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Foreword

Australia has had an informal agricultural policy for thousands of years, formalised by post-European settlement. We are blessed that this policy rests on clean air and water, access to productive soils and stable government. Agriculture has always been integral to the advancement of Australia as a strong, independent and outward-looking nation.



Agriculture policy can be the architecture for success or the cursed prelude to failure. Imagine there was no policy—no labour laws, biosecurity, environmental laws, public infrastructure—basically agriculture in a land without government. If we then add one regulation or service at a time and ask what the pros and cons are of each we test the efficacy of policy. Ultimately we work out whether we are now better or worse off than with the blank slate.

We want people to think of the Agricultural Competitiveness White Paper as the blank slate and build the 21st century policies that bring a better return to the farm gate. A better farm-gate return quite naturally inspires an increase in production and reinvestment in the sector.

We cannot let the paper be just a profound motherhood statement. The task initially is to invite the agricultural sector and the Australian public to be part of this process. From the feedback we receive we will assess a range of alternatives before selecting a plan that allows us to take agriculture in this nation forward over the long term. The process has to make certain we protect our national interest while advancing our return from a global environment.

Australia has a great opportunity because of the fortuitous confluence of geography and history. We can produce the food and fibre for the emerging middle class of our near neighbours who will express their new wealth in the clothes they wear and the food they eat.

Our economy has evolved unrecognisably from the days of our rural pioneers, and so too has Australian agriculture. Although still managing the vagaries of currency, drought, floods, pest and disease and changing markets, farming in the 21st century is a technologically advanced and globally integrated concern. Farming successfully today depends upon increased efficiencies, world-best decision support, leading-edge research, strong supply chain partnerships and, as always, a little luck.

The government is committed to developing a White Paper that will ensure that agriculture, as one of the five pillars of our economy, realises its full potential through innovation, productivity, investment and trade. It will also focus strongly on farm profitability and revitalising our rural communities.

We invite you to join us in shaping the future of Australian agriculture by responding to matters raised in this issues paper. Together we can build a better farm sector and a more prosperous future for all Australians.

Barnaby Joyce

Minister for Agriculture

Process for making submissions

The Government is developing a White Paper on the Competitiveness of the Agriculture Sector that will provide policy directions for enhancing the profitability of the sector and boosting agriculture's contribution to economic growth, trade, innovation, productivity and regional communities.

This issues paper encourages individuals and organisations to contribute to this process by making submissions, which are due before 5pm on **17 April 2014**.

Submissions can be made:

By email:

Agricultural.Competitiveness@pmc.gov.au

By mail:

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

On line:

www.agriculturalcompetitiveness.dpmc.gov.au

Publication of submissions:

Submissions will ordinarily be available for public review at www.agriculturalcompetitiveness.dpmc.gov.au, unless you request otherwise.

Please indicate clearly on the front of your submission should you wish it to be treated as confidential, either in full or part.

The Australian Government reserves the right to refuse to publish submissions, or parts of submissions, which contain offensive language, potentially defamatory material or copyright infringing material.

A request may be made under the *Freedom of Information Act 1982* (Cth) for a submission marked confidential to be made available. Such requests will be determined in accordance with provisions under that Act.

Contact information, other than your name and organisation (if applicable) will not be published. Your name and organisation (if applicable) or state will be included on the Agricultural Competitiveness White Paper website to identify your submission.

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Overview

The Government's White Paper on Agricultural Competitiveness will provide a platform for enhancing the contribution of agriculture to economic growth, employment creation and national prosperity, through increased innovation, productivity, investment and trade. The White Paper will outline directions for increasing farm profitability and strengthening our rural and regional communities. It will also consider the guidelines for drought preparedness and in-event drought measures as part of the Government's commitment to review the adequacy of current measures.

In this paper, competitiveness is defined 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.

The scope of issues covered in the terms of reference for the White Paper process is shown in Box 1. The full terms of reference are in Appendix A.

Box 1: The scope of the Agricultural Competitiveness White Paper

The White Paper will consider:

- 1. Food security in Australia and the world through the creation of a stronger and more competitive agriculture sector;
- 2. Means of improving market returns at the farm gate, including through better drought management;
- 3. Access to finance, farm debt levels and debt sustainability;
- 4. The competitiveness of the Australian agriculture sector and its relationship to food and fibre processing and related value chains, including achieving fair returns;
- 5. The contribution of agriculture to regional centres and communities, including ways to boost investment and jobs growth in the sector and associated regional areas;
- 6. The efficiency and competitiveness of inputs to the agriculture value chain—such as skills, training, education and human capital; research and development; and critical infrastructure;
- 7. The effectiveness of regulations affecting the agriculture sector, including the extent to which regulations promote or retard competition, investment and private sector-led growth;
- 8. Opportunities for enhancing agricultural exports and new market access; and
- 9. The effectiveness and economic benefits of existing incentives for investment and jobs creation in the agriculture sector.

The White Paper will not consider industry competitiveness issues associated with the fisheries and forestry sectors and nor will it cover human nutritional health issues.

Importance of the agriculture sector to the Australian economy

The agriculture sector¹ and downstream activities which make up the food and fibre supply chains² are important to the Australian economy and a major driver of economic activity, employment, social cohesion and prosperity for many parts of rural and regional Australia.

Agriculture has played an important role in Australia's history. In the first half of the 20th century it accounted for around a quarter of the nation's output and between 70–80 per cent of Australia's exports (Productivity Commission 2005). In recent decades, agriculture's share of Australia's national income and exports has declined, consistent with that of many other developed countries. This is in part due to the strength of the services and mining sectors.

In 2012–13, the farm sector's gross value of production was almost \$48 billion, and is forecast to grow to over \$50 billion in 2013–14 (Australian Bureau of Agricultural and Resource Economics and Sciences 2013e). Looking beyond the farm gate, in 2011–12 food and beverage processing was worth \$91 billion and food retailing \$136 billion (Department of Agriculture Fisheries and Forestry 2013a). In 2012–13, farm exports were \$38 billion. In that year, the agriculture sector employed 278,000 people with a further 225,000 people employed in food, beverage and tobacco manufacturing (accounting for around one quarter of all employment in Australian manufacturing) (ABARES 2013e).

In 2011–12 farmers managed around 53 per cent (405 million hectares) of Australia's landmass (ABS 2013f), reflecting the importance of their stewardship in maintaining our natural resource base. Agricultural systems vary across the country from large northern cattle properties to smaller, more intensive production systems mainly inland of the south-eastern seaboard. Australian farms produce a diverse range of food and fibre products including grains, milk, meat, fruit, nuts, vegetables, sugar, rice, cotton, wool and eggs amongst others. The issues which affect the sector are varied and diverse and the responses to these issues need to reflect this.

Population growth, increasing prosperity in our region and changing consumer diets and preferences are creating consumer demand for food and fibre. Worldwide, demand for food is projected to rise by around 75 per cent in the first half of this century, with three quarters of this growth in Asia (ABARES 2013a). Australian agricultural production will need to expand significantly to take advantage of these opportunities. This is likely to require opening up new areas of agricultural production, including in northern Australia, with the possibility of doubling production by 2050.

Key challenges and opportunities for the sector include increasing competition from overseas suppliers; new production technologies and consumer attitudes to their application; advances in the digital-economy; increasing globalisation of supply chains; competition for prime agricultural land; and increasing frequency and intensity of adverse weather events. Understanding current and future issues affecting the competitiveness of the agriculture sector will help individuals, industries and governments better respond to these opportunities and challenges.

¹ Defined as the aggregation of land-based activities generating plant and animal commodities, excluding forestry and aquaculture.

² Defined as the integrated processes and activities that transform food and fibre at the farm-gate into processed products and eventually into consumer-ready products.

Policy Context

The Agricultural Competitiveness White Paper will complement the Government's broader policy agenda to boost productivity, lower business costs, generate more jobs and strengthen the economy. The Government is committed to providing all businesses with the flexibility, certainty and confidence to innovate and compete in global markets. The White Paper will contribute to the Government's commitment to reducing the burden of ineffective regulation that constrains Australia's economic prosperity and development. It will be prepared in the context of the commitment to return the Budget to surplus and ensure public services are delivered as efficiently and effectively as possible.

A vibrant, innovative and competitive agriculture sector will create jobs, encourage investment and help build stronger rural and regional communities, and, in turn, a stronger Australia. The Government's overarching objective is to assist the farm sector become more competitive, profitable and sustainable. This will be achieved through maintaining and enhancing the natural resource base on which our rural industries rely; delivering scientific and economic research, programmes and services to help deal with the challenges faced by agricultural and food industries; addressing issues relating to the integrity of Australia's food supply chain; safeguarding the integrity of Australia's animal and plant health; upholding biosecurity, export certification and food safety standards; and improving trading opportunities for Australian agriculture and food industries.

The Government is progressing its election commitments and other measures to promote a strong, vibrant agriculture sector, including:

- Providing \$100 million in additional funding for Rural Research and Development Corporations so that they have greater capacity to deliver cutting edge technology, continue applied research, and focus on collaborative innovation;
- Committing \$15 million in rebates to small exporters for Export Certification registration costs;
- Strengthening Australia's biosecurity and quarantine capabilities by investing an additional \$20 million to establish a Biosecurity Flying Squad as a first response unit for urgent biosecurity issues; strengthening biosecurity and quarantine containment; and focussing on import risk analysis and quarantine arrangements that better integrate science in quarantine decisions and minimise the risk of exotic pest and disease incursions;
- Improving chemical registration by reforming agricultural and veterinary chemicals legislation;
- Committing \$2 million for a new programme to help teachers better understand the products and processes of food and fibre production;
- Enhancing market access, reducing red tape and streamlining the export certification system (Export Supply Chain Assurance System ESCAS) for livestock exports;
- Bringing into force the free trade agreement the Government recently concluded with Korea, which will improve market access for a range of products including beef, wheat, sugar, dairy, wine and horticulture;
- Committing to increasing resources to conclude free trade agreements with other key trading partners including China, Japan, India and Indonesia, as well as enhancing Australia's commitment to multilateral trade negotiations;
- Providing \$420 million (\$210 million in 2013–14 and \$210 million in 2014–15) in loans to support farm businesses that are experiencing financial hardship;

- Securing domestic grain advantages, for example by ensuring Graincorp, which accounts for a significant share of eastern Australian storage, distribution and marketing of grains, continues to be majority Australian owned; and
- Enhancing consultation with the agriculture sector by establishing an industry advisory council that will meet with the Minister for Agriculture at least twice a year.

The White Paper is being developed alongside a number of other Government initiatives. The White Paper on Developing Northern Australia will set out a policy platform for promoting the development of Northern Australia. It is expected to be released towards the end of 2014. The National Commission of Audit will assess the role and scope of government, as well as ensuring taxpayer's money is spent wisely and efficiently. The Government's Plan to Boost Productivity and Reduce Regulation sets a target of reducing red and green tape by \$1 billion per year and will audit all legislation and regulation. The Energy White Paper will provide an integrated, coherent national energy policy including the role of alternative transport fuel sources. The Government's competition policy review, into competition law and the broader competition framework, has the overall objective of finding ways to increase productivity and outcomes for Australians through improving competition. This includes considering the competitiveness of key retail markets including groceries, and whether regulatory changes are necessary to enhance outcomes for consumers and producers.

Achieving improved agricultural competitiveness will also require efforts by individual farm businesses, industry bodies and state and territory governments. The foundation of a market-based agricultural system is decision making by individual businesses. Industry bodies also play an important role, including in marketing, research and development, industry codes of practice and standards, advocating industry interests, and providing information to industry members. State and territory governments have a key role in land use policy, water policy and agricultural development, education and training as well as creating many of the regulations which affect the sector. Reducing regulatory burden on the sector will require collective efforts across all governments.

Outline of the White Paper process

There are three phases in the development of the White Paper:

- 1. The issues paper—provides an overview of the key issues of specific interest to the Government and outlines questions to prompt discussion and input from stakeholders.
- 2. The Green Paper— will assess the critical issues and opportunities for improving Australia's agricultural competitiveness and may flag the Government's predisposition on policy issues to seek stakeholder input. The Green Paper is expected to be released in the first half of 2014.
- 3. The White Paper—will present the Government's long-term strategic direction and policy commitments to promote competitiveness, farm-gate profitability, investment and jobs in the sector. The White Paper is expected to be released towards the end of 2014.

Key dates for this process are outlined in Table 1 and information on how to make a submission is provided on page iii. The release of this issues paper provides the first opportunity for stakeholders to provide written submissions and will be supported by a series of discussions with stakeholders. To assist in this, a snapshot of issues is provided in Table 2 and the key questions of interest to the Government are provided in Box 2. Stakeholders are free to raise other relevant matters.

Table 1: Key dates for White Paper process

Announcement of terms of reference	9 December 2013	
Release of issues paper	6 February 2014	
Due date for submissions on issues paper	17 April 2014	
Release of Green Paper	Mid 2014	
Due date for submissions on Green Paper	8 weeks after release	
Release of White Paper	End of 2014	

Table 2: Issues snapshot

1.	Ensuring food security in Australia and globally				
•	Expanding agricultural production	 Challenges to global food production 			
•	Australia's food security	The role of technology			
•	The importance of trade				
2.	Farmer decisions for improving farm gate retu	rns			
•	Learning from top performing farms	Succession planning			
•	Managing risks	Marketing			
•	Business structure and management	 Drought, flood and fire management 			
•	Scale and diversity of production	 Social and environmental pressures 			
•	Productivity Growth	 On-farm non-agricultural income 			
3.	Enhancing access to finance				
•	Business structures	 Institutional and corporate investment 			
•	Debt	Foreign investment			
•	Alternative financing models	Access to finance			
4.	Increasing the competitiveness of the agriculture	ural sector and its value chains			
•	Concentration in the supply chain	• Farmers' proportion of final sale returns			
•	Supermarket power	 Competition with other sectors 			
•	Food processing competitiveness	 Competition with other countries 			
5.	5. Enhancing agriculture's contribution to regional communities				
•	Contribution of agriculture to regional	 Indigenous community linkages 			
	communities	 Pressure on regional communities 			
•	Changing population patterns				
6.	Improving the competitiveness of inputs to the				
•	Skills, training, education and human capital	• Energy			
•	Research and development	Water resources			
•	Infrastructure to assist development	 Land resources 			
•	Competition for workers	• Fertiliser			
•	Agricultural and veterinary chemicals				
7.	Reducing ineffective regulations				
•	Efficiency and effectiveness of regulations,	Priorities for reform			
	including environmental regulations	Efficacy of consumer laws			
8.	Enhancing agricultural exports				
•	Market access and returns	Competition from imports			
•	Role of the biosecurity system	Market information			
•	Trade negotiations				
9.	Assessing the effectiveness of incentives for in	•			
•	Government programmes	Labour market programmes			
•	Tax concessions				

Box 2: Summary of questions for consideration

1. Ensuring food security in Australia and globally

- What opportunities exist to expand agricultural production in Australia and how can we take advantage of them?
- How can farm businesses, food manufacturers and the retail sector be more responsive to domestic and global food demand and better integrate into domestic and global supply chains?
- Do farmers have access to timely, relevant and accurate information to fully inform production decisions to meet domestic and global food demands?
- What opportunities exist for exporting Australian agricultural technology, marketing skills and expertise to improve global food security outcomes?

2. Farmer decisions for improving farm gate returns

- What are the drivers and constraints to farmers adopting alternative business structures, innovations or practices that will assist them in improving farm-gate returns?
- What tools, skills and advice do farmers need to effectively adapt and respond to the risks they face?
- What alternative actions or measures by governments, farmers or others would result in improved financial performance at the farm gate?
- What approaches could be used to encourage improved drought preparedness?
- During drought, what measures are most effective in supporting long term resilience?
- How can new farmers be attracted to agriculture and how can they succeed?

3. Enhancing access to finance

- How do we better attract private capital into farm investment?
- What examples are there of innovative financing models that could be used across the industry?
- What would encourage uptake of new financing models?
- What alternative business structures could be developed for farming that also retain ownership with farm families?
- How can foreign investment best contribute to the financing and productivity growth of Australian agriculture?

4. Increasing the competitiveness of the agricultural sector and its value chains

- How might existing laws and regulations be changed to address any market power imbalances in the agricultural supply chain, without limiting prospects for global-scale firms developing in Australia?
- How can the agriculture sector improve its competitiveness relative to other sectors in the economy?
- Which examples of overseas approaches to improving agricultural competitiveness have relevance for Australia?

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?
- How can the agriculture sector best contribute to growth in jobs and boost investment in regional communities, including indigenous communities?
- 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?
- How do we attract the next generation of farmers?

6. Improving the competitiveness of inputs to the supply chain

- 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?
- What skills including specialised skills and training, will be required in the future and how can these be delivered and uptake encouraged?
- How can we attract workers to agriculture particularly in remote areas?
- How can we promote career pathways for the agriculture sector, including models to enable younger farm workers to gain broader industry experience?
- How can rural industries and governments better identify, prioritise and fund research, development and extension?
- 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?

7. Reducing ineffective regulations

- How well do regulations affecting the industry meet their policy objectives?
- What opportunities are there to reduce ineffective or inefficient regulation?
- Which regulations are disproportionate to the risks they are supposed to address?
- How do we coordinate across governments to reduce regulations whose costs exceed their benefits?

8. Enhancing agricultural exports

- How can industries and government respond to the key challenges and opportunities to increase or enhance exports?
- How can the government take best advantage of multilateral and bilateral trade negotiations (including through the World Trade Organization and through free trade agreements (FTAs)) to advance the interests of the sector?
- How can engagement between industry and government on market access priorities for Australian agricultural products be improved, including to inform negotiations on FTAs?
- What changes could be made to biosecurity arrangements, both in Australia and in other countries, that would enhance global trade in agricultural products?
- How do we provide the appropriate biosecurity controls at minimum cost?

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

- How well is the current set of government programmes and incentives directed at the agriculture sector meeting their objectives, in terms of both effectiveness and efficiency?
- Are government visa arrangements and programmes like relocation assistance, the Seasonal Worker Programme and Harvest Labour Services effective at channelling workers into the agriculture sector and what other approaches should be considered?
- What have other countries done to inspire agricultural investment?
- What has Australia done in the past that has had best effect?

Issue 1: Ensuring food security in Australia and globally

The White Paper will consider food security in Australia and the world through the creation of a stronger and more competitive agriculture sector.

Food security is a complex and multidimensional issue, encompassing physical and economic access to food, food safety, nutrition, and food preferences. Global food security is improved by greater food production (including from a competitive and profitable Australian agriculture sector), combined with a global trading system that allows food to move to where it is needed.

In Australia food is available and most Australian families have the income to afford it. Australia is considered to have a high level of food security, ranking fifteenth in a recent assessment of 107 nations (Economist Intelligence Unit 2013). Australia is a net exporter of food (Figure 1) and produces enough food to feed around 60 million people (Prime Minister's Science, Engineering and Innovation Council 2010). Australian incomes are relatively high by global standards, enabling most families to purchase the food they need, with spending on food and beverages only accounting for approximately 12 per cent of household expenditure (Australian Bureau of Statistics 2013a). Despite this, social disadvantage and remoteness lead to some pockets of food insecurity. While rising food production will contribute to secure access, food security for these groups is a focus of social policy.

Population growth, rising affluence and changing diets in the Asian region are creating enormous opportunities for food producers. Demand for food is forecast to rise by around 75 per cent in the first half of this century, with three quarters of this growth occurring in Asia (ABARES 2013a). At the same time, global food production and the scope to raise supply is being affected by urban expansion, competition for land from other sectors (such as mining), depletion of groundwater reserves, and increasing frequency and intensity of adverse weather events. A more productive agriculture sector globally would help to reduce pressure on resources, by utilising less water and land per unit of output (Lomborg 2013).

Meeting these challenges will require the Australian agriculture sector to be flexible and resilient. Patterns of production may need to change and individual agricultural businesses will need to get the most out of the available resources. New products and methods of production will be needed. Businesses will need to see themselves as part of supply chains that reach into domestic and international markets. Accurate weather forecasts and intelligence about new market opportunities will be critical to agricultural development. Governments can have a role in fostering the conditions for business investment and growth and facilitating structural change.

Australian agriculture will need to expand significantly to take advantage of new opportunities. Agricultural production could increase through:

- increasing output from existing land and water resources, which will be mainly driven by increasing yields through productivity growth;
- transitioning to more intensive production systems in existing areas, including through additional water supplies and new dam and irrigation infrastructure; and

• converting previously undeveloped sites to agriculture, particularly in northern Australia, through development of water and other infrastructure.

The White Paper on Developing Northern Australia will also examine the scope for an expanded agricultural footprint in our northern regions. Harnessing these opportunities will require new investment capital, which in turn depends on the prospects for favourable returns at the farm gate, while taking account of cultural and environmental sensitivities.

Australia can also help improve global food security by promoting the development of global markets and exporting our technology and know-how. While we produce food for 60 million people, this is less than one per cent of the global population and around 840 million people are considered 'food insecure' (Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development & World Food Program 2013). Australia can work within the global trading system, and bilaterally with key partners, to progress trade liberalisation and widen market access. Since we are at the forefront of technology and development in many fields of agriculture, we can make a strong contribution to the development of skills and know-how in our region and beyond. Through research and development and training, Australia already contributes to the diets of around 400 million people each year (Australian Centre for International Agricultural Research 2011).

Farm and fish food production Food and beverage processing Retail food sales \$135.8 billion Sales and service revenue. \$42.6 billion \$91.2 billion (2010-11 data) Meat 24% Supermarkets, Meat 32% grocery stores 62% Dairy 15% Grains, oilseeds 31% Takeaway outlets 11% Bakery products 6% Fruit, vegetables 18% Liquor retailing 7% Beverages 17% Milk 11% Cafes, restaurants 14% Seafood 5% Flour, cereal products 6% Other food 6% Other food 3% Pruit, vegetables 6% Other food 26% Exports Imports \$30.5 billion \$11.3 billion Meat 24% Beverages 20% Grains 34% Horticulture 19% Dairy products 8% Seafood 12% Wine 6% Dairy 7% Seafood 3% Other 42% Other 25 %

Figure 1: Value chain for food in Australia

Notes: represents the value chain in 2011–12, farm value excludes non-food production. *Source:* DAFF 2013b.

Questions for consideration

- What opportunities exist to expand agricultural production in Australia and how can we take advantage of them?
- How can farm businesses, food manufacturers and the retail sector be more responsive to domestic and global food demand and better integrate into domestic and global supply chains?
- Do farmers have access to timely, relevant and accurate information to fully inform production decisions to meet domestic and global food demands?
- What opportunities exist for exporting Australian agricultural technology, marketing skills and expertise to improve global food security outcomes?

Issue 2: Farmer decisions for improving farm gate returns

The White Paper will consider the means of improving market returns at the farm gate, including through better drought management.

The success of Australian farming depends on the many day-to-day decisions made by individual farmers across Australia. Although returns from farming are often dependent on factors beyond the farm gate, this section focuses specifically on farm-level determinants of profitability. Farms that are profitable enable farmers to reinvest in business growth, repay debt, manage risk through off-farm investments, fund their lifestyle or retirement goals, and receive a reasonable return to their assets. Achieving profits consistent with these outcomes is fundamental to the success of farming. Recognising the characteristics of farms that achieve this can help other farmers improve the profitability of their farms. Some features of high performing Australian farms are profiled in Box 3.

Box 3: High performing broadacre and dairy farms

Key features of the top 25 per cent of farms ranked by their rate of return to capital (using survey data) are:

- They achieved consistently higher rates of return—they recorded average rates of return (excluding capital appreciation) of 5.9 per cent a year (over the 20 years to 2011–12), compared with 1.1 per cent for all broadacre farms.
- They produced more than half of the sector's output—for the three years ending 2011–12, they accounted for 54 per cent of the value of output compared to 8 per cent for the bottom 25 per cent of farms.
- They invested more—for the three years ending 2011–12, they accounted for 64 per cent of net capital additions on farms compared to 2 per cent for the bottom 25 per cent.
- They were found among all farm sizes and in most regions in Australia—suggesting there is scope for better performance for many farms across Australia.

Features which contributed to better performance included:

- Better management capability;
- Larger scale of operation (although some medium and a few smaller scale farms perform well);
- Higher water use efficiency;
- High productivity—including higher herd and flock productivity;
- Lower enterprise and overhead costs; and
- Greater reliance on grain growing relative to livestock production.

Source: ABARES 2013e

Strong productivity growth is a key factor in improved farm gate returns. Historically the prices paid for inputs by farmers have grown faster than the price received for outputs, meaning that growth in productivity (increasing the volume of output at a faster rate than inputs) has been essential to maintaining farm gate returns. Productivity growth in the agricultural sector has been strong relative to other parts of the economy, but in the last 15 years or so there is evidence of slowing productivity growth. This slowing was influenced primarily by drought, but also was due to declining investment

in research and development (Dahl, Leith and Gray 2013). It is important to consider how to boost productivity growth, including through research, development and extension (leading to adoption) to enable farmers to adapt to changing market, climate and other conditions.

While productivity growth will improve returns over the long run, farmers also manage a range of risks that cause their incomes to vary from year to year (Figure 2). Incomes vary due to fluctuations in prices received for farm products (due to market conditions, including exchange rates), in prices paid for farm inputs (such as labour, energy, water, fertiliser and interest), and in production (due to seasonal conditions, pest and disease pressures, application of inputs and natural disasters – such as droughts, floods and fires). The National Farmers' Federation (NFF) has argued in its *Blueprint for Australian Agriculture* that it is important for farmers to have risk management tools to help them manage the variability in commodity prices, the Australian dollar and the terms of trade (NFF 2013a). The ability to use inputs flexibly, such as though water trading, can also be an important part of risk management.

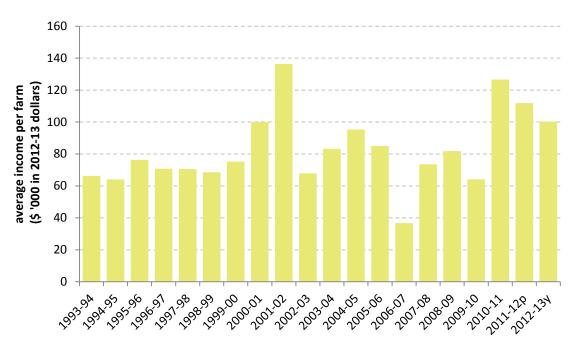


Figure 2: Variability in broadacre farm cash incomes

 $\it Note:$ p denotes ABARES preliminary estimate, y denotes ABARES forecast. $\it Source:$ ABARES

Drought conditions are a key risk for farm incomes. A previous study by the Bureau of Meteorology and the CSIRO highlighted that drought conditions in Australia are likely to occur more often and be more severe (Bureau of Meteorology & CSIRO, 2008). Past reviews of drought assistance programmes have stressed the importance of increasing preparedness and risk management by equipping farmers with the tools and skills needed to tackle the challenges of farming. The Exceptional Circumstances (EC) arrangements, which have been the primary mechanism for assistance during droughts, involve targeted assistance via income support payments to farm families. Past assistance also included EC interest rate subsidies for farm businesses, which closed on 30 June 2012.

In May 2013, Australian, state and territory primary industries ministers agreed a framework for determining support for farmers (Intergovernmental Agreement on National Drought Program Reform 2013). The agreement aims to help farmers prepare for and manage the effects of drought and other challenges without the need for formal drought declarations and will be fully implemented by 1 July 2014. There are five main elements in the agreement: a farm household support payment; continued access to Farm Management Deposits and taxation measures; a national approach to farm business training; a coordinated, collaborative approach to the provision of social support services; and tools and technologies to inform farmer decision making. The efficacy of these measures is to be considered as part of the White Paper process.

Getting started in farming represents a challenge for new-comers to the industry. The cost of land, equipment, livestock and other inputs to a farm business, along with technical know-how in what is increasingly a more complex business can be a barrier to new farmers. These new farmers can bring new ideas and approaches to the industry which can be beneficial to future growth and response to consumer demands. Attracting new farmers will be important to a vibrant and growing industry.

Farmers make a range of other decisions that influence their business performance, on matters such as business structure, scale of production, diversity of on-farm activity (for example, agroforestry, biofuel crops or farm tourism), succession planning, investment, leasing versus buying equipment, marketing, environmental management and off-farm income. They must be responsive to the needs and demands of consumers; and also face expectations from governments and the community around a range of social and environmental issues—including animal welfare, land management, chemical use and run-off. Farmers need to be able to adapt to these factors which requires timely and appropriate information as well as the tools and skills to use this information. They must also be able to challenge whether the expectations are out of proportion to the risk. Matters around debt financing and capital raising for farm investment are covered in Issue 3.

While farmers are best placed to make their own business decisions, there may be a role for industry bodies and governments. Industry bodies assist in formulating policy to address systemic issues affecting farmers and can support sharing of costs across industry in some areas. Government can assist in addressing areas where the market is less able to respond—including in some forms of information provision (such as weather and climate forecasts), facilitating collective action on certain matters (such as research and development), and provision of certain risk management tools (such as Farm Management Deposits).

Questions for consideration

- What are the drivers and constraints to farmers adopting alternative business structures, innovations or practices that will assist them in improving farm-gate returns?
- What tools, skills and advice do farmers need to effectively adapt and respond to the risks they face?
- What alternative actions or measures by governments, farmers or others would result in improved financial performance at the farm gate?
- What approaches could be used to encourage improved drought preparedness?
- During drought, what measures are most effective in ensuring long term resilience?
- How can new farmers be attracted to agriculture and how can they succeed?

Issue 3: Enhancing access to finance

The White Paper will consider access to finance, farm debt levels and debt sustainability.

Farmers invest to grow their business but also rely on their capital base to help manage income variability. For most family farms, the sources of capital for investment are limited to the funds available to the family, the farm returns that are generated (including earnings retained in Farm Management Deposits) and borrowings (mainly from banks) (Martin, Phillips & Shafron 2013).

Reliance on borrowed capital raises concerns about debt sustainability. Debt owed by the rural sector (agriculture, forestry and fisheries) increased in real terms from \$40 billion in 2000–01 to \$64 billion in 2012-13 (Figure 3). This increase was driven by greater ability and willingness to borrow because of rising land values and lower interest rates, but also because of income pressures for some farmers (in part due to extended drought). While broadacre farmers have net equity above 80 per cent on average, the proportion of cash income used to repay loans increased from 6 per cent in 2000–01 to 11 per cent in 2006–07 before easing to 9 per cent in 2011–12 (ABARES 2013b).

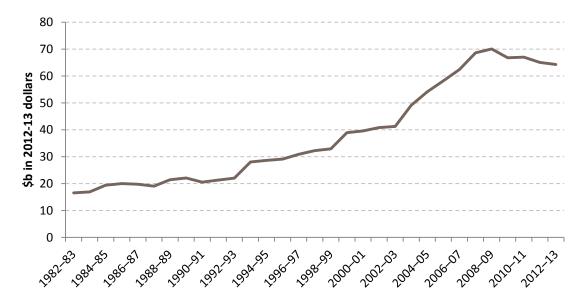


Figure 3: Total lending to agriculture, fishing and forestry sectors

Source: ABS 2013g; Reserve bank of Australia 2013

The combination of variable incomes and limited sources of capital for family farms means that farmers and their lenders are relatively conservative when it comes to borrowing. This may explain why the top 25 per cent of farms (in the three years to 2011–12) accounted for 64 per cent of net capital additions on broadacre farms, compared with just 2 per cent for the bottom 25 per cent of farms (see Box 3 in Issue 2). Tighter financial conditions following the global financial crisis are also affecting the farm sector and bank lending may not be as easy to access as in the past (Kingwell 2013). Effective management of debt for business—growth, while ensuring cash flow is not compromised, presents a business challenge for farmers.

Alternative business structures and financing methods may provide opportunities to attract new investment and open up additional sources of finance. Alternative business models that establish a business structure over the farm (or over several farms) can be constructed so that ownership of the farm remains with the family. There is limited use of such models at present, possibly reflecting that many farms have the characteristics of small businesses which tend to rely on private equity sources.

Institutional investors (such as superannuation funds) have played a much smaller role in Australian agriculture than in some other countries. In the United States, it has been estimated that non-owner-operating investors, such as institutional investment funds, owned around 29 per cent of farm land in 2007 (GlobalAgInvesting 2012). Lower levels of institutional investment in Australian agriculture could be due to farm business assets being less easily converted into cash, or to the volatility in cash flows. Additional investment by long-term Australian investors may be unlocked through creating new pooling and risk sharing vehicles. Other models include the use of agricultural management firms, equity partnerships with passive investors, and models for purchase of non-land assets such as dairy cow herds (ANZ & Port Jackson Partners 2012).

Governments have, at times, provided financial facilities – such as the Commonwealth's Farm Finance Program, which provides concessional loans to farmers. While the current program has only been in operation for a short time, we are interested in information on the impact of the current and previous arrangements for farmers and the financial sector.

Foreign investment in Australian agriculture can be an important source of new finance for investment, innovation and growth. While available data suggests that current foreign ownership of agricultural land and businesses in Australia is still relatively low³, there have been calls for increased transparency and availability of information on foreign ownership. Foreign investment is more prevalent in other parts of the supply chain. For example, in 2011 around half the milk and 40 per cent of the red meat produced in Australia was processed by foreign-owned firms, three foreign-owned milling groups account for almost 60 per cent of Australia's raw sugar production, and half of the 23 licensed wheat exporters operating in Australia were foreign owned (Moir 2011).

As well as being an important source of capital, foreign investment can help drive productivity growth by exposing domestic businesses to new technologies and techniques. Linkages to foreign partners can also improve overseas market access. Outside formal agreements, there are recent examples from other countries of ways to increase market access for agricultural products. One example of this is the concept of a 'take-off' agreement in which private entities invest in farm, processing or logistical infrastructure in return for outputs (ANZ & Port Jackson Partners 2012).

Australia reviews foreign investment proposals on a case-by-case basis to ensure they are not contrary to the national interest. In this way, Australia's foreign investment screening arrangements strike a balance between attracting foreign investment into Australia to support our economy and reassuring the community that sensitive foreign investments are assessed against a set of checks and balances. The Government recognises community concerns about the sale of agricultural land and agribusinesses to foreign investors and is considering steps to increase scrutiny and

³ According to the ABS, agricultural land and businesses are still predominantly Australian owned, with only around 1 per cent of Australian agricultural businesses wholly or partly foreign owned and around 11 per cent of agricultural land wholly or partly foreign owned (ABS 2011b).

transparency around foreign ownership. For example, the recently concluded Korea – Australia Free Trade Agreement negotiations maintained policy flexibility around investment in agricultural land and agribusiness.

Questions for consideration

- How do we better attract private capital into farm investment?
- What examples are there of innovative financing models that could be used across the industry?
- What would encourage up take of new financing models?
- What alternative business structures could be developed for farming that also retain ownership with farm families?
- How can foreign investment best contribute to the financing and productivity growth of Australian agriculture?

Issue 4: Increasing the competitiveness of the agriculture sector and its value chains

The White Paper will consider the competitiveness of the Australian agriculture sector and its relationship to food and fibre processing and related value chains, including achieving fair returns.

The importance of the agriculture sector extends well beyond the farm gate. In order to grow and prosper, the agriculture sector needs to be competitive at three levels: within its supply (or value) chain, in competing for resources with other sectors of the economy and in competing with overseas producers. The competitiveness through the supply chain will influence how the final consumer dollar is distributed through the supply chain – including the proportion received by farmers.

Competition within the supply chain

The agricultural sector in Australia is generally comprised of large numbers of small business operations at the farm level. However, concentration increases further up the supply chain. In 2011–12 there were around 136,000 farms in Australia (ABS 2013e). In contrast:

- the majority of grain handling and storage facilities are controlled by a single entity in each State;
- food and fibre processing is undertaken by a limited number of large firms. There are:
 - o four poultry processors accounting for 60 per cent of the market;
 - o three sugar millers accounting for 85 per cent of the market;
 - three dairy processors purchasing more than 50 per cent of the milk supply (ANZ & Port Jackson Partners 2012);
 - o four major wool processors;
 - o five meat processors accounting for 40 per cent of the market share and 506 businesses sharing the remaining 60 per cent (IBISWorld Pty Ltd 2013)
- in the grocery sector the four largest players own 98 per cent of supermarkets, with Woolworths (43 per cent) and Coles (37 per cent) dominating; although there has been increased presence of global supermarket chains, such as Aldi and Costco, with further competition provided by convenience stores such as Seven and I Holdings (Mortimer 2013, DAFF 2013b).

By comparison, in the United Kingdom five major retailers control just over 70 per cent of supermarkets and in China the largest five control 38 per cent. In the United States, Walmart is the largest player with 25 per cent of the market. However, market concentration is generally higher for packaged dry groceries than for fresh food (Mortimer 2013).

High levels of concentration and market power, including imbalances in negotiating power between farmers and others in the supply chain, can raise concerns about whether businesses are receiving an appropriate return on their investment and whether consumers are paying fair prices. The Australian Competition and Consumer Commission (ACCC) is presently reviewing aspects of supermarket behaviour, such as their conduct in dealings with suppliers in supply contracts and in relation to home brand products (ACCC & Australian Energy Regulator 2013). The Government

announced it will undertake a review of competition laws, policy and the broader competition framework, including the powers under the *Australian Competition and Consumer Act 2010* that enable the ACCC to examine such behaviour. The food industry is also acting to address some concerns through the establishment of a code of conduct between supermarkets and their suppliers (Australian Food and Grocery Council (AFGC) 2013).

While concentration can limit competition on the domestic market, scale can be important to provide international competitiveness. Internationally, there is a trend toward increased scale and globalisation of processors and of supermarket chains. The presence of global supermarket chains in Australia not only adds competition locally, but can also provide a pathway for access into other markets—creating a global value chain.

The food processing sector in Australia is facing pressure from rising input costs (energy and labour) and competition from imports (AFGC & KPMG 2013a). There is pressure for greater product and process innovation, improved supply chain efficiencies and greater economies of scale. Improvements in transportation, processing and preservation technologies are allowing food retailers to source a wider range of products on a global scale. The use of private labels has also enabled greater control by retailers over the food processing sector. Industries producing processed, non-perishable and longer-life products are increasingly confronted by import competition in their traditional domestic markets. Industries such as processed pork, dried fruits, nuts and tinned fruit and vegetables are facing adjustment pressures partially as a consequence of greater imports. The AFGC argues that governments should reduce the cost of doing business and provide targeted cost-effective incentives for innovation (AFGC & KPMG 2013b).

Competition with other sectors of the economy

The ability of the agricultural sector to compete for workers, capital and other resources (such as land and water) depends on the returns that can be earned in the sector relative to the returns that can be earned in other sectors. For example, the high returns that have been earned in the mining sector over the past decade have enticed workers away from the agriculture sector and pushed up wages for these workers. This has made it harder for farmers to attract and retain workers, raising production costs and encouraging capital substitution.

Government assistance levels can also affect the attractiveness of different sectors. The Productivity Commission estimates that government assistance to primary production (which includes fisheries and forestry) in 2011–12 was around 3.3 per cent of its value added (with a range of 1.1 per cent for other livestock farming, through to 3.5 per cent for horticulture and 7.2 per cent for forestry and logging) (PC 2013a). This is higher than for mining (0.3 per cent) but lower than for manufacturing (4.1 per cent—with a range of 9.4 per cent for motor vehicles to 0.9 per cent for other transport equipment, with food, beverages and tobacco on-par with primary production at 3.3 per cent).

Competition with overseas producers

With around 60 per cent of agricultural production exported, Australian farmers must remain competitive with farmers in other countries. The industries with high international exposure due to a dominance of exporting include wool (98 per cent), cotton (98 per cent), wheat (70 per cent) and beef (65 per cent) (Figure 4). Some industries, such as pork, horticulture and dairy, are also exposed to import competition domestically. This means that domestic agricultural prices and farmer returns are usually highly influenced by global prices and the exchange rate.

In order to compete internationally, the agricultural sector must supply at or below the price of foreign suppliers or differentiate their products (for example, through quality or safety) to justify a higher price. Productivity growth assists Australian agriculture in maintaining competitiveness in the long run. ABARES found that between 1961 and 2006 agricultural productivity in Australia grew at 1.6 per cent a year on average, higher than in Canada (1.2 per cent) but lower than in the United States (1.8 per cent a year) (Sheng, Nossal and Ball 2013). International competitiveness will also be driven by innovation in products, process and practices though the supply chain, for example in manufacturing, transport and logistics.

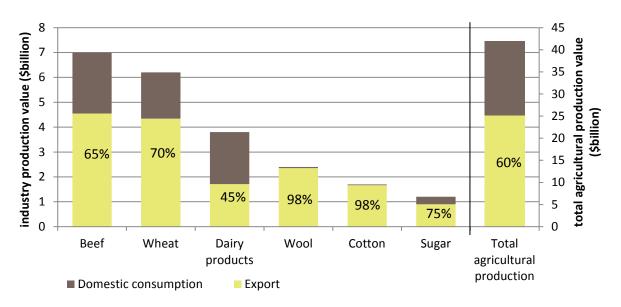


Figure 4: Share of agricultural production exported

Note: Values averaged from 2009–10 to 2011–12. Exports valued at the farm gate. *Source:* ABARES pers. comm.

The Australian agriculture sector receives less support from government than many of its foreign competitors. The Organisation for Economic Cooperation and Development (OECD) rates Australia as the one of the lowest subsidisers (producer support estimate of 3 per cent in 2012) after New Zealand (1 per cent) in 2012 (OECD 2013). This contrasts with other developed countries, such as the United States (7 per cent), European Union (19 per cent) and Canada (14 per cent). Subsidies are also lower than emerging economies such as Indonesia (21 per cent), China (17 per cent) and the Russian Federation (13 per cent). Brazil (5 per cent), South Africa (3 per cent) and Chile (3 per cent) also have low levels of producer support. A focus of trade policy has been to work to reduce assistance provided to agricultural sectors in other countries, to produce a freer international trading environment.

Other factors may also influence the competitiveness of overseas suppliers—such as New Zealand's dominance in dairy exports and Brazil's growth in sugar, beef and grains. While the factors and approaches may not be directly relevant or appropriate for Australia, understanding them may help to improve the competitiveness of Australian exports.

Questions for consideration

- How might existing laws and regulations be changed to address any market power imbalances in the agricultural supply chain, without limiting prospects for global-scale firms developing in Australia?
- How can the agriculture sector improve its competitiveness relative to other sectors in the economy?
- Which examples of overseas approaches to improving agricultural competitiveness have relevance for Australia?

Issue 5: Enhancing agriculture's contribution to regional communities

The White Paper will consider the contribution of agriculture to regional centres and communities, including ways to boost investment and jobs growth in the sector and associated regional areas.

Agriculture is a key industry in many rural and regional areas across Australia (ABARES 2013d). However, with an ageing farm population, there are often concerns expressed about where the next generation of farmers will come from and what will attract them to agriculture. Of the 136,000 agricultural enterprises in Australia, the majority are located in rural and regional Australia. The agriculture sector employs only a small proportion of the national workforce, but it is an important source of jobs in rural and regional communities. In 2011, agriculture accounted for 2.2 per cent of total employment across Australia. In very remote, remote and outer regional areas, agriculture accounted for around five to seven times this (11.6 per cent, 14.7 per cent and 10.4 per cent respectively).

Food product manufacturing is also a key employer in rural and regional areas. In 2011, the sector accounted for 1.7 per cent of total employment, providing a larger share of employment to inner regional areas (2.7 per cent) and outer regional areas (2.1 per cent) (Figure 5). In 2011, it employed close to half of its workforce in rural and regional areas (Australian Food and Grocery Council and KPMG 2012).

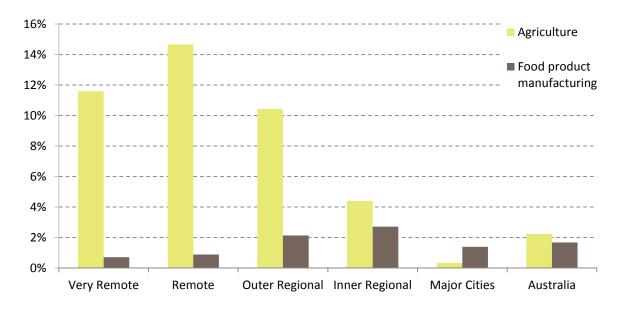


Figure 5: Agriculture and food processing share of employment by region

Note: Regional definitions are based on remoteness as defined by the ABS according to the Accessibility/Remoteness Index of Australia. Agriculture and food product manufacturing employment is based on 2 digit industry of employment classifications.

Source: ABS (2013d) 2011 census data

While direct employment in the agriculture and broader food processing sectors is a key part of regional communities, it is also the source of income that supports many other jobs in related industries and other sectors like retail, restaurants and cafes, and health and education services. A competitive, growing and productive agriculture sector will be important for the ongoing sustainability of those communities.

A vibrant, growing agriculture sector is important for many regional communities, but that does not necessarily mean that all small rural towns will grow. In recent decades, population growth has been concentrated in coastal cities. Many small rural townships with an agricultural base are experiencing population declines while some large inland cities and peri-urban areas have been growing. Improved productivity in the agricultural sector and long term farm consolidation have been a source of reduced population in some areas. Improved transport has also meant that farms source their inputs from further afield, which can also affect the viability of local communities. Larger regional centres benefit from diversification of economic activity and support movement from urban areas by 'tree changers' looking for a rural lifestyle but with city amenities (Bureau of Infrastructure, Transport and Regional Economics 2011). This concentration of population in larger regional centres may generate enough scale to justify services that were previously only available in capital cities, improving access to services for farming communities.

The ability of regional communities to deal with changing population and employment patterns depends on a number of factors. Regional communities face pressures across a number of dimensions, including natural disasters (such as droughts and flooding) and shifting economic conditions (such as loss or addition of a major employer or changing tourist numbers). It is important to understand the key factors which help regional communities adapt to these pressures, which may include the strength of social networks, local leadership, diversity of income and access to resources.

In some regions there are important linkages between the agricultural sector and indigenous communities. Indigenous engagement and leadership as well as indigenous training and employment, are key issues for agricultural development in these regions.

Questions for consideration

- 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?
- How can the agriculture sector best contribute to growth in jobs and boost investment in regional communities, including indigenous communities?
- 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?
- How do we attract the next generation of farmers?

Issue 6: Improving the competitiveness of inputs to the supply chain

The White Paper will consider the efficiency and competitiveness of inputs to the agriculture value chain—such as skills, training, education and human capital; research and development; and critical infrastructure.

A competitive agriculture sector requires farmers to apply their skills in using their land, water, labour, capital, energy and other inputs as efficiently as possible to produce farm outputs that they can sell profitably. The operating environment for farmers is dynamic and often complex as currency, weather patterns, commodity prices and yields can vary considerably across seasons. Even for industries that operate within controlled environments, such as intensive livestock, a heavy dependence on the cost of feed means little relief from the vagaries of markets and seasons. Farmers around the globe are continually improving their efficiency. Australian farmers need to keep pace.

With agriculture occupying 53 per cent (405 million hectares) of Australia's land area in 2011–12 (ABS 2013f), farmers face competition for land from mining, urban development and lifestyle uses (Mewett et al. 2013). Land prices reflect the combination of demands for these uses, the returns that can be earned from productive use of the land in agriculture and land as a store of value in a hard asset. There has been some interest in restricting certain areas to agricultural use in order to reduce pressure from mining and help maintain agricultural production. The Productivity Commission (PC) has recently reviewed government regulation of land uses for minerals and energy exploration, arguing for wide consideration of the benefits and risks to the community of such regulation informed by sound evidence (PC 2013b).

The size of the land area managed by farmers nationally also makes them important managers of the nation's resources. Farmers have generally recognised for some time the value of a healthy environment to a productive farm business, including the quality of soil and water resources. They take actions to maintain or improve the environment of their farms, with some actions also having environmental benefits beyond the farm gate—such as efforts to reduce nutrient, sediment and pesticide runoff into the Great Barrier Reef area. Nevertheless, there can be differences between public and private interests in how resources are managed and this may justify some government involvement. On farmers' part, there is often frustration over what farmers wish to do on their land compared to what others demand they do in running their land.

The condition of Australian soils makes fertiliser use essential to much of Australia's agricultural production, exposing farmers to additional cost volatility. Australia has a wide range of soil types but, when compared with soils in the northern hemisphere, our soils have less organic matter, lower phosphorus and other nutrients, and poorer structure and are susceptible to erosion, salinization, acidification and compaction (DAFF 2012). Fertiliser costs varied between 6 and 11 per cent of cash costs for farmers over the 10 years to 2012–13 (ABARES 2013f). Movements in Australian domestic fertiliser prices generally track developments in world markets as Australia is a net importer of

fertilisers (about half the fertiliser used in Australia is manufactured in Australia). While there may be opportunities to improve efficiency of fertiliser application (Simpson, Richardson & McLaughlin 2010), often Australian farmers have little choice but to absorb increases in fertiliser prices as there is limited scope to substitute with other farm inputs. Concerns have been expressed about the availability of global phosphorus supplies during the course of this century, which may have implications for price increases in the future (Beardsley 2011 and Clabby 2010).

In 2011–12, around 59 per cent of the water used in Australia was used for agriculture (ABS 2013b), with the output from irrigated land accounting for around 29 per cent of the gross value of agricultural production (ABS 2013c). Australia's water availability varies geographically with 65 per cent of run-off occurring in far north Australia and coastal Queensland and only 6.8 per cent in the Murray Darling Basin (DAFF 2012). Access to irrigation water from bores or river systems is licensed by the states, which also own major storages on rivers. Distribution of irrigation water from state owned facilities is managed by utilities which levy fees for delivery. Increased trading of water (on a permanent or temporary basis) is contributing to a more economically efficient allocation of the resource between competing users. Such trade was particularly useful in ensuring that scarce water was available to higher value users in droughts in the 2000s. Improvement in irrigation infrastructure can also improve the efficiency of water use as well as saving water for other uses—such as for environmental purposes. This helps ensure water remains available for productive uses (as compared to water buybacks). Ensuring effective government policies on water infrastructure (including potential new irrigation systems), distribution, pricing, and use remain important to future agricultural development in Australia.

Agricultural chemical use can boost farm productivity but potentially creates risks for consumers and the environment. Farmers' use of pesticides and veterinary products are regulated to manage their safe use and disposal, to control run-off or drift outside of the property and to avoid the build-up of pest and disease resistance. Regulations must balance farmers getting the production benefits of these chemicals and managing the risks of their use. Reduced use of chemicals can provide access benefits in some overseas markets that have stringent residue limits.

Energy costs in the form of fuels and electricity are important components of farm costs – and so access to low cost energy is important for the competitiveness of the sector. Fossil fuels and derived products, such as lubricants and fertilisers, are essential inputs for almost all agriculture production systems and supply chain activities. The price of fuels such as diesel in Australia are linked to the international price of crude oil, as 83 per cent of the crude oil and other refinery feed stock used to distil fuels in Australian refineries was imported in 2010 (Parliament of Australia 2013). Fuel prices in Australia also reflect a range of domestic factors, such as transportation and storage costs within Australia and wholesale and retail selling margins. Farmers receive fuel tax credits on fuel used on farm in the course of conducting their business to remove fuel tax from this business input. Increasing use of agricultural products for biofuels, also presents an opportunity for farmers to be contributing to global fuel supplies.

In recent times, higher electricity costs have reduced farm returns. Farmers often have to make trade-offs between the amounts of electricity, water and labour they use. For example, some water-saving technologies such as sub-surface drip irrigation, may save on labour but increase energy costs. While the agriculture sector is not subject to the carbon tax, it will benefit from the repeal of

the carbon tax indirectly through lower input costs (for example lower electricity and natural gas prices as lower costs are passed through the supply chain). Access to robust information on likely future prices of inputs over the medium to longer term is important in determining the best mix of farm inputs, particularly for investments with lengthy pay-off periods.

Attracting workers at the right time and with the right skills is becoming more difficult for many farmers – particularly in remote areas where there can be limited access to services such as education and health care. This has been exacerbated by the large salaries paid by the mining industry to attract employees with similar skill requirements, including those from rural and regional areas. Many jobs in the farm sector are unable to be filled by Australian workers for the critical periods required, which has led to a reliance on overseas workers in some industries. For example, many of Australia's horticultural industries rely on seasonal backpacker labour and temporary workers from the Pacific and Timor Leste. With low unemployment in the economy, the ability to attract and retain labour is of concern to the agriculture sector. To assist the industry in sourcing temporary workers, the Work and Holiday (subclass 462) visa (WHM) and the Seasonal Worker Programme (SWP) were introduced. The WHM provides an incentive for visiting backpackers from programme partner countries to focus their work activities in agriculture and other specified regional industries. The SWP allows Australian employers in the horticulture industry to employ workers from eight Pacific island countries and Timor-Leste.

Developing career paths to attract younger people to the industry is a key challenge for the sector. While agricultural workers have fewer post-school qualifications compared with the average across all industries, there has been an increase in educational attainment over the last several decades. The agricultural workforce is ageing, with the median age of workers around 53 in 2010-11 (ABS 2013d). At the same time, 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. Attracting labour in the short term requires the sector to employ innovative and attractive remuneration strategies. Offering training to further develop the skills of workers and to increase labour productivity will be important. The industry, the education sector and governments have a role to play in assisting the provision of these skills in the sector.

Investment in research and development (R&D) and its adoption on-farm through extension (technology and innovation diffusion) are integral to the future competitiveness of Australian agriculture. Total expenditure on rural R&D from all sources in 2008–2009 was estimated to be around \$1.5 billion, of which \$490 million was through the rural research and development corporations (RDCs) (PC 2011). The RDCs are mainly funded by statutory levies on commodity production with eligible R&D matched by the Australian Government up to 0.5 per cent of each industry's gross value of production.

A Council of Rural R&D Corporations (CRRDC) evaluation of 59 RDC programs, representing \$676 million in R&D investment between 2001 and 2009, found for every \$1.00 invested, \$10.51 is returned after 25 years (CRRDC 2009). Over the life of the Cooperative Research Centre Programme established in 1991, there have been more than 50 agricultural CRCs representing around 28 per cent of the Programme. The agriculture sector, through the Cooperative Research Centre programme had the most significant direct economic impact of all the sectors, estimated at \$6.15 billion in 2012 (The Allen Consulting Group 2012).

While R&D contributes to long-term productivity gains, extension can generate higher short-run productivity gains when a higher proportion of producers become early adopters of R&D outcomes. Extension services in Australia have been changing with state and territory governments playing a smaller role and the private sector being an increasing source of services (Parliament of Australia 2007).

Both the Rural R&D Council (RRDC) and the Productivity Commission examined rural research and development in 2011 and made recommendations to improve the effectiveness of rural R&D investment (PC 2011; RRDC 2011). Some of their recommendations have been implemented, but it may be useful to consider whether more can be done, particularly in the context of stagnant R&D investment and the need to boost agricultural productivity. Investment in agricultural R&D can also have benefits more broadly beyond the agricultural sector, for example promoting food security, alleviating poverty or finding solutions for carbon reduction (PC 2011, McClintock and Griffith 2010; Lomborg 2013).

Agricultural biotechnologies, such as genetically modified crops, have the potential to transform agricultural productivity by delivering increased yields and lowering input costs. They can also improve environmental outcomes by reducing the need for inputs such as herbicides and water. Looking to the future, GM crops could better equip cropping systems to withstand drought, frost and other climate challenges. Biotechnology may also enable agricultural systems to be adapted to produce pharmaceuticals and products with industrial applications, potentially expanding the markets in which farmers can operate. Given the potential benefits of biotechnology to the agriculture sector, a regulatory regime in which consumers have confidence will be part of ensuring the benefits of biotechnology to the agriculture sector are fully realised. Australia has a strong regulatory framework to manage any risks to human health and safety and the environment from GM organisms and GM foods, but there continue to be limitations imposed by some states and territories on growing GM crops within their jurisdictions. These limitations have the potential to constrain the ability of farmers to adopt the latest available technologies to improve their productivity.

Given the geographical dispersion and diversity of Australian farms, reliable logistics with efficient provision of road, rail, sea and airfreight infrastructure are crucial for farm produce to move through domestic and global food supply chains. Food companies and their suppliers can only succeed in an increasingly competitive market where there is seamless integration of food storage, handling, packaging, processing, marketing and retailing services. Increased capacity is likely to be required with increased pressure on current distribution networks from expanding production and production in new areas, especially in years with good seasonal conditions. Requirements for specific production handling equipment and potential expansion of production in areas currently without adequate infrastructure increases the need for co-ordination between government and farmers (Nguyen et al. 2013).

Modern communication technologies (such as broadband, smartphones and online services) have the potential to overcome many of the location disadvantages faced by farm businesses and rural communities, and can assist in management. This includes providing improved access to health and education services, additional options for off-farm income, remote diagnosis of farm machinery faults, off-site detection of plant and animal health problems, animal monitoring and automation of

processes such as milking or irrigating, efficiencies with financial transactions, sourcing business inputs, accessing research and climate information, and marketing produce.

Infrastructure planning and investment must meet the current and future demands of rural industries if Australian agriculture is to remain competitive over the longer term. The nature of agriculture, including its regional dispersion and seasonal production, means that it can be sometimes difficult to commit to long term freight or other infrastructure solutions. Planning and prioritisation of future infrastructure improvement requires careful examination of the current capacity and conditions of transport and storage networks. Better systems and tools for collecting and analysing freight flows by commodity will help identify synergies across industries. The Department of Infrastructure and Regional Development is currently working with state and territory governments to identify and map key freight routes, including compiling more detailed information on the type of agricultural commodities and the intensity of freight flows.

There is often scope for infrastructure to service multiple industries and users, but in some cases it will be necessary for this infrastructure to be specifically targeted to the needs of the sector. While public provision of infrastructure has been the dominant approach in the past, there is increasing private sector involvement through public-private partnerships and direct investment in projects (Nguyen et al. 2013). The Australian Government has committed to reforming the governance arrangements for Infrastructure Australia, leading to a more rigorous and robust approach to infrastructure planning and prioritisation within the fiscal constraints facing the Government. The Government has also announced a PC inquiry into ways to encourage private financing and funding for major infrastructure projects (PC 2013c). The Council of Australian Governments (COAG) recently commissioned urgent work on infrastructure, including options to increase private sector involvement in infrastructure projects (COAG 2013).

Questions for consideration

- 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?
- What skills including specialised skills and training, will be required in the future and how can these be delivered and uptake encouraged?
- How can we attract workers to agriculture particularly in remote areas?
- How can we promote career pathways for the agriculture sector, including models to enable younger farm workers to gain broader industry experience?
- How can rural industries and governments better identify, prioritise and fund research, development and extension?
- 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?

Issue 7: Reducing ineffective regulations

The White Paper will consider the effectiveness of regulations affecting the agriculture sector, including the extent to which regulations promote or retard competition, investment and private sector-led growth.

Regulation is important for both economic and social reasons but regulation must be effective and efficient. All regulations have a purpose—such as, to protect or provide information to consumers, the environment, and society; to demonstrate to other countries that our products are safe; or to ensure that businesses compete on an even playing field. While regulations are likely to be of benefit to one group, they often impose a cost on another – such as controls on odour from livestock production close to urban areas. Regulations can also divert attention from managing the business and investing for the future. Overlapping regulations imposed by different levels of government add complexity and cost. Regulations should achieve their policy purpose with the least cost. Reducing ineffective and inefficient regulation can raise investment, innovation, productivity and growth.

Farm businesses are highly regulated, with one estimate indicating that the cost of complying with regulation could be around 4 per cent of total farm expenses (Holmes Sackett 2007). Farm businesses are governed by around 90 Acts administered by the Department of Agriculture, in addition to those regulations that apply to all businesses (Gibbs, Harris-Adams & Davidson 2013). Farm businesses are also subject to various state and territory government regulations and regulations in overseas markets that affect their operating environment.

Regulatory arrangements have been developed over many years to safeguard the integrity of Australia's food and fibre supply system. This can provide a marketing advantage. Compliance with these regulations, which often differ between states and territories, creates a significant cost for business in addition to the cost of complying with generic business requirements. This can be particularly difficult for companies whose scale of operation extends across jurisdictional borders and for those companies who are competing in export markets alongside international competitors who may be subject to lower regulatory standards.

A key policy objective of the Government is to reduce the burden of ineffective and inefficient regulation. The Government has committed to relieving the regulatory burden on individuals, businesses and community organisations by reducing red and green tape by at least \$1 billion a year.

A number of recent studies have identified priorities for regulatory reform. ABARES, in analysing a selected set of regulations, found that further Government action could reduce unnecessary regulatory burdens across a number of areas in the agriculture sector (Table 3). Further analysis and consideration is required to determine whether reform in these and other regulations would boost competitiveness in the agriculture sector without creating new costs. Furthermore, there may be opportunities to reduce state and territory regulatory burdens, particularly in the areas of genetically modified crops, water rights, chemicals and food regulation.

The NFF has argued that the key priorities for regulation reduction are environmental protection, carbon farming, transport of agricultural goods, the agricultural workforce, and agricultural and

veterinary chemicals. The NFF also argues for streamlining data collection, improving regulatory processes and reducing duplication and overlap between levels of government (NFF 2013b). Similarly the Australian Food and Grocery Council (AFGC) has argued for the government reducing "the cost of doing business" (AFGC & KPMG 2013b).

Table 3: ABARES assessment of opportunities for regulatory reform in the agriculture sector

Further action could reduce unnecessary regulatory burden ^a	Further action could complement state and territory government efforts to reduce unnecessary regulatory burdens
Livestock exports—Overly prescriptive requirements of Marine Orders Part 43 ^b Environment Protection and Biodiversity Conservation Act—Lack of clarity about what constitutes a 'significant impact' Environment Protection and Biodiversity Conservation Act—overlap with biosecurity approval procedures for live animal imports Temporary labour—Inconsistent taxation of non-resident and resident workers Work health and safety—Inconsistent regulation between jurisdictions Agricultural chemicals and veterinary medicines—Access to chemicals for minor uses Agricultural chemicals and veterinary medicines—Overlap, inconsistency and duplication in regulation across jurisdictions	Genetically modified crop production Water property rights ^c Chemicals of security concern Food regulation—Inconsistency between jurisdictions
No unnecessary regulatory burden exists	The regulatory burden is no longer a concern for industry
Horticulture Code of Conduct omissions Australian Animal Welfare Strategy National Pollutant Inventory Temporary labour — Skill requirements to access the 457 visa programme Food regulation—Inconsistency in regulation of domestic and imported food National Livestock Identification System requirements Biosecurity and quarantine—Timeliness of import risk analyses Biosecurity and quarantine—Uncertainties about the Emergency Plant Pest Response Deed	Reef Water Quality Protection Plan Temporary Labour—Work eligibility assessments of overseas visitors by farmers Temporary labour—Centrelink reporting requirements regarding temporary labourers Food regulation—Timeliness in regulatory processes involving Food Standards Australia New Zealand and the Australian Pesticides and Veterinary Medicines Authority Testing biodiesel produced on farms Biosecurity and quarantine—Overlap between the

Notes: a. One item from the ABARES report has been excluded from the category 'Further action could reduce necessary regulatory burden' since it related mainly to the forestry industry. b. Marine Orders Part 43 is scheduled to undergo a review in 2014. c. It is noted that the Council of Australian Governments (COAG) has signed off on the National Water Reform Work Plan 2013–17 which outlines priorities for all governments in future water reform.

Source: Gibbs, Harris-Adams & Davidson 2013

Questions for consideration

- How well do regulations affecting the industry meet their policy objectives?
- What opportunities are there to reduce ineffective or inefficient regulation?
- Which regulations are disproportionate to the risks they are supposed to address?
- How do we coordinate across governments to reduce regulations whose costs exceed their benefits?

Issue 8: Enhancing agricultural exports

The White Paper will consider opportunities for enhancing agricultural exports and new market access.

Agricultural exports are important to both the agriculture sector and to the economy as a whole. By value, around 60 per cent of agricultural production was exported to overseas markets in 2012–13 and agricultural exports added \$38 billion to Australia's economy, comprising 13 per cent of Australia's total exports or 15 per cent of total merchandise exports (ABARES 2013e).

Asia is becoming a key focus of agricultural exports with Australia well placed to supply markets in this region. The majority of Australian agricultural exports, 66 per cent or more than \$25 billion, are sent to the Asian region, with the largest single country market being China (\$8 billion), followed by Japan (\$4 billion). Over the 10 years to 2012–13, exports to Asia increased from 54 per cent of agricultural exports to 66 per cent, and for China from 8 per cent to 20 per cent (ABARES 2013f,c).

This demand from Asia has been driven by income and population growth and urbanisation trends. Strong growth is set to continue, with projections that the real value of food consumption in Asia will double between 2007 and 2050 (Figure 6). While Asia is expected to increase its food production, ABARES has projected that growth will be insufficient overall to meet demand for commodities. This suggests that the opportunity for Australia's agricultural exports remains substantial (ABARES 2013a). With rising populations in middle and higher income brackets, this also provides an opportunity for exports of food and fibre products that can be sold at price premiums due to quality, environmental standards and other desired characteristics—such as specialist flour or organic certification. Concurrently, increasingly wealthy consumers are becoming more discerning in their expectations of quality.

Vegetables
Fruit
Meats
Cereals
Oilseeds and oilseed products
Dairy products
Sugar

0 20 40 60 80

US\$b in 2007 dollars

Figure 6: Value of projected demand of ASEAN countries for agrifood products

Source: ABARES 2013a

Access for Australia's agricultural products into overseas markets can be challenging. Traditional barriers such as tariffs, quotas and subsidies on products can prevent or limit access to markets and distort trade—with these measures often becoming more restrictive for processed products. Australian exports can face increased competition due to agreements our trading countries conclude with other countries.

Australia's approach to market access is at the multilateral, bilateral and regional levels. At the multilateral level, Australia continues to work constructively with other countries in multilateral trade negotiations under the World Trade Organization (WTO). Australia works bilaterally and regionally to progress high-quality, comprehensive free trade agreements (FTAs). Trade restrictive measures can also be addressed outside of trade negotiations, such as bilaterally and through advocacy and action in the WTO.

The Government is committed to advancing multilateral negotiations through the WTO as the best way to improve global economic growth through reducing trade barriers, lowering subsidies to our overseas competitors and removing export subsidies. The trade agreement reached in Bali in December 2013 will make it easier and cheaper for goods to flow through the ports and customs processes of 159 countries and offers a real opportunity to re-energise the WTO.

Australia has seven FTAs currently in force with New Zealand, Singapore, Thailand, US, Chile, the Association of South East Asian Nations (ASEAN) (with New Zealand) and Malaysia. Trade with these countries accounts for 28 per cent of Australia's total trade.

The Government is also working to fast-track the conclusion of agreements with China, Japan and South Korea (negotiations were concluded with South Korea in December 2013, but the agreement has not yet entered into force) and continuing to negotiate or explore FTAs with a range of other trading partners, including through the Trans-Pacific Partnership Agreement and the Regional Closer Economic Partnership Agreement negotiations (DFAT 2013).

Technical barriers to trade related to biosecurity, food safety, quality or other conditions can also restrict the export of Australian products. While many of these measures are legitimate, there are cases where measures are overly onerous or unjustified. The Government plays an important role in both negotiating technical market access—including though the placement of staff from the Department of Agriculture in key markets, and collaboration between industry and federal and state and territory governments—and certifying that exported products meet the conditions imposed by importing countries. It also engages in international negotiations on standards and other conditions that affect trade, such as conventions under the United Nations, animal and plant health standards and human health standards. The Government also builds cooperative relationships with other countries to share skills and expertise, which helps to support broader trading relationships.

Australia's biosecurity system is important in maintaining export market access for agricultural products, but also to manage pest and diseases risks from imported products (before the border, at the border and within Australia). These measures are designed to safeguard Australia's plant and animal health and the environment from harmful pests and disease. Australia's biosecurity system faces increasing challenges, including changing global distribution of pests and diseases as well as increasing movement of goods and of people. The Government has responsibility for responding to these challenges (in co-operation with state and territory governments and industry) to maintain

Australia's widely-recognised animal and plant health status. Australia's export certification system and supporting legislation affords an advantage for agricultural exporters. Australia's biosecurity arrangements complement the Imported Food Inspection Scheme, administered under the Imported Food Control Act 1992, which ensures imported food meets Australian requirements for public health and safety and compliance with Australian food standards as detailed in the Australian New Zealand Food Standards Code.

Information on new market opportunities in existing markets can be just as valuable as liberalising access to new markets. While the Government has an important role in government-to-government market access arrangements, developing markets also requires information on market segments, product characteristics, business practices and supply chains, as well as marketing efforts to "sell" the product and to compete. While these aspects are principally the role of exporters, marketers and industry bodies, Government does play a role in supporting Australia's agricultural exporters through Austrade, the Export Market Development Grants Programme, the Export Finance and Insurance Corporation, agricultural counsellors in key markets and other efforts.

The ability of Australia to negotiate improved export access is often related to providing improved import access to the Australian market. Tariff and quota restrictions on agricultural products are generally low in Australia. While consumers can directly benefit from imports, they can also benefit Australia's agricultural sector by providing inputs into the supply chain, such as fuel, fertiliser, food ingredients and packaging. Imports may also increase competition in the market, encouraging Australia's agriculture and processing sectors to be more efficient and innovative—but putting pressure on the viability of those unable to compete. There are concerns by some that increasing vertical integration across national borders can remove products from a domestic market. In an increasingly globalised trading system it can be expected that Australia will have opportunities to both import and export a greater quantity and variety of agricultural products.

Questions for consideration

- How can industries and government respond to the key challenges and opportunities to increase or enhance exports?
- How can the government take best advantage of multilateral and bilateral trade negotiations (including through the World Trade Organization and through free trade agreements (FTAs)) to advance the interests of the sector?
- How can engagement between industry and government on market access priorities for Australian agricultural products be improved, including to inform negotiations on FTAs?
- What changes could be made to biosecurity arrangements, both in Australia and in other countries, that would enhance global trade in agricultural products?
- How do we provide the appropriate biosecurity controls at minimum cost?

Issue 9: Assessing the effectiveness of incentives for investment and job creation

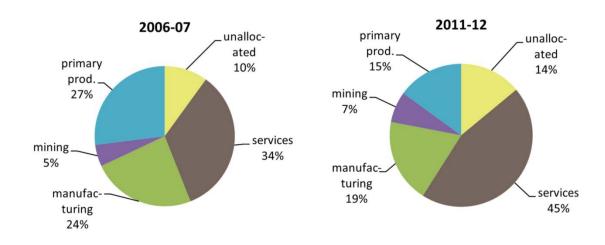
The White Paper will consider the effectiveness and economic benefits of existing incentives for investment and job creation in the agriculture sector.

New supplies of capital and labour will be key factors in the future expansion of the agriculture sector, with strong income growth critical to attracting new investment and workers. The efforts of industry will play the major part in achieving this. Governments also provide a number of incentives and programmes aimed at encouraging investment and attracting labour. These incentives need to be effective and value for money.

The Australia Government provided assistance to the agriculture sector worth around \$1.4 billion in 2011–12. This is made up of around \$780 million in budget outlays, \$520 million in tax concessions and around \$110 million in net tariff assistance. Around one-third of this assistance is directed to sheep, cattle and grain farming (PC 2013a).

Budgetary assistance for primary producers, at around 15 per cent of overall budgetary assistance to industry, is lower than for manufacturing but higher than mining. Comparisons of assistance to the agriculture sector from year to year can be very heavily influenced by significant weather events. For example, assistance was significantly higher in 2006-07 and 2007-08 due to significant increases in

EC drought relief payments and interest rate subsidies (Figure 7). Figure 7: Budgetary assistance by industry sector



Source: PC 2013a

A focus of Australian Government assistance to the agriculture sector is on helping primary producers to manage fluctuations in their income through the Farm Management Deposits Scheme and income averaging provisions. Additional assistance has been provided during drought via the Exceptional Circumstances Relief Payment and, until 30 June 2012, the Exceptional Circumstances

Interest Rate Subsidy. The Australian Government also makes a significant investment in research and development, through the rural R&D Corporations and the R&D tax incentive.

Primary producers can also access some tax concessions that are not available to other businesses. These include special rules for non-commercial business losses, which allow farmers greater scope to offset farm business losses against income from other sources; immediate deductions for capital expenditure on Landcare operations; three-year write-off for capital expenditure on water facilities; ten-year write-off for the capital cost of electricity connections and telephone lines; accelerated deduction for the decline in value of horticultural plants; deferral of profit on the forced disposal or death of livestock; deferral of profit on certain insurance recoveries; and deferral of profit on double wool clips carried out because of drought, fire or flood.

While farmers receive some advantages from the tax system, some stakeholders have argued that there may be areas of the system which constrain investment or other decisions. For example, the NFF has raised concerns about non-commercial loss provisions introduced by the former Government, which generally prevent taxpayers with annual income more than \$250,000 from offsetting their other business losses (such as from primary production) against their income in the same income year (NFF 2009). The Government is intending to prepare a Taxation White Paper during its first term.

There are other government programmes which aim to assist with financial and business management and innovation. For example, the Rural Financial Counselling Service provides free financial counselling to primary producers and small rural businesses which are suffering financial hardship and have no alternative sources of support. Commercialisation Australia provides funding to help researchers, entrepreneurs and innovative firms take their intellectual property to market.

In addition to general education and training policies, the Government implements a number of policies to help supply workers with the right skills at the right place and time in the agriculture sector. Working holiday-maker visas (417) and temporary business visas (457) provide avenues to boost labour supply. It is important that these visa arrangements are used to their full effect to deal with the practicalities of agricultural production, including seasonal patterns. Furthermore, the Australian Government provides a number of programmes to help job seekers who move to take up a new job or apprenticeship, which may be of assistance to farm businesses. These include relocation assistance, the Seasonal Worker Programme, and Harvest Labour Services.

Questions for consideration

- How well is the current set of government programmes and incentives directed at the agriculture sector meeting their objectives, in terms of both effectiveness and efficiency?
- Are government visa arrangements and programmes like relocation assistance, the Seasonal Worker Programme and Harvest Labour Services effective at channelling workers into the agriculture sector and what other approaches should be considered?
- What have other countries done to inspire agricultural investment?
- What has Australia done in the past that has had best effect?

Appendix A: Agricultural Competitiveness White Paper terms of reference

Purpose

A vibrant, innovative and competitive agriculture sector will lead to better returns to farmers, more jobs, more investment and stronger regional communities. Australia is a leading agricultural producer and exporter, and the sector has considerable opportunities for future growth. As a nation we must encourage a strong agricultural sector, with primary producers that remain among the most innovative in the world.

An important role for Government is to set stable, long-term policies to improve productivity and growth. The White Paper on Australia's Agricultural Competitiveness (the White Paper) will outline a clear strategy to improve the competitiveness and profitability of the agriculture sector, boosting its contribution to trade and economic growth, and building capacity to drive greater productivity through innovation.

By setting a solid foundation to promote investment and jobs growth in the agriculture sector, the White Paper will also help ensure agriculture remains a significant contributor to the Australian economy and regional communities.

Considerations and scope

The White Paper will consider:

- food security in Australia and the world through the creation of a stronger and more competitive agriculture sector;
- means of improving market returns at the farm gate, including through better drought management;
- access to investment finance, farm debt levels and debt sustainability;
- the competitiveness of the Australian agriculture sector and its relationship to food and fibre processing and related value chains, including achieving fair returns;
- the contribution of agriculture to regional centres and communities, including ways to boost investment and jobs growth in the sector and associated regional areas;
- the efficiency and competitiveness of inputs to the agriculture value chain such as skills, training, education and human capital; research and development; and critical infrastructure;
- the effectiveness of regulations affecting the agriculture sector, including the extent to which regulations promote or retard competition, investment and private sector-led growth;
- opportunities for enhancing agricultural exports and new market access; and
- the effectiveness and economic benefits of existing incentives for investment and jobs creation in the agriculture sector.

The White Paper will not consider industry competitiveness issues associated with the fisheries and forestry sectors and nor will it cover human nutritional health issues.

The White Paper is proposed for release towards the end of 2014. It will complement related initiatives, including the Action Plan to Boost Productivity and Reduce Regulation, the White Paper on Developing Northern Australia and the new Energy White Paper.

The White Paper will be developed in the context of the findings of the Commission of Audit, the constrained fiscal circumstances and the Government's commitment to return the Budget to surplus.

The Prime Minister and the Minister for Agriculture will oversee the development of the White Paper, with responsibility for day-to-day management of the process resting with the Minister for Agriculture in consultation with relevant Ministers.

A cross-agency taskforce within the Department of the Prime Minister and Cabinet (PM&C) will develop the White Paper. It is overseen by an inter-agency committee co-chaired by Deputy Secretaries from PM&C and the Department of Agriculture. This committee will ensure the broad range of policies that affect the agriculture sector are included in the process to produce a comprehensive plan for the sector.

Public consultation

The White Paper will be developed with extensive consultation with business, non-government experts and the community. The industry advisory council for the agriculture sector, chaired by the Minister for Agriculture and a respected industry leader, will play a key part in providing advice to assist the development of the White Paper.

References

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) 2013a, *What Asia wants: long term food consumption trends in Asia*, ABARES research report 13.12, Canberra, October.

ABARES 2013b, Agricultural Commodities: March Quarter 2013, Canberra, March.

ABARES 2013c, Agricultural Commodities: September Quarter 2013, Canberra, September.

ABARES 2013d, About My Region, Canberra.

ABARES 2013e, Agricultural Commodities December 2013, Canberra, December.

ABARES 2013f, *Agricultural commodity statistics 2013*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, December.

Australian Bureau of Statistics (ABS) 2011a, Household Expenditure Survey, cat. no. 6530, Canberra.

ABS 2011b, Agricultural Land and Water Ownership Survey, cat. no. 7127.0, Canberra, September.

ABS 2013a, Australian National Accounts: National Income, Expenditure and Product, cat. no. 5206, Canberra.

ABS 2013b, Water Account, Australia, 2011–12, cat. no. 4610.0., Canberra, October.

ABS 2013c, Gross Value of Irrigated Agricultural Production, 2011–12, cat. no. 4610.0.55.008. Canberra, October.

ABS 2013d, *Census of population and housing 2011*, Australian Bureau of Statistics, retrieved from Table Builder 2011 Census, Canberra, October.

ABS 2013e, Australian Farming in Brief, cat. no.7106.0, Canberra, October.

ABS 2013f, Land management and farming in Australia, cat. no. 4627.0, Canberra, September.

ABS 2013g, Consumer Price Index, cat. no. 6401.0, Canberra;

Australian Competition and Consumer Commission & Australian Energy Regulator (ACCC & AER) 2013, *Annual Report*, Canberra.

Australian Centre for International Agricultural Research (ACIAR) 2011, *Strategic Framework for International Agricultural Research within Australia's Aid Program*, Canberra, available at aciar.gov.au/publication/cp023.

Australian Food and Grocery Council (AFGC) 2013, Food and Grocery Code Agreed by Supermarkets and Food Industry, Australian Food and Grocery Council, Canberra, 18 November, available at www.afgc.org.au/media-releases/1759-food-and-grocery-code-agreed-by-supermarkets-and-food-industry.html.

AFGC & KPMG 2012, State of the Industry 2012. Essential Information: Facts and Figures, Australian Food and Grocery Council & KPMG, Canberra.

AFGC & KPMG 2013a, Competitiveness & Sustainable Growth. Challenges for the Australian Food and Grocery Industry, Australian Food and Grocery Council & KPMG, Canberra, June.

AFGC & KPMG 2013b, *State of the Industry 2013. Essential Information: Facts and Figures*, Australian Food and Grocery Council & KPMG, Canberra.

Allen Consulting Group 2012, *The Economic, Social and Environmental Impacts of the Cooperative Research Centres Program*, report to the Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra, September, available at www.crc.gov.au/About-the-program/Documents/CRC%20Program%20impact%20study FINAL.pdf (pdf 6.6mb)

ANZ & Port Jackson Partners, 2012, 'Greener pastures: The global soft commodity opportunity for Australia and New Zealand', *ANZ Insight Series*, Issue 3, October, available at media.corporate-ir.net/media_files/IROL/24/248677/ANZ_insight_3_Greener_Pastures.pdf (pdf 2.96mb).

Beardsley, T 2011, 'Peak phosphorus', Bioscience, February, vol. 61, no 2, p.91.

Bureau of Infrastructure, Transport and Regional Economics 2011, *Spatial trends in Australian population and movement*, Report 122, Canberra.

Bureau of Meteorology and Commonwealth Scientific and Industrial Research Organisation (BoM and CSIRO), 2008, Drought Exceptional Circumstances: An Assessment of the Impact of Climate Change on the Nature and Frequency of Exceptional Climate Events, Canberra.

Clabby, C 2010, 'Does peak phosphorus loom?', *American Scientist*, July-August 2010, vol. 98 no. 4, p. 291.

Council of Australian Governments (COAG) 2013, COAG Communique, 13 December, available at http://www.coag.gov.au/node/516

Council Rural R&D Corporations (CRRDC) (2009) *Impact of Investment in Research and Development by the Rural Research and Development Corporations*, available from www.ruralrdc.com.au/WMS/Upload/Resources/CRRDCC%20evaluation%20report%202009%20final%20.pdf

Department of Agriculture, Fisheries and Forestry (DAFF) 2012, Australia's Agriculture, Fisheries and Forestry at a Glance 2012, Canberra, May.

DAFF 2013a, *National Food Plan, Our Food Future*, Department of Agriculture, Fisheries and Forestry Canberra.

DAFF 2013b, *Australian Food Statistics 2011–12*, Department of Agriculture, Fisheries and Forestry, Canberra.

Dahl, A, Leith, R & Gray, E 2013, 'Productivity growth in the broadacre and dairy industries', *Agricultural Commodities March 2013*, p. 200–220, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

Department of Foreign Affairs and Trade (DFAT) 2013, *Australia's Trade Agreements*, Department of Foreign Affairs and Trade, Canberra, available at dfat.gov.au/trade/.

Economist Intelligence Unit 2013, *Global Food Security Index*, available at foodsecurityindex.eiu.com/.

FAO, IFAD & WFP 2013, "The State of Food Insecurity in the World 2013". *The Multiple Dimensions of Food Security*. Food and Agriculture Organization of the United Nations (FAO), International Fund for Agricultural Development (IFAD) and the World Food Program (WFP), Rome.

Gibbs, C, Harris-Adams, K & Davidson, A 2013, *Review of Selected Regulatory Burdens on Agriculture and Forestry Businesses*, Australian Bureau of Agricultural and Resource Economics and Sciences report to client prepared for the Department of Agriculture, Canberra, November.

Global AgInvesting 2012, Farmland: An Untapped Asset Class?, December, available at www.globalaginvesting.com/downloads/files/Farmland-an-Untapped-Asset-Class.pdf

Holmes Sackett 2007, *The cost of Bureaucratic Red Tape in Agriculture,* Holmes Sackett Pty Ltd report to the National Farmers' Federation, Wagga Wagga NSW July, available at www.nff.org.au/get/2982.pdf.

IBISWorld Pty Ltd 2013, "Tough conditions: Weak export demand and an appreciating dollar affect the industry" *Meat Processing in Australia Industry Report C1111*, May.

Kingwell, R 2013, 'Issues and Options for Farm Financing in Australia', Farm Policy Journal, vol. 10 no. 3, Spring Quarter, Australian Farm Institute, Surrey Hills.

Lomborg, B 2013, Finding the smartest solutions for climate and the smartest solutions for the world (like malnutrition and malaria), National Press Club Address, Canberra, 3 December 2013.

Martin, P, Phillips, P & Shafron W 2013, 'Farm performance: broadacre and dairy farms, 2010-11 to 2012-13', *Agricultural Commodities March Quarter 2013*, p. 154-198, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, March.

McClintock, A, and Griffith, G 2010, 'Benefit—cost meta-analysis of investment in the International Agricultural Research Centres', *ACIAR Impact Assessment Series Report No. 68*, Australian Centre for International Agricultural Research: Canberra.

Mewett, J, Paplinska, J, Kelley, G, Lesslie, R, Pritchard, P & Atyeo, C 2013, *Towards National Reporting on Agricultural Land Use Change in Australia*, ABARES technical report 13.06, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, October, available at daff.gov.au/abares/publications-remote-content/publication-series/technical-reports.

Moir, B 2011, Foreign Investment and Australian Agriculture, Rural Industries Research and Development Corporation, Canberra, November, available at rirdc.infoservices.com.au/items/11-173.

Mortimer, G 2013, 'FactCheck: is our grocery market one of the most concentrated in the world?', *The Conversation*, 12 August 2013.

National Farmers' Federation (NFF) 2009, Exposure Draft – Non Commercial Losses, NFF Submission, Canberra, July.

NFF 2013a, *Blueprint for Australian Agriculture2013–2020*, National Farmers' Federation, Canberra, February.

NFF 2013b, NFF Issues paper – Red Tape in Australian Agriculture, National Farmers' Federation, Canberra, September.

Nguyen, N, Hogan, L, Lawson, K, Gooday, P, Green, R, Harris-Adams, K & Mallawaarachchi, T 2013, *Infrastructure and Australia's Food Industry: Preliminary Economic Assessment*, research report 13.13, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, November.

OECD 2012, *OECD Factbook 2013: Economic, Environmental and Social Statistic*, OECD Publishing. Available at www.oecd-ilibrary.org/economics/oecd-factbook-2013/agricultural-producer-supportestimate-by-country_factbook-2013-table220-en

OECD 2013, Agricultural policy Monitoring and evaluation 2013: OECD countries and emerging economies, OECD publishing, available at www.oecd-ilibrary.org/agriculture-and-food/agricultural-policy-monitoring-and-evaluation-2013 agr pol-2013-en (pdf 6.04 mb)

Parliament of Australia 2007, *Rural Skills Training & Research: Submissions,* House of Representatives Standing Committee on Agriculture, Fisheries and Forestry, Canberra.

Parliament of Australia 2013, *Report on Australia's Oil Refinery Industry*, House of Representatives Standing Committee on Economics, Canberra.

PMSEIC 2010, 'Australia and food security in a changing world: Can we feed ourselves and help feed the world in the future?', report of the Prime Minister's Science, Engineering and Innovation Council Working Group, Canberra, October, available at content/uploads/FoodSecurity_web.pdf (pdf 3.75mb).

Productivity Commission (PC) 2005, *Trends in Australian Agriculture*, Research Paper, Productivity Commission, Canberra.

PC 2011, *Rural Research and Development Corporations*, Inquiry Report no. 52, Productivity Commission, Canberra, February.

PC 2013a, *Trade & Assistance Review 2011-12*, Annual Report Series, Productivity Commission, Canberra, June.

PC 2013b, *Mineral and Energy Resource Exploration*, Draft Inquiry Report, Productivity Commission Canberra, May.

PC 2013c, *Public Infrastructure*, Productivity Commission, Canberra, November, available at www.pc.gov.au/projects/inquiry/infrastructure.

Reserve Bank of Australia 2013, *Estimated Rural Debt to Specified Lenders*, Bulletin Statistical, Table D9.

RRDC 2011, *National Strategic Rural Research and Development Investment Plan*, Rural Research and Development Council report to Department of Agriculture, Fisheries and Forestry, Canberra. available at development-investment-plan.

Simpson, R, Richardson, A & McLaughlin, M 2010, *Review of Phosphorus Availability and Utilisation in Pastures for Increased Pasture Productivity*. Final Report to Meat & Livestock Australia Limited North Sydney: CSIRO Sustainable Agriculture Flagship for Meat and Livestock Australia.

Sheng, Y, Nossal, K & Ball, E 2013, Comparing Agricultural Total Factor Productivity Between Australia, Canada and the United States, contributed paper to the 57th AARES Annual Conference, 5-8 February, Sydney.

