeted on the development space to ensure that research around the world is customised and made relevant to local growers. Groups based in the regions are best placed to deliver this and in recent years have been successful in gaining strong take-up among the target audience. This approach ensures that the RD&E is packaged in an appropriate manner in a context which will make a real difference on-farm and along the value chain. This approach contrasts with a model in which the research is done, but there is no support to ensure its acceptance and adoption within the target market.

- Accelerated capital allowances for major equipment investments will in turn allow for further investment to occur in technology which is currently prohibitively priced for family farms. Changes in this tax ruling will increase the likelihood of investment by family farm operations.

What approaches could be used to encourage improved drought preparedness?

- Multi-peril insurance may have a fit in drought preparedness. Increased investment is required to provide decision support focusing on improving the tools designed to reduce climate risk. The tools need to be both accessible and designed to meet the users' needs. They should have a strong quantification basis, combined with an understanding of the way in which farmers and small business owners in general comprehend risk and make decisions.

- Farmers should be discouraged from overextending their borrowings. Previous drought assistance which concentrated on interest rate support rewarded those who had made risky decisions. This also distorts investment decisions made by farmers and makes it tough for the farming community to ensure there is a focus on the difference between land ownership and making management decisions.

- Encouraging growers to have a documented plan in advance will assist in drought preparedness. These plans are once again best developed by growers locally, supported by the specific expertise available only at that particular level. Grower groups are well placed to facilitate this planning process and ensure it is done in a way to maximise grower participation.

- The farm management deposit scheme is challenging for farmers who operate through a family trust. It is very difficult to bring cash back into the farm without incurring a significant income tax liability. Family trust losses cannot be offset against the FMD withdrawal.

What social measures are most effective in ensuring long term resilience?

- In times of drought and uncertainty, it is necessary to ensure that people are supporting one another. This is a particularly challenging, even daunting, prospect for government and local resource bodies. In times of severe drought, research has shown (see *Critical Breaking Point*), that instinctive farmer reaction to adversity is to withdraw rather than to seek either personal or professional advice. The provision of support to ensure discussion and confidences between neighbours and among the community is crucial. This can be done, at low cost, and with government support, through regional and local bodies.

- Encouraging people to make early decisions rather than reward indecision is important. Once made, a decision can be put into the past, and its consequences dealt with practically and pragmatically. Government indecision flows through to the rural community and encourages people to think the government will come and fix the situation if it gets sufficiently bad. If the government makes clear what actions it will take, this encourages the farming the community to do the same.

- Regional and local groups (like BCG) are well best qualified to extend social and emotional support, particularly in partnership with specialists who have an understanding of the context of the problem. Their knowledge of the particular agricultural industry, its population and specific needs is required to encourage trust and acceptance by people who and isolated and/or emotionally and financially stressed.

3. Access to finance, farm debt levels and debt sustainability.

Farming has always been, and continues to be, a challenging, certainly risky, means of earning a living.

What are the drivers and constraints to farmers' adopting alternative business structures, innovations or practices that will assist them in improving farm-gate returns?

Farming as a business, family farming in particular, is subject to social, financial and legal complexities. These include:

- the complexity of succession planning, including the nature of family law. Farmers who split ownership and management to allow the key decision maker to be recognised need to be encouraged
- the impenetrability of innovative ways of restructuring businesses; many farmers are out of their depth in complex financial decision making
- labour management and ownership are interwoven; current laws do not encourage that they become disentangled
- costs associated with adopting new technologies can be prohibitive
- the tight labour market can make expansion difficult
- farmers having limited experience of what it is to be an employee. As a result, they have little understanding of what expectations an employee may have and how those needs are best met. To become an employer of choice this sort of knowledge is essential
- lack of skilled staff
- ageing farmer demographic

4. Contribution of agriculture to rural communities

How does agriculture contribute to the local economy?

Rural communities in Australia are by definition moulded by and structured to service agricultural enterprises. Farming prosperity (good seasons, increased technological, financial and managerial know-how) equates to a vibrant, positive town and community life. The local town and its amenities are equally crucial to the farm: trips to remote, larger centres are time consuming and hence profit devouring. It is both a strength and a weakness that farms and the local town are so mutually dependent: good times for one mean good times for the other. Local suppliers, retailers and the commercial community share in the vicissitudes of climate variability and its extremes: drought is especially threatening in many Australian communities.

Local towns play a role in either dissuading or encouraging potential players to the local stage. Facilities must be seen to be at least comparable to those available elsewhere. (See 6, below).

5. Enhancing agriculture's contribution to regional communities

What impact does the growth of populations in regional centres and the decline in more rural or remote townships have on farming businesses and the agriculture sector?

The move away from the country increases the challenges connected with access to labour, both skilled and unskilled, and the support services essential to functioning communities. The major challenge lies in the need for sufficient volunteers to ensure the continuance of community organisations which can continue to thrive and provide support and well-being to rural communities. It is increasingly the case that farming partners and others in rural communities are both working; community services based on volunteerism creates stresses in the community and on individuals; there are fewer and fewer to undertake the various essential roles for a functioning community. There is no easy solution to this, but having in place flexible structures which recognise this situation rather than rather restrictive legislation greatly increases the compliance and time costs of volunteer committees.

6. Inputs into the agriculture value chain, including skills, training, education and human capital

What tools, skills and advice do farmers need to adapt effectively and respond to the risks they face?

Tools such as Yield Prophet (see, below) can make a significant contribution. Support to increase accessibility to and understanding of the value of these tools will improve farmer risk management.

- Tools and advice need to be different for those in top 25% as opposed to those who are not. They need different types of advice, as their risks are very different. For instance, a farmer returning over 5% year in, year out, will be able to utilise most incremental innovation opportunities that come from R&D and incorporate them into their system; they can afford to tinker to get it right. A farmer returning under 1% will find it cost prohibitive to invest in incremental R&D: a failed investment could mean a whole business failure. Farmers who are returning around 1% need to make transformational change. Currently most transformational change opportunities are presented in the context of failure, which makes them unpalatable.

- Establishing multi-peril insurance may be a cost-effective way to help growers manage risk. Government may need to play its part in establishment, but once in place, it has to be self-funding.

- Marketing is a challenge which many farmers find difficult; understanding the risks associated with it requires training and increased familiarity. Once farmers develop confidence in their abilities and adaptability to changing markets, this skill too would be self-perpetuating.

- Issues associated with farming are becoming increasingly complex and challenging, so that many farmers are no longer sufficiently informed to be able to make a decision. This has led to an over-dependence on agronomists and farm advisers; farmers do not have sufficient knowledge or confidence to challenge accepted thinking. This in turn stifles innovative responses to new and particular problems.

How do we attract the next generation of farmers?

- They already exist. Thriving successful businesses mean that the next generation of family farmer, already engaged, understands the lifestyle benefits and can be assured of the financial success necessary to enjoy them. Agriculture has a very bright future for those involved. However, there will be a change in what people do. There will be fewer people owning or being primary managers of the land, but more involved in providing support and high level technical expertise. Opportunities to build career structures, currently few and far between, will increase. Governments should also concentrate on developing world leading training and education, which can be a large export earner in its own right.

What community and policy responses are needed in rural and regional communities to adapt and change to new pressures and opportunities in the agriculture sector?

- In agriculture, as in other professions, gaining appropriate skills through training, mentoring and higher education is essential. The notion that's "what was good enough for Dad is good enough for me" is no longer sufficient or desirable. Working in the industry can both precede and follow training (as occurs in many farming families), but appropriate knowledge through learning is as relevant as knowledge through experience. They are symbiotic. Of particular concern in this area is adaptation to and adoption of the increasingly vast array of technical knowhow and tools, including apps and technology focused on data management.

- To be actively involved in Agriculture and farming, you do not need to own the means of production. Agriculture is a vast and expanding source of employment involving the application of theoretical and practical knowledge. The way forward lies in the development and expanded use of technological advancement. (see, for example, Yield Prophet, below)

- Australian agriculture can benefit from the use of overseas workers and skills. This requires an understanding of what support and skills needed to make this employment arrangement to work.

- Rural towns have obvious environmental and cultural advantages (especially to the already converted). At the same time, they must be able to provide for the needs of a modern workforce accustomed to advantages which today are taken for granted in larger cities: health, educational and recreational facilities must be seen to be comparable or to mitigate the effects of distance and isolation. Many "migrants" to the country, (or from the city), possibly reluctant initially, in many cases become converts.

- Local and regional farm groups provide a tailored platform for exchange of ideas and concerns between farmers, industry and researchers. Research stands at the head of an imaginary triangle, with its application opportunities at the base. Farmers and farm groups together comprise the means of application of agricultural research into the framing community.

- Government bodies, as well as government -supported bodies, have performed and continue to play an invaluable part in the development of agriculture in Australia. These include the Grains Research Development Corporation (GRDC), CSIRO, state Agriculture departments and farmer-run and -driven groups like BCG, Southern Farming Systems, etc.

Over the last twenty years, this triumvirate (between government, researchers and the framing community) has proved a winner. Research has been directed, its outcomes applicable and agriculture in general is much better off.

How can land, water and other farm inputs be more effectively deployed to better drive agriculture sector productivity, while maintaining or enhancing the natural resource base?

Sustainability lies at the heart of agricultural success in a time of increasing climate variability and an higher prevalence of extreme weather events. Growing awareness and knowledge of both the actualities and potential of data processing, GM technology, ever-increasing understanding of crop production and soils, new varieties and, essentially, managing risk will be ever-more-important to the future of Australian agriculture.

What irrigation, transport, storage and distribution infrastructure are required to support the food and fibre production systems of the future and how should this be funded?

Availability of capital will continue to be a limiting factor in rural and regional Australia. Overseas investment and local partnerships are potential sources to fill the economic gap: entrepreneurial impulse and business acumen should be encouraged to take up areas of slack in infrastructure development. Efficiency will be its own reward. For example, road, rail and transport hubs (e.g. containers) should be used to value-add transport in the country as well as at the major ports and capital cities.

Processing at the source of need is an important consideration; this would involve energy cost equality (e.g. absence of natural gas in rural areas.) Efficient processing cannot occur in rural areas without some compensatory assistance in the costs of power.

7. Effectiveness of regulations affecting the agricultural sector

How can the agricultural sector best contribute to growth in jobs and boost investment in rural communities?

- Innovation, adaptability and increased investment lie at the heart of agricultural development in the twenty-first century. Incentive to engage in these three elements is possible at a legislative and financial level. Being rewarded for investing in innovation can tip the scales.

- Shortening the payback time for people who increase investment in innovation and capital. This is particularly true in the areas of Research, Development and Extension, which will in turn drive further investment.

- Ensuring awards and conditions of employment are flexible to match the modern workforce needs. This means moving away from a one-size-fits-all model: because it suits a CBD or suburban small business does not mean that is the best structure for rural and regional agricultural employment. Legislation must change to take into account particular circumstances.

8. Exports and new markets: deregulation and logistics

Is Australia keeping pace with the rest of the world?

- Ensuring our products are presented in a differentiated way that builds on our market reputation and ability to deliver a high quality consistent product. Investment is needed if Australia is to maintain this reputation.

- It is essential that the logistics of exporting keep pace with the demand, that the infrastructure is equal to the requirements. While it could be said that this country has some inherent advantages in this area, (c.f., say, Canada), this does obviate the need to ensure export efficiency.

9. Assessing the effectiveness of incentives for investment and job creation

Currently, federal government programs seem to be a set of competing ideas. Often, there is discussion about further innovation and the need for leading RD&E investment to enable Australia to be the so-called food bowl of Asia. At the same time, as soon as any part of the country faces a rainfall deficit, the government (of whatever persuasion) rides to the rescue, providing financial support and, more importantly, reinforcement that farmers have a right to be profitable. The trouble is that one is an agricultural competitiveness and investment issue; the other is a social support safety net issue, targeted at landholders who have large capital reserve but cash flow problems. Wrapping the two issues together means that policy responses are often ineffective. Ensuring that agriculture is encouraged and fostered through RD&E investment will drive its competitiveness. Drought response, social support and safety challenges are best delivered to farming communities in the form of encouraging preparedness and rewarding those who can and do look to the future.

Those who lack the skills and confidence to undertake this preparedness need to be supported, to be shown how they can utilise their capital so that they have an enjoyable, rewarding life based on sound financial planning.

This may or may not involve farming: programs should exist to encourage people to understand that farming is not the be-all-and-end-all, that there are other possibilities. Many farmers are so because they feel that it was the only choice they could make.

Incentives focusing on seasonal workers and relocation could be effective, but more work needs to be done to show farmers the ways in which they can become employers of choice. Many farmers have had no experience of being an employee and, as a result, have little understanding of either the qualities of a safe, enjoyable work place or how such an environment is created. Developing these skills will be important to attract highly skilled people are willing to work for Australian farmers.

The best way to ensure that people are inspired to invest in agriculture is to have clear government policies which are not continually in a state of flux; that reward those who invest in innovation and that keep social policy separate from agricultural policy. Science must be well funded and given clear aspirational goals.

BCG Organisational information and History

BCG celebrated twenty years of research and extension to the community in 2012.

BCG is recognised both nationally and internationally as a credible, independent and innovative organisation. Its research and communication activities provide evidence, support and tools for improving farm management practices and profitability.

BCG remains integral to the adoption of new agronomic technologies and farming practices and continues to assist farmers in making decisions, developing risk management strategies, increasing profits and operating sustainable farming operations.

BCG employs 22 staff, based at Birchip.

It has 32 research partners including publically funded state departments and CSIRO and private research. Multi-nationals such as BAYER and BASF, along with many smaller businesses are involved in RD&E. BCG has 24 sponsors who help the group deliver services to its 420 members and the broader Mallee and Wimmera community.

Research

2013	Contract Services began in 2013 with first year bringing in approx. $350k of research work which helps upgrade machinery including brand new fully computerised Wintersteiger plot harvester
2008-2013	Water Use Efficiency project leaders; increased WUE by 10% in Wimmera and Mallee farming systems
2008/2012	Publication of ***Critical Breaking Point*****; understanding the impact of drought on farming families in the Wimmera and Mallee'**
2008-2010	Herbicide tolerance project (Jil Jil investigating ryegrass resistance)
1999-2013	Longest running farming systems trial site in Australia researching four different management systems
2003	Australian roll out of crop modelling tool YieldProphet® **(ww.yieldprophet.com.au),** an online interface for the crop production model APSIM **(www.apsim.info)** designed to help growers to make management decisions. It is delivered by BCG in conjunction with CSIRO and the APSIM initiative to grain growers and farm consultants Australia-wide. Yield Prophet simulates crop growth based on paddock specific inputs. It takes into consideration soil type, pre-sowing soil water and nitrogen, rainfall, nitrogen fertiliser applications, irrigation and climate data and allows subscribers to monitor their crop resources and match their inputs. Increase from 220 subscribed paddocks (2007) to 654 (2013).
1993-2013	20 years of Season Research Results handbooks, culmination of research reports written on trials carried out each year
1993-2014	Wide variety of yearly and long-term projects into cropping and livestock; 40 projects under way in 2014.

Regular Events

18 years of Grains Research Expo, annual attendance of 500-600: opened by Premier Steve Bracks, (2005); Her Excellency Quentin Bryce (2009) and state Ministers of Agriculture.

21 years of Field Days, annual attendance of 400-500

Yearly Updates day, including delivery of Season Research Results Handbook.

Members only field days

International and local specialist guest speakers

Women's field days and agronomy group meetings

Traditional history of approximately 3000 visitors annually: farmers, advisors, researchers, corporate partners, international and national guests.

Special Events

2011 $100k philanthropic funding in from Perpetual fund

2009 Women in the Community, 'Adapting to Change': 200 women in the community, with *Mao's Last Dancer* author Li Cunxin as the special guest

2006 Debate: 'Is sex better than farming?'

Staff/board/awards/visits

2014 20 FTEs focusing on areas of mixed farming research, communication, marketing, corporate and public relations, accounting and farm business management

2008 OAM Inaugural Chairman, Ian McClelland

2008 Victorian Telstra business women's award finalist, Alex Gartmann CEO (2003-2011)

2007 Victoria fellowship – Simon Craig, Research Agronomist

2007 Asia Pacific Extension Network (APEN) excellence in extension

2007 Banksia award for land and biodiversity 'Biodiversity in a Piped System'

2005 CEO award for significant innovation, Alex Gartmann, CEO (2003-2011)

2005 BRS science and innovation award for young people, Simon Craig, Research Agronomist

2005 Prime Minister's award for Excellence in Community Business Partnership

2004 Governor's visit

2002/2005 Drought relief/support from State Government

Other

Largest grower group in Australia

New state of the art building in 2001 with conference, lab and office facilities

Inaugural Chairman for the 20 year history

Annual cropping membership of approximately 420 farming business and 100 livestock members

The Member average cropped area of members is 2,107h compared with the regional average of 726h

Long-term relationships with corporate partners and sponsors: 8 Diamond, 5 Gold and 18 Bronze, which provide cash and in-kind funding (O'Connor's, Birchip and CBA longest running sponsors)

Additional information can be found in our annual reports on the website: http://www.bcg.org.au/cb_pages/publications.php#Annualreports or on the annual history pages of the website: http://www.bcg.org.au/history.php