**Agricultural Competitiveness  
Green Paper**

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# Submission Process

Stakeholders are invited to comment on the broad directions and specific policy ideas raised in the Green Paper and provide further policy suggestions. Stakeholders’ comments will assist the Government in finalising its policy directions for improving the profitability and competitiveness of the agriculture sector, which will be detailed in the Government’s White Paper.

Individuals and organisations are encouraged to comment on the Green Paper by making submissions, which are due before **5pm** on **12 December 2014.**

**Submissions can be made:**

***Online:***

[www.agriculturalcompetitiveness.dpmc.gov.au](http://www.agriculturalcompetitiveness.dpmc.gov.au)

***By mail:***

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

**Publication of submissions:**

Submissions will be available for public review at www.agriculturalcompetitiveness.dpmc.gov.au unless you request otherwise.Please indicate clearly on the front of your submission if 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.

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# Overview

This Green Paper represents the summation of the views of the Australian public on the vital issue of the health and future of Australian agriculture. As part of this process, the Government has received almost 700 submissions in what has been a major input into the direction of this key policy agenda. As agriculture plays an important role in the economic and social fabric of this country—and indeed has been recognised by this Government as one of the five pillars of the Australian economy—there is an understandable expectation that the discussion of these policy alternatives will be wide and dynamic. While this has been the case, it has not been possible to consider all policies and issues raised through this process. The more deliberative White Paper, which is to follow, will build on the policy of the past and the ideas and input generated through this Green Paper.

A broad range of ideas were aired during the consultation process. This paper seeks to present many of these ideas and options from stakeholders. Not all of these will be able to be pursued by the Government as some of them conflict with broader Government policy directions, while others would not be affordable in the current budget environment. Many of the policy ideas in this paper also overlap with the work of other reviews, such as the Harper Competition Review and Taxation White Paper. In instances where such overlap occurs, particularly where it relates to areas broader than the agricultural sector, any findings or recommendations arising from the Agriculture White Paper process may be referred to the other appropriate review processes. It will be important, also, that Australia’s policies remain consistent with our international obligations, as we expect from other countries.

As such, this Green Paper is presented as a discussion of possible options proposed by stakeholders for improving the competitiveness of the sector. Not all options discussed in the Green Paper will be taken forward in the White Paper. We are looking for your views on those ideas that will make the most difference.

The Australian Government’s agricultural policy is driven by one key objective: to achieve a better return at the farm gate to ensure a sustainable and competitive Australian agriculture sector. Ultimately, if this objective is attained then investment in Australian agriculture will follow, more export income will be earned, regional communities will be stronger, better jobs will be created and the health of our economy and nation will be strengthened.

It is farmers who need to make business decisions that will make them profitable and competitive. The Government’s role is to set the right policy environment to support this outcome for farmers and across industries, not to make business decisions for farmers who are far better placed to do so.

More broadly, the Australian Government is focused on an agricultural policy that will achieve a number of principles as outlined in Figure 1.

Figure 1 Australian Government agriculture policy principles

A pictorial shows the nine Australian Government agriculture policy principles:
• increases returns at the farm gate—by reducing costs and unnecessary barriers to productivity and profitability
• keeps families as the cornerstone of farming—by establishing career paths based on financial stability, training and succession options
• builds the infrastructure of the 21st century—to improve transport and communications linkages to domestic and international markets
• creates well-paying jobs in agriculture, including in the downstream sectors of food manufacturing, food retailing and hotels and restaurants
• reduces unnecessary regulation at all levels of government—to give greater ownership and rights to farmers
• promotes access to key export markets
• focuses on Australia’s competitive advantages so we are prepared to realise the food demand of the growing middle class in our region
• supports strong and vibrant regional communities 
• maintains access for all Australians to high-quality and affordable fresh food.


The proportion of the value of the final product that farmers have received has fallen over time (Figure 2). This partly reflects changes in the food production system and consumer preferences. Farmers have compensated by getting bigger and becoming more efficient, steadily driving down costs. Encouraging and impressive as these productivity gains have been, they are unlikely to be sustained at the same rates seen in recent decades. More importantly, a strong agriculture sector will not survive without sound and supportive government policy settings and a focus on removing all unnecessary impediments and regulations that stifle innovation, productivity, investment and growth in jobs.

Figure 2 Value is now created largely post–farm gate

**The farmers’ share has declined from 80–90 per cent of price in 1900 to 10 per cent or less today**

Note: Graph represents a general trend, which also applies to agricultural production.

Source: Adapted from Philipson 2011 and Stanley 2014

Unsurprisingly, many areas of policy affect agriculture, including tax, education and training, foreign investment, environmental law and industrial relations among others. The Government is taking a whole-of-government approach to this White Paper process because only a comprehensive approach to all of the policies that impact Australian agriculture can help the sector be prepared for the opportunities and challenges that lie ahead.

It is important that Australia recognises and celebrates the tremendous success it has had so far in its agriculture sector (Box 1). In many respects, we are doing better than other countries and other sectors within Australia (Figure 3). This enviable record, however, can only continue if we achieve the right balance between exploiting our natural resources for agricultural production and protecting them for long-term sustainable use. In some areas, we had exploited our resources too much—perhaps most vividly demonstrated by the over-allocation of water licences in the   
Murray–Darling.

With the greater knowledge our capacity for both robust and environmentally sustainable development is greater than ever before. But to take advantage of this capacity, we need to ensure environmental regulations and processes affecting new development are based on science and not emotion.

Box 1 Bulla Burra Operations Pty Ltd

Collaborative Farming Australia Pty Ltd was established between two neighbouring farmers. The aim was to find a business model that created economies of scale without losing the integrity and heritage of the family farm. The venture then established a joint farming partnership, Bulla Burra Operations Pty Ltd, between the two neighbours. Bulla Burra leases both families’ farms from trust companies owned by the two families.

All machinery previously owned by the two families was sold privately and Bulla Burra bought its own equipment to suit the operation. Both families sit on the board of Bulla Burra, another member of Collaborative Farming Australia being the independent chairman. One farmer is the operations manager of the collaborative farming business and the other is the business manager. The company’s farm manager attends board meetings and reports to the board.

By combining both farms, the business achieved economies of scale advantages and benefited from specialisation in operations and business management. This gave the business its commercial strength for expansion.

Bulla Burra has leased a further 2000 hectares and operate another 2000 hectares under a   
share-farming arrangement. The extra 4000 hectares allows the business to operate two sets of machinery and hire an additional full-time employee. Machinery use is optimised across the 8000 hectares under management, with efficiencies gained through rostering to ensure around-the-clock use of machinery in peak times.

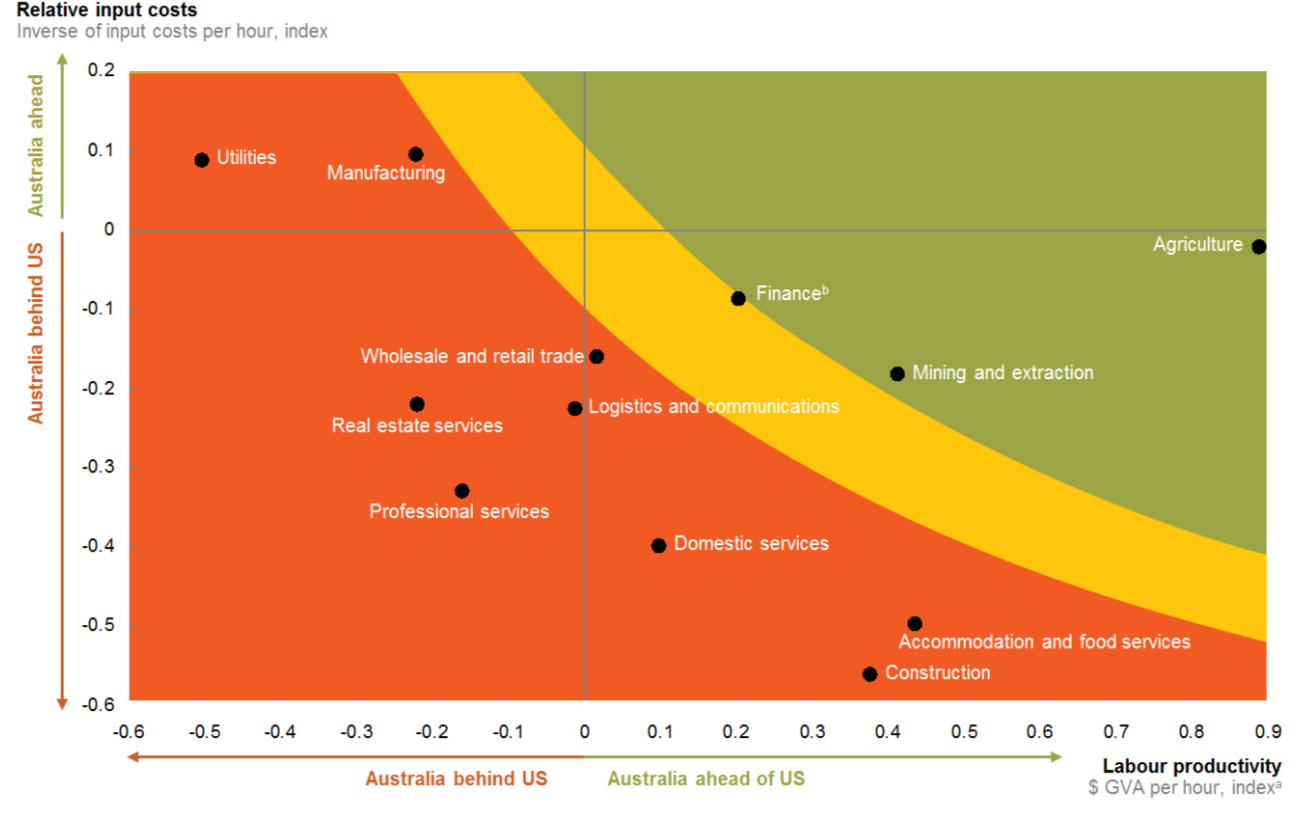
Source: Kingwell 2013

Family farmers represent some of Australia’s best examples of outstanding environmental stewardship. Through successive generations of ownership, many family farms have acquired a deep understanding of local ecosystems and weather patterns with their adaptive farming practices supporting the long-term sustainability of their land resources. With a focus on passing on the farm to the next generation, family farmers are also conscious of maintaining the productive capacity of the soil and water resources on the farm, and the wider environmental landscape.

There is, with the removal of many people’s connection to farming—via a direct experience or the association of family members on the land—a risk of a growing ignorance of how the produce that we put in our fridges or wear on our backs is actually produced. This can lead to emotive campaigns to impose further limits on farm production, creating cost imposts and, in some instances, production guidelines that lead to impossible business hurdles. Education in agriculture is imperative to not only provide a pool of appropriately educated candidates for the agricultural jobs of the future but to provide the general public with information about the fundamental realities of agricultural production.

The question of the appropriate policy settings for a healthy agriculture sector extends beyond the economics of yields, productivity and prices; it also encompasses the issue of the ownership of the nation by the people in the most seminal and tangible form. Farming is a statement of who we are. Families on the farm are both the overwhelming driver of the economics of the farm as well as the owner of the asset. The concept of a family farm being small and inefficient is a misrepresentation of the reality that is today’s business-oriented enterprises focused on market needs. Policy settings

Figure 3 Australian productivity and cost compared to United States, 2012



Notes: **a**.Both axes are indices where a score of 0 means Australia is equal to United States. Labour productivity is a partial productivity measure and less robust than total factor productivity, which accounts for capital and other inputs, as well as labour. The choice of productivity metric was driven by data availability. For further detail, see McKinsey Australia 2014. **b** Traditional productivity comparisons in the finance sector are difficult due to complexities measuring sector GVA.

Source: McKinsey Australia 2014

need to enable business success to be mindful of increasing returns to those who contribute most of the work and carry so much of the risk. Family farms are a cornerstone of Australian agriculture and rural communities and policy must reflect this fact, and the aspirations of those Australians who would seek to participate. Family farms are the best stewards of the land because they’ve been on it for generations and care about maintaining it for future generations.

To be on the land is similar to owning your own house for those who live in the cities. It is a core aspiration that should be reflected in policy settings. The first step on the way to fulfilling that aspiration is that there exists a reasonable path to purchase. Of course, farmers need a capacity to finance the repayment and operation of the farm from returns if they are to stay on the land. Since the mid 2000s interest costs have been rising as a proportion of farm returns (gross value of production). This is in part the result of rising farm debt levels in the 2000s, but more recently is also due to interest rates for small businesses not falling by as much as the underlying cash rate—due to higher borrowing costs for banks since the Global Financial Crisis (Deans & Stewart 2012) (Figure 4). Finally, and crucially, the value of the purchase should not be allowed to be eroded by the actions of government or other third parties without due compensation.

Overseas markets have played an important role in the development of Australian agriculture. From the 1800s on, Australian agriculture developed largely to supply international markets, with a steadily expanding range of products. Along with supplying the growing domestic food market, agriculture continues to be substantially export-oriented.

Figure 4 Small business weighted average borrowing rate less the cash rate

Source: RBA 2014a, RBA 2014b

Figure 5 shows that, despite the continuing high proportion of production exported for wheat, beef, sheep meat and sugar, there has been some plateauing in the level for wheat and sugar. The rising proportion of beef and veal exported partly reflects declining per capita consumption levels domestically since the 1970s. The growth in the export share for sheep meat since the 1990s, despite the halving in national sheep numbers over the period, reflects the switch from wool to sheep meat production by many farmers.

Figure 5 Australian agricultural production and share exported, 1900–2000 (volume)

Note: Wool exported exceeded production in certain years due to changes to stocks on farms and through the supply chain.

Source: ABARES pers. comm 2014; ABS 2014a; ABS 2000; ABS 2014b

At present we feed approximately 60 million people globally, or more than double our population (PMSEIC 2010; Keogh 2014). Historically, Australia has maintained this export competitiveness despite being far from most of its traditional markets. Over recent decades, Asian markets have provided closer and fast-growing destinations for our produce, and these markets are likely to strengthen even more in the near future. The Organisation for Economic Co-operation and Development (OECD) predicts that Asia could account for 66 per cent of the world’s middle class by 2030, up from around 30 per cent today (Kharas 2010). This represents an unprecedented opportunity for Australian farmers.

But it must be stressed that the growth of Asian economies represents an opportunity, not a foregone conclusion. India is a net exporter of food and Australia could not, by itself, feed even half of its nearest neighbour, Indonesia (PMSEIC 2010; World Bank 2014; WTO 2012a). Australia only produces around 1 per cent of the value of agricultural production globally—with production of even our largest industries being less than 4 per cent of global production (other than wool) (Figures 6 and 7). China has four times the number of cattle Australia has (ABARES 2013a). Brazil and Argentina have massive further potential in most of the agricultural products we specialise in. The agriculture sectors in all of these economies have much catching up to do, whereas Australia is at or near the agricultural productivity frontier on a global scale. It is harder to stay in the lead of the race than come from behind, and that is why the Australian Government is focused on delivering tangible improvements from this White Paper process.

Figure 6 Share of the value of global agricultural production, Australia and the top producers

Source: ABARES 2013a and FAOSTAT 2014

Figure 7 Australian share of the value of global agricultural production, 2011

Source: FAOSTAT 2014

The challenge of maintaining the competitiveness of our export industries (including agriculture) in the global market has been made more difficult because of the high value of the Australian dollar in recent years. The rising Australian dollar in the 2000s was driven by the mining boom, and more recently by the relative strength of the Australian economy as compared with those developed economies that suffered most during the Global Financial Crisis. In the past, the Australian economy was seen as closely linked to the fortunes of agriculture. The exchange rate often, although not always, moved with agricultural commodity prices (Figure 8)—and this helped to offset the impact on farmers’ incomes of falls in commodity prices. The relationship has changed in the past decade, with an appreciating exchange rate but relatively stable farmers’ terms of trade (the difference between prices received for agricultural outputs relative to the prices paid for inputs). This change increases the risk for farmers from adverse movements in world prices and means that hedging against exchange rate movements will become increasingly important for the sector.

While artificially lowering the exchange rate might seem desirable, monetary policy by the Reserve Bank is based around managing the inflation rate within the bounds of the 2 to 3 per cent range (RBA 2014c). Attempting to lower the value of the Australian dollar would risk losing control of inflation, which would lead to higher input costs, wages and interest payments for businesses over the medium term. When Australia had a fixed exchange rate, holding the value of the dollar below the market value proved unsustainable over time.

Figure 8 Australian exchange rate and farmers’ terms of trade

Source: RBA 2014d, ABARES 2014a

A key element in meeting the challenge of maintaining, and ideally increasing, Australian agricultural production is the availability and management of our freshwater infrastructure. Figure 9 shows the decline in our per capita freshwater availability from large dams since the 1980s, and the projected further decline in coming decades without a change of approach to building more water infrastructure. This would help to supply rural and urban needs as well as complement the development of non-dam infrastructure, such as groundwater sources, desalination plants and water recycling systems.

Finally we live in the right place at the right time but, we have no automatic right to benefit from this concurrence of events more than any other diligent nation. There is no free lunch but a Green Paper that is the precursor to a definitive policy plan for agriculture is an essential policy step.

Figure 9 Australia’s water infrastructure – declining availability of fresh water per capita from large dams

Notes: Data based on the capacity of large dams. 2030 and 2061 projections based on ABS Series C projection of a population of approximately 29 000 000 and 36 800 000 respectively. Projected megalitres per person assumes no addition to the current dam capacity.

Source: Australian National Committee on Large Dam Inc. data and ABS 2013a; ABS population clock at 29 July 2013; and ABS 2013b

With that in mind, the policy ideas outlined in this Green Paper have been organised under the main categories outlined in Figure 10. These ideas have largely come from the submissions made to us.

The Green Paper identifies the opportunities to make our agriculture sector stronger, as well as the challenges it faces. The section below provides a summary of the key issues, what the Government has done or is doing to address these, and a summary of the ideas that have been presented by stakeholders (detail is provided in the main body of the report). Your feedback on the policy ideas in the Green Paper will be used to refine and prioritise these policy ideas to inform the development of the Agricultural Competitiveness White Paper. Not all of the policy ideas will be taken forward in the White Paper—that is why your feedback is so important. Details of how to make submissions are on page iii.

The White Paper will deliver 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.

The Government has prioritised agriculture as one of the five pillars of the economy for good reason. Agriculture helped build Australia—it continues to put food on our tables and it underpins our national economy and rural communities. A stronger and more competitive agriculture sector will support job creation, growth and investment.

The White Paper will be the Government’s plan to support the future of agriculture. It must leave a legacy that attracts the next generation of farmers.

Figure 10 Categories for policy ideas

Pictorial shows the categories for policy ideas in the Green Paper, as well as a short summary of each:
• Infrastructure—building efficient and cost-effective transport and communications infrastructure that will support the movement of farm inputs and outputs, reduce costs and open up new markets; and facilitating new or intensified agricultural production.
• Working with the States and Territories—to deliver improved outcomes for Australian agriculture, including by tackling deregulation through the Council of Australian Governments (COAG) agenda.
• Competition and regulation—giving farmers the best chance to earn a fair return on investment by ensuring fairness and transparency in the supply chain; and making sure that unnecessary red and green tape is removed and that necessary regulation creates the least possible costs for business and individuals.
• Finance, business structures and taxation—improving access to finance; providing access to reliable independent business information and advice; and ensuring that the tax system appropriately encourages investment.
• Foreign investment—encouraging responsible foreign investment to build new production capacity; and ensuring the foreign investment regulatory framework takes into account the needs of the agriculture sector. 
• Education, skills and training, and labour—ensuring agriculture is well covered in our education system; making education more accessible for children in remote areas; increasing skills of new and existing workers; enabling access to a flexible workforce; and attracting new entrants into agriculture.
• Drought—building resilience and risk management capability; and providing appropriate support to farm families and otherwise viable farm businesses suffering severe droughts.
• Water and natural resource management—identifying and building the water infrastructure needed for Australia’s future water supply needs; ensuring sustainable and productive use of natural resources for economic growth and development; improving our knowledge of sustainable resources use; and managing weeds and pests.
• Research, development and extension (RD&E)—boosting productivity through strategic and coordinated research and development; and making sure that farmers can apply the latest innovations through ensuring effective extension of new knowledge and technology.
• Biosecurity—protecting our favourable animal and plant health status to maintain productivity and access to export markets.
• Accessing international markets—giving our exporters the best chance of capturing high-value markets through addressing technical barriers to trade and ensuring trade negotiations deliver real commercial benefits for the sector; and, by doing so, contributing to global food security.



## Summary of issues, what the Government is doing and stakeholder ideas

### Infrastructure

#### The issue

Efficient and cost-effective transport infrastructure is vital to the competitiveness of the agriculture sector. Stakeholder feedback indicates concerns about bottlenecks and problems accessing transport routes where agricultural produce is grown, at intermodal hubs and at final destination ports. Like all modern businesses, farmers must have reliable and fast communications technology to access markets and information essential to their business.

The Government is committed to encouraging and facilitating public and private investment in transport and communications infrastructure across Australia. It has also committed to upgrading and developing strategic infrastructure to support communities and industries.

#### What the Government is already doing

* Investing over **$50 billion in road and rail infrastructure** (administered through the Infrastructure Investment Programme and the Asset Recycling Initiative). Major projects include: $6.7 billion to upgrade the Bruce Highway, $5.6 billion to complete the duplication of the Pacific Highway, $3 billion for the East–West Link in Melbourne, $2.9 billion over 10 years for the Western Sydney Infrastructure Plan, an additional $350 million for the Roads to Recovery Programme, an additional $200 million for the roads Black Spot Programme, $300 million for the Bridges Renewal Programme, $248 million for the Heavy Vehicle Safety and Productivity Programme, $300 million to start the Inland Rail from Brisbane to Melbourne.
* Investing $9 million under the **Regional Aviation Access Programme** for infrastructure upgrades to remote airstrips across Australia.
* Providing the $1 billion **National Stronger Regions Fund** to boost regional economic development though the expansion, upgrade and construction of new local infrastructure.
* Implementing the **Port Terminal Access (Bulk Wheat) Code of Conduct**.
* Improving mobile coverage by investing $100 million through the telecommunications **Mobile Black Spot Programme** and increasing competition by rolling out new mobile base stations.
* Rolling out the **National Broadband Network (NBN)**, Australia’s first national wholesale-only, open-access communications network that is being built to bring high-speed broadband and telephone services within the reach of all Australian premises. The NBN is a $41 billion project for which the Australian Government will contribute $29.5 billion in funding.
* Spending around $2 billion on designing, building and launching the NBN **long-term satellite services** (LTSS) and for other LTSS equipment and services. The LTSS is designed to improve the experience of broadband users in regional and remote Australia.
* Tasking Infrastructure Australia to undertake an **audit of Nationally Significant Infrastructure** and to then develop a 15-year infrastructure plan.

#### What stakeholders proposed the Government should consider

**Policy idea 1—Building new transport infrastructure:** The Government is committed to working towards filling Australia’s infrastructure gaps to meet the infrastructure needs of the 21st century. Some specific stakeholder suggestions included:

1. improving links between public and private freight lines and port infrastructure;
2. investigating all-weather access rural roads that may increase productivity of interstate freight movement, including sealing a third east–west continental road through central Australia;
3. identifying air freight hubs in regional Australia as potential opportunities to significantly reduce transport times to markets; and
4. examining infrastructure for greenfield developments that may support growth in new areas and open up new opportunities for Australian farmers.

**Policy idea 2—Improving existing infrastructure and transport regulation**: The Government is committed to upgrading existing infrastructure across Australia and reducing transport costs.To address these needs, stakeholders have suggested that mechanisms are required to incorporate information on local infrastructure needs and bottlenecks into infrastructure planning and funding decisions. Options are also sought on areas where transport regulation can be amended or removed to improve the efficiency of the transport system and reduce business costs. For example, the Government is considering reform of coastal shipping regulations to reduce costs faced by producers.

**Policy idea 3—Enhancing communications**: The Government is committed to ensuring that farmers and regional communities have access to reliable and affordable communications systems. Views are sought on areas of focus for future government and commercial investment in communications infrastructure and options to assist farmers and regional communities to use the communications infrastructure currently being deployed.

### Working with the States and Territories

#### The issue

Farmers, like the broader community, want reduced and more flexible regulation, an end to duplication and for it to be easier to interact with all levels of governments. Stakeholders have identified many issues affecting agriculture’s competitiveness that are primarily the responsibility of the States and Territories.

The Australian Government is committed to working with the State and Territory governments—along with individuals, companies and organisations—to improve agricultural competitiveness.

#### What the Government is already doing

* Reducing **red and green tape and duplication** through the Council of Australian Governments (COAG).
* **Working with the States and Territories** on:

- wild dog control;

- a ‘One-Stop Shop’ for environmental approvals;

- improving the performance of regulators;

- delivering Farm Finance concessional loans;

- delivering Drought Concessional Loans and emergency water infrastructure; and

- implementing the Murray–Darling Basin Plan for water reform.

* Preparing a **White Paper on Reform of the Federation**.

#### What stakeholders proposed the Government should consider

**Policy idea 4—State government deregulation:** Deregulation is a priority for COAG, with governments already looking at ways to reduce red tape and duplication and improve the performance of regulators. Stakeholders suggested some ideas for deregulation including:

1. removing excessive native vegetation laws;
2. removing excessive work health and safety requirements; and
3. improving the efficiency of the native title system.

**Policy idea 5—Protecting the resource base:** A strong agriculture sector requires the natural resource base to be maintained for future generations. Stakeholders made a number of suggestions for the States and Territories, including:

1. limiting the adverse impacts of mining on the agriculture sector, including by providing a royalty stream for land holders affected by mining, ensuring that access to freehold land is granted with the agreement of the landowner and ensuring that no long-term damage is done to aquifers so as to change the agricultural capacity of the district as a result of extraction activities;
2. providing opportunities for farmers to convert leasehold land into freehold;
3. ensuring greater consistency in biosecurity regulations between Australian jurisdictions; and
4. quarantining prime agricultural land from mining.

**Policy idea 6—Strengthening farm businesses:** There are a number of State and Territory policy changes that could be made to allow farm businesses to operate more effectively. These include:

1. implementing a nationally consistent and mandatory approach to farm debt mediation;
2. subsidising farm energy audits;
3. streamlining development application processes by assigning a single government official to assist a farm business as they work through the different steps;
4. enforcing animal welfare legislation and strengthening laws to stop trespass on farms; and
5. adopting the Co-operatives National Law to make it easier to run a cooperative across different states.

### Competition and regulation

#### The issue

Farmers need to earn a fair return on their produce. With commodity prices affected by international prices, farmers have limited influence over the price they receive and they are also often at a negotiating disadvantage when compared to processors, wholesalers and retailers. Farmers can have stronger negotiating positions when they have alternative channels to market. Australian farmers are also estimated to spend more than 20 days of their working year consumed with complying with government regulation—red and green tape (Holmes Sackett 2014). Regulation is important for both economic and social reasons, but it must be effective and efficient.

The Government is committed to ensuring competition laws in Australia enable a competitive marketplace—for example, by preventing the misuse of market power and allowing for appropriate collective bargaining by farmers. The Government is also committed to reducing red tape faced by farmers and through the supply chain.

#### What the Government is already doing

* Introducing the ***Competition and Consumer Amendment (Industry Code Penalties) Act 2014***, to provide a framework for penalties under industry codes of conduct, proposed to be applied to the new Franchising Code from 1 January 2015*.*
* Commissioning an independent **‘root and branch’ review** of the *Competition and Consumer Act 2010* (CCA) (the **Competition Policy Review**).
* Providing **additional funding for the Australian Competition and Consumer Commission (ACCC).**
* Transforming the Australian Small Business Commissioner into the **Small Business and Family Enterprise Ombudsman.**
* Extending **unfair contract term protections to small businesses.**
* Through ACCC action, **reviewing aspects of certain supermarket behaviour.**
* Considering whether to prescribe the **Food and Grocery Code** as a regulation under the *Competition and Consumer Act 2010* further to public consultations.
* Boosting the competitiveness of Australia’s economy through the **Industry Innovation and Competitiveness Agenda.**
* Reducing **the regulatory burden** across Australia, including for the rural sector, by $1 billion a year.
* Removing cost imposts on Australian farmers by **abolishing the carbon tax.**
* Improving the **efficiency of agriculture and veterinary chemicals regulation.**

#### What stakeholders proposed the Government should consider

**Policy idea 7—Improving market competition:** The Government aims to facilitate and support a regulatory environment that allows agricultural markets to operate efficiently and transparently to support competition. Many stakeholders argued that there was a lack of transparency and certainty in the price of agricultural products and that this had led to difficulties in planning or investing. Stakeholders also argued that producers had been unfairly dealt with by other players in the supply chain. Stakeholders suggested that the Government:

1. introduce options to increase price transparency throughout the domestic supply chain;
2. introduce new marketing mechanisms that might restore balance of power to the producer; and
3. facilitate greater use of cooperative structures.

**Policy idea 8—Strengthening competition laws:** The Government is committed to ensuring that competition laws in Australia provide a sound basis for ensuring firms act in a competitive manner. Current competition laws generally seek to prevent the misuse of market power and allow for collective bargaining (including by farmers) in certain circumstances, to negotiate better deals. The Government’s Competition Policy Review is examining these issues and the Review Panel released its draft report on 22 September 2014.

Stakeholders consulted as part of the Agricultural Competitiveness White Paper suggested improvements to competition laws, such as making it easier to prove that market participants had misused market power (strengthening s46). They also raised other issues including divestiture, exclusive dealing (s47), powers to obtain information, documents and evidence (s155), the unconscionable conduct provisions of the Competition and Consumer Act (CCA), and whether there are barriers to the emergence of major Australian agribusiness companies (‘national champions’) of global scale for exporting to international markets. Specific changes suggested include:

1. revisions to the CCA to make it easier to prove breaches of market power provisions; introduce a flexible anti-competitive ‘effects test’ in the misuse of power provisions; and increase penalties for breach of the CCA including a general divestiture power enabling courts to break up a business that repeatedly breaches the CCA;
2. reviewing competition laws to consider whether there are any barriers to greater consolidation among agribusiness firms;
3. increasing the resources of the ACCC, including specialist agribusiness knowledge, and requiring the ACCC to publish more information on investigations and their outcomes; and
4. creation of a supermarket ombudsman with penalty powers and a mandatory code of conduct for supermarkets (across all commodities) backed by direct financial penalties.

The Government will consider views on these issues in the context of responding to the Competition Policy Review.

**Policy idea 9—Improved regulation:** The Government is committed to making sure that unnecessary red and green tape is removed, and that necessary regulation is effective but imposes the least possible costs for business and individuals. Stakeholder suggestions included:

1. changes to the regulation of AgVet chemicals, such as through relying on the advice of trusted foreign regulators and allowing the Minister to issue temporary permits for chemicals; and
2. improvements to Country of Origin Labelling to ensure that consumers clearly understand the origin of their food.

### Finance, business structures and taxation

#### The issue

Many stakeholders said that raising profitability and competitiveness would require farmers to become more business focused and market oriented. Farmers have traditionally relied on bank debt and retained profits to finance growth, but relying too much on bank debt may hold the industry back in the future. Some farmers—for example, in the northern beef industry—are facing unsustainable debt levels. There is limited investment in the sector from the $1.8 trillion superannuation industry, but significant interest from foreign investors.

The Government is committed to making sure that farmers can access finance as cheaply as possible, including by promoting competition in the banking sector and working with banks to ensure there are clear and transparent processes for helping farmers facing financial hardship. New ways of financing offer potential to attract additional investors, like superannuation funds, while retaining the core role of the family-controlled farm. The Government is also committed to providing an equitable taxation regime for farmers that supports productivity, investment and competitiveness.

#### What the Government is already doing

* Providing information and assistance to farmers in financial difficulty through the **Rural Financial Counselling Service**.
* Providing concessional loans through the **Farm Finance Concessional Loans Scheme**.
* Considering options for a nationally consistent approach to **farm debt mediation**.
* Conducting a **Financial System Inquiry** to set out a blueprint for the future of our financial system.
* Committing to lowering the **company tax rate** from 30 per cent to 28.5 per cent from 1 July 2015.
* Completing a **White Paper on the Reform of Australia’s Tax System** by the end of 2015.
* Providing primary producers with access to special provisions including: **income tax averaging**; **farm management deposits**; **accelerated depreciation** on water facilities and horticultural plantings; the **fuel tax credits scheme**; **deductions** for landcare operations; and **special rules** relating to non-commercial losses. Farmers can also access a range of **general and small business tax concessions**.
* Establishing, as part of its Industry Innovation and Competitiveness Agenda, **five Industry Growth Centres** including one for food and agribusiness from early 2015. It will be an industry-led organisation with a focus on addressing sector-wide impediments to productivity and competitiveness.
* Consulting on a proposed regulatory framework for **crowd-sourced equity funding** forinnovative start-ups and other small enterprises seeking to raise initial or early stage capital.

#### What stakeholders proposed the Government should consider

**Policy idea 10—Improving access to finance**: The Government wants effective finance mechanisms to provide farmers with the capital they need to grow. Stakeholders suggested a number of options for assisting Australian farmers to better meet their financing requirements including:

1. making the existing concessional loans scheme permanent; and
2. creating incentives to encourage greater institutional investment in agriculture. Options could include creating superannuation products that exchange cash for partial equity in farms and the issuing of special Government bonds to finance agricultural infrastructure investments, with taxation concessions for investors.

**Policy idea 11—Improving tax system efficiency and equity:** It is important that Australian farmers are subject to fair taxation arrangements that recognise the unique circumstances of farming. In general, taxation policy changes should be considered in the context of the Government’s Tax White Paper. However, specific policy changes that relate only to the agriculture sector could be considered in the Agricultural Competitiveness White Paper. Suggestions include:

1. revising the non-commercial loss rules to encourage investment, by i) removing the $250,000 maximum income threshold or raising it to $1 million; and ii) increasing access to the primary producer exception to the non-commercial loss rules by raising the income threshold;
2. increasing thresholds and extending eligibility for the Farm Management Deposits Scheme (FMDs)—for example by increasing the deposit limit for FMDs to $1 million—raising the   
   off-farm income threshold, extending access to FMDs to companies and trusts and   
   re-establishing early access provisions in times of drought;
3. reducing the complexity of depreciation for farm plant and equipment by changing the effective life schedules for farm plant and equipment, which would result in a positive effect on productivity;
4. realigning the Zone Tax Offset scheme to be representative of the true cost of isolation from publicly funded amenities such as health and education services and public transport;
5. allowing farmers to trade tax losses to non-farm businesses, such as banks, to assist farm cash-flow in low-income years;
6. allowing farmers to opt back in to the income tax averaging provisions after a period of time to recognise changing circumstances; and
7. reducing and better targeting the rebate of the Wine Equalisation Tax.

**Policy idea 12—Farm business improvement:** Farm businesses need to consider the most appropriate business structure for their circumstances, and access business information and rural services that allow them to operate at their best. To promote more competitive farm businesses with better support for farmers, stakeholders suggested:

1. establishing a programme offering independent business advice and assistance to farmers to improve decision-making and performance;
2. expanding the role of Rural Financial Counselling Service to assist ‘at risk’ businesses, promote learning and extension activities and provide links with mental health support services; and
3. establishing a programme to encourage collaboration between agricultural businesses by providing a networking service to bring interested parties together.

### Foreign investment

#### The issue

Australia’s foreign investment regime is very open and we have traditionally relied on foreign investment to meet shortfalls in domestic savings. Foreign investment has also been important in the development of some industries—for example, beef and cotton. Foreign investment can continue to play an important role in expanding production in the sector and potentially help to boost returns at the farm gate.

Feelings on this issue are strong and views are mixed. Three in five Australians are against foreign ownership of agricultural land (Oliver 2014). Some stakeholders felt that further restrictions on foreign investment were needed while others argued we needed to attract more foreign investment to improve competitiveness.

The Government recognises these concerns and is committed to increasing the scrutiny of foreign ownership in the agriculture sector while attracting investment that would be beneficial to the development of the sector.

#### What the Government is already doing

* Establishing a **register of foreign ownership of agricultural land** to improve transparency.
* Improving **Foreign Investment Review Board** (FIRB) scrutiny of investment proposals in the agriculture sector, including:

- improving the FIRB’s expertise in, and focus on, agriculture by appointing an agriculture industry representative to the FIRB board; and

- consistent with its 2013 election policy, committing to lower the thresholds for FIRB scrutiny of proposed foreign private sector purchases of farm land and agribusinesses (the threshold for all state-owned enterprises will remain at zero).

* **Attracting foreign investment**, via Austrade, including most recently by:

- working with States and Territories to nominate agribusiness and food as one of five national investment priorities; and

- appointing a senior investment specialist for agribusiness and food to help facilitate proposed investments that contribute to industry growth.

#### What stakeholders proposed the Government should consider

**Policy idea 13—Improving the transparency of foreign investment**: Expanding the coverage of the register of foreign ownership of agricultural land to water and agribusiness enterprises would improve transparency and allow for a more informed debate about foreign ownership.

### Education, skills and training, and labour

#### The issue

Stakeholders pointed to the need to develop and promote clear career pathways in order to attract highly skilled people to operate the latest technology and drive productivity growth. The agriculture sector needs an appropriately skilled, available and affordable workforce to support future growth and competitiveness. New people will be needed to fill job openings as older workers retire from agriculture—there could be around 100,000 job openings for livestock and crop farmers to 2025 (AWPA 2013).

The Government is committed to an education system that builds the next generation of farmers and that reaches students at all educational levels and provides a clear path for people who want to pursue an agricultural career. The Government is committed to a strong agriculture sector that will create rewarding jobs for Australians. However, domestic labour has not met all of agriculture’s needs due to domestic labour mobility inertia, remote locations, seasonal and temporary work, and working conditions. The agriculture sector is likely to continue to need foreign labour. The Government will continue to offer visa schemes to help the sector fill labour supply gaps.

#### What the Government is already doing

* Providing $2 million to the **Agriculture in Education**initiative and $22 million over four years to the **Flexible Literacy Learning for Remote Primary Schools** Programme.
* Providing $476 million over four years for the **Industry Skills Fund.**
* Undertaking new **VET sector reform initiatives** central to the Industry Innovation and Competitiveness Agenda.
* Providing the **Assistance for Isolated Children (AIC)** allowance.
* Providing stronger participation incentives for job seekers including the **Relocation Assistance to Take Up a Job** programme.
* Providing the **National Harvest Labour Information Service.**
* Enhancing the **Temporary Work (Skilled) visa (subclass 457) programme,** as set out in the Industry Innovation and Competitiveness Agenda.
* Providing the **Working Holiday Maker visa (417)** and the **Seasonal Worker Program**.

#### What stakeholders proposed the Government should consider

**Policy idea 14—Strengthening agricultural education:** Young people, including those in rural and remote Australia, should have access to a comprehensive education. This should include a clear pathway for agricultural education and training from high school to tertiary level, to training opportunities for lifelong learning for those in the industry. Stakeholders frequently raised the difficulties faced by young farmers in getting a foothold in the industry, due to lack of clarity about career options and growth possibilities and high capital costs. Options include:

1. working with States and Territories to ensure agricultural high schools and colleges have the resources to continue to specialise in agriculture in the future;
2. establishing a young farmers’ mentoring and networking programme to help new entrants, including offering clear advice and information on education pathways for agricultural careers;
3. increasing financial support for regional education by extending the Assistance for Isolated Children (AIC) allowance and providing living away from home allowances for students from remote areas studying tertiary agriculture; and
4. creating national agricultural tertiary centres of excellence in regional areas for education, training, research and extension.

**Policy idea 15—Strengthening labour availability:** While the Government is strongly focused on strengthening the domestic labour market and creating jobs for Australians, visa programmes can be an important means of supplementing domestic labour supply for the agriculture sector. Stakeholders emphasised the importance of labour market flexibility and the ability to access labour when needed, and recommended broadening the scope of existing visa schemes. Options to improve the flexibility and reduce the compliance burden of existing visa programmes include:

1. expanding the Working Holiday Maker (417) visa by increasing the qualifying age, expanding the country coverage and allowing a second application;
2. broadening the skill coverage of the Temporary Work (Skilled) visa (subclass 457);
3. expanding the Seasonal Worker Program to all agricultural industries;
4. streamlining visa application processes to reduce administrative burdens (i.e. shorter application waiting periods, less onerous superannuation requirements and automatic provision of tax file numbers); and
5. providing clearer pathways to residency for visa holders in farm management.

### Drought

#### The issue

Drought is a recurring feature of Australian farming. Individual farmers are best placed to determine how to manage their particular circumstances and prepare for drought in a way that suits their business. However, there are community expectations of a role for government in providing appropriate support. The Government is seeking stakeholder views on the most appropriate programme mix (on farm, household, business, social or other support) to assist farmers to prepare for, manage through and recover from drought.

The Government is committed to providing appropriate support for farmers facing hardship due to severe drought, and remains committed to the Intergovernmental Agreement on National Drought Program Reform between the Australian Government and State and Territory governments.

#### What the Government is already doing

* Implementing the **Farm Household Allowance**, a programme which provides household support to farm families suffering financial hardship, including loss of household income arising from drought.
* Providing $280 million for **Drought Concessional Loans**.
* Allocating $22 million to existing State government **emergency water infrastructure** schemes, including $12 million in 2014–15.
* Providing $10 million in assistance for **pest management**.
* Supplying $10.7 million to help increase access to **social and mental health services**.
* Providing the **Farm Management Deposits Scheme** and other taxation concessions that assist farmers with managing income variability from drought.
* Providing the **Rural Financial Counselling Service (RFCS)**.
* Implementing **Natural Resource Management initiatives** to improve environmental resilience, including the National Landcare Programme.

#### What stakeholders proposed the Government should consider

A number of measures proposed in other sections could also provide benefits to farmers to prepare for drought or while in drought. These include measures to increase the flexibility of farm management deposits and a permanent concessional loan scheme. Stakeholders also suggested several other policy ideas:

**Policy idea 16—Increasing drought preparedness:** While a strong and profitable farm business is the best way to prepare for and manage drought, there were a number of specific options that were suggested to improve preparedness:

1. introducing accelerated depreciation—for example, at 100 per cent in the first year—for new water and fodder infrastructure;
2. encouraging multi-peril crop insurance by providing a grant to reduce the cost of the risk assessment process for commercial insurance products or the States and Territories removing stamp duty on insurance products; and
3. improving climate information through better tools for use by farmers and additional weather stations.

**Policy idea 17—In drought support:** There are community expectations of a role for government in providing appropriate support to farm families and otherwise viable farm businesses suffering severe droughts. Options include:

1. additional mental health support in times of drought; and
2. provision of additional assistance for prolonged and severe drought that is beyond any capacity of farmers to prepare for, such as a one in 75-year drought.

### Water and natural resource management

#### The issue

Farmers manage 52 per cent of Australia’s landmass (ABS 2014c) and account for the majority of our water use (ABS 2013c). The future competitiveness of Australian agriculture is dependent upon the sustainable use of our land, water and soil resources—and a healthy natural resource base is integral to a growing agriculture sector. Improving access to reliable water supplies and better managing existing water resources is essential for the continued growth of the agriculture sector. Controlling the threat of pests and weeds so their impacts can be managed is also an integral part of a healthy resource base.

The Government is committed to working with landholders to ensure Australia’s natural capital supports productive agricultural industries and is available for future generations through sustainable management. The Government is also committed to facilitating development of major water infrastructure projects by leading future planning, continuing to promote water management reform and, in some cases, providing direct investment for construction.

#### What the Government is already doing

* Providing $1 billion over four years for the **National Landcare Programme**.
* Establishing **a Green Army**, at a cost of $525 million over four years, for young Australians aged 17 to 24 to gain experience in pest and weed management and environmental conservation.
* Implementing **a One-Stop Shop for environmental approvals** to reduce duplication between the Australian Government and the States and Territories, while maintaining high environmental standards.
* Identifying new infrastructure projects, through **a Ministerial working group chaired by the Minister for Agriculture**, focusing on planning for Australia’s future water supply.
* **Contributing up to $12 million in 2014–15** **to support State Government water-related infrastructure rebate programmes—**drought-affected farmers in Queensland and New South Wales will benefit by accessing the rebate for water infrastructure expenses for emergency animal welfare.
* **Implementing the Murray–Darling Basin Plan**, including capping Australian Government water purchases at 1500 gigalitres; prioritising water recovery through on- and off-farm infrastructure investments; and increasing market certainty by publishing a Water Recovery Strategy.
* Undertaking **the $10 billion Sustainable Rural Water Use and Infrastructure Programme** aimed at investing in rural water use, management and efficiency.
* Reviewing the ***Water Act 2007***.

#### What stakeholders proposed the Government should consider

**Policy idea 18—Improving water infrastructure and markets:** Developing our water infrastructure and improving the efficiency of water trading markets are integral to the competitiveness of Australia’s irrigation industries. Stakeholders suggested some ideas to improve water infrastructure, markets and administration. These included:

1. investment in new dam and infrastructure projects and opportunities to improve water-use efficiency or increase the amount of water available to agriculture through infrastructure projects;
2. providing a 50 per cent per year deduction over three years for investment in on-farm water reticulation infrastructure; and
3. improving the functioning and flexibility of water trading markets, such as through   
   counter-cyclical temporary trade of environmental water by the Commonwealth Environmental Water Holder and regulating trading of water by speculators.

**Policy idea 19—Natural resource management initiatives:** Environmental legislation provides important protections for our natural assets. However, regulation needs to appropriately recognise the interests of rural landowners. Ideas included:

1. amending the *Environmental Protection and Biodiversity Conservation* *(EPBC) Act 1999* to remove onerous on-farm conditions and provide right of way to national transport and infrastructure goals; and
2. promoting more targeted approaches to pest and disease management and control.

### Research, development and extension

#### The issue

Australia can only be a major global player in agriculture if we are at the forefront of technology and productivity. Our farmers face stiff competition from countries with lower costs or substantial subsidies. Research and development (R&D) means access to modern technologies, such as plant and animal genetics, which will take agriculture forward. This R&D must be turned into practical,   
on-the-ground solutions. Extension is about getting new technology and information out to those needing it.

The Australian Government recognises that research, development and extension (RD&E) is critical for increased production of food and fibre to meet our national and global needs. The Government is committed to co-funded RD&E. Ultimately, the Australian Government wants our joint investment in RD&E to deliver results on-the-ground that improve farm profitability and productivity.

#### What the Government is already doing

* Investing in the rural **Research Development Corporations (RDCs)** model with matched funding of over $260 million a year provided for rural RD&E via the levy system.
* Launching a **$100 million** rural RD&E programme, Rural R&D for Profit.
* Providing $29 million to the six ongoing **agricultural Cooperative Research Centres** in 2014–15 and continuing to invest in the CSIRO and tertiary research. In September the Government announced a review of the CRC programme and its role in supporting business and research collaboration.
* Providing the **R&D Tax Incentive** to stimulate Australian industry investment in RD&E.
* Developing a strategy to **boost commercial returns from research**, as announced in the Industry Innovation and Competitiveness Agenda.

#### What stakeholders proposed the Government should consider

**Policy idea 20—Strengthening the RD&E system:** Collaboration, cross-sector and transformational research and extension have been identified as current gaps in Australia’s RD&E system. The Government is interested in ways to promote better rural RD&E coordination, reduce duplication, and facilitate the development of private markets in extension services. Options include:

1. updating the rural RD&E priorities to better align with community needs;
2. establishing a new body, or tasking existing research bodies, to coordinate cross-sector research;
3. enhancing access to the R&D Tax Incentive;
4. promoting the development of extension services;
5. decentralising Government agricultural research functions (such as RDCs and agencies of the Department of Agriculture) to regional areas, as appropriate; and
6. regular five-yearly assessments of the RD&E system.

**Policy idea 21—Improving the rural RDCs:** RD&E funding to RDCs should drive tangible outcomes for farmers to improve farm profits by targeting priority areas and minimising research overheads. Options include:

1. administrative changes to the RDC model to increase transparency and reduce costs, including giving RDCs a targeted set of objectives; and
2. increasing the flexibility of levy arrangements.

### Biosecurity

#### The issue

Australia’s reputation for high-quality, safe and clean produce relies on our strong biosecurity system. Protection of our animal and plant health status is fundamental to access overseas markets, for our farms to remain competitive and for our environment. For example, the introduction of foot-and-mouth disease would devastate our livestock industries to the tune of $50 billion over 10 years (Buetre et al. 2013).

The Government is committed to maintaining a science-based biosecurity system that allocates biosecurity resources based on the level of risk. The system must facilitate the safe movement of animals, plants, people and cargo to and from Australia, and conform to our international obligations.

#### What the Government is already doing

* Constructing a new **single-site government-run post entry quarantine facility** in Mickleham, Victoria.
* **Updating the *Quarantine Act 1908*** to enable a more modern and responsive biosecurity system.
* Providing $80,000for the coordination of a **national fruit fly strategy**.
* **Reviewing the Import Risk Analysis process**, which will help to ensure that our risk assessment processes continue to effectively manage the risks of entry of exotic pests and diseases.
* **Establishing a rapid response facility** with an investment of $20 million in the 2014–15 Budget.
* Pressing for **transparent and science-based approaches to biosecurity** in all countries.
* **Cutting red tape for small exporters** by providing $15 million over four years, including rebates to cover 50 per cent of export registration costs for small exporters in 2014–15.

#### What stakeholders proposed the Government should consider

**Policy idea 22—Improving legislation:** The biosecurity legislative framework should be clear, transparent and simple. The proposed Biosecurity Bill 2014 will go some way to achieving this, but the Government could also update other parts of the biosecurity legislative framework—such as the *Export Control Act 1982* and the *Australian Meat and Live-stock Industry Act 1997*.

**Policy idea 23—Improving the biosecurity system:** Australia’s biosecurity system protects our native flora and fauna and underpins our agricultural exports. To ensure that it remains robust and resilient to new and emerging pests and diseases, stakeholders suggested the need for:

1. improved information and intelligence gathering tools, supported by increased investment in high-risk areas and priority pests and diseases;
2. enhanced onshore monitoring, including by developing reporting tools and establishing a public Biosecurity Information System to share information; and
3. collaborating with industry associations to extend traceability systems to better facilitate responses to outbreaks and expand market access.

### Accessing international markets

#### The issue

Australia produces only around 1 per cent of the total global value of agricultural production, but this 1 per cent provides food for around 60 million people. While Australia cannot hope to become the food bowl of Asia, the extraordinary consumption growth in Asia and other emerging markets means that Australia has the opportunity to be a supplier of premium products. To achieve this, we need to produce what consumers in these markets want, but we also need to access their markets. Export markets provide farmer’s with an important alternative to selling to the big two supermarkets.

The Australian Government is committed to growing our export opportunities by negotiating to remove tariffs and quotas on our products and unwarranted technical restrictions in overseas markets, and by ensuring our products are effectively marketed around the world.

#### What the Government is already doing

* **Concluded free trade agreements with the Republic of Korea and Japan.** Agreements are also in force with the Association of Southeast Asian Nations (ASEAN), New Zealand, the United States, Malaysia, Singapore, Thailand and Chile.
* **Pushing for high-quality free trade agreements** **with other key trading partners**, including China, India, Indonesia and with regional partners, via the Trans-Pacific Partnership.
* **Building on the success of the World Trade Organization (WTO) Uruguay Round**, by continuing efforts to liberalise global agriculture trade in the WTO.
* Undertaking **technical market access negotiations.**
* **Maintaining our overseas diplomatic network** of agriculture and trade specialists.
* **Re-opening markets for live exports** in the Middle East—including Bahrain, Iran and Egypt—and in Asia, including Cambodia.
* Providing funding of **$15 million** over four years **to support smaller exporters.**
* **Implementing a** **Trusted Trader Programme** to provide more flexible and efficient border clearance processes that allow trusted exporters and importers to get their goods to market faster.
* Providing **market development assistance via Austrade and the Export Finance and Insurance Corporation**, including boosting the Export Market Development Grants (EMDG) programme by $50 million and Export Finance and Insurance Corporation (EFIC) by $200 million.
* Providing **international development assistance** to promote food security in developing countries.

#### What stakeholders proposed the Government should consider

**Policy idea 24—Strengthening Australia’s overseas market efforts:** Maintaining international competitiveness requires an understanding of, and engagement with, our overseas customers and competitors. Stakeholders have called for improvements to the Government’s capacity to assist farmers to access international markets through:

1. undertaking further trade research;
2. improving exporter services and our understanding of overseas markets;
3. providing more exporter readiness training;
4. accelerating the development of technical market access and commodity strategies to prioritise market access efforts;
5. developing national promotion efforts (such as through a national brand);
6. increasing Australian Government positions and considering options for industry-funded positions, on the ground in foreign missions, to underpin increased focus on agricultural market access; and
7. increasing engagement in bilateral and multilateral forums to promote use of international standards in food regulation.

**Policy idea 25—Improving Australia’s export and import systems:** The Department of Agriculture provides a range of export and import certification systems and databases that enable exporters to comply with different countries’ import requirements, and domestic importers to comply with Australia’s biosecurity requirements. A review of these systems with a view to improving functionality and reducing compliance costs is seen as crucial by many stakeholders to their own cost competitiveness. These systems could also be improved by ensuring the Government’s review of biosecurity cost recovery arrangements explicitly considers export certification systems. Improving these systems with enhanced functionality through new ICT investments would enable existing exporters, as well as potential exporters exploring overseas requirements, to improve understanding of different countries’ import requirements, helping them with their access to international markets.

# Background

## Why the Government is developing a White Paper

The Agricultural Competitiveness White Paper will establish the plan for the future growth and prosperity of the agriculture sector. It will enhance the sector’s contribution to national and regional economic growth, job creation and national prosperity. Importantly, it will assist in bringing about a more profitable future for farmers and their families, who are at the heart of the sector and for whom a better return through the farm gate is imperative.

There are plenty of opportunities for the agriculture sector to grow and prosper—in overseas markets and domestically. Ultimately, it is up to businesses to grasp these opportunities. There are a number of challenges in the way—including our high-cost structure, strong competition from other countries in our domestic and export markets, and the ability to attract workers and investors to the sector. There is an important role for the Government to provide support to help address these challenges and remove impediments to growth. The Government is determined to see the Australian agriculture sector benefit from its agenda for a prosperous economy.

We have listened to your views on the opportunities, issues and changes needed. We received almost 700 written submissions (the majority of these are publicly available at [www.agriculturalcompetitiveness.dpmc.gov.au](http://www.agriculturalcompetitiveness.dpmc.gov.au)). An extensive consultation process was also conducted involving face-to-face meetings in 34 regional and metropolitan centres across Australia. Over 950 people were directly consulted through this process. They included farmers, processors, retailers, traders, researchers, financiers, representative bodies, government agencies, State and Territory Agriculture Ministers, and many others. Hundreds of other people were also made aware of the development of the White Paper through presentations to conferences, meetings and other groups.

The White Paper terms of reference (Appendix A) include improving farm gate returns, farm debt and access to finance, supply chain competitiveness, investment, job creation, infrastructure, skills and training, research and development, regulatory effectiveness, market access and food security. The White Paper will also consider drought support measures as part of the Government’s commitment to review the adequacy of current support. The White Paper will be focused squarely on the agriculture sector—it will not consider industry competitiveness issues associated with the fisheries and forestry sectors and nor will it cover human nutritional health issues.

## Profile of Australia’s agriculture sector

### Brief history of agriculture

Throughout our history, the ability of Australian farmers to adapt and respond flexibly to changing market conditions, both domestically and internationally, has been critical to our success.

While Indigenous Australians practised land management for food production, current forms of intensive cultivation and animal husbandry date back to the arrival of the first European settlers in 1788. Australia’s agricultural development since then has been driven by national development objectives, feeding our people, trade, foreign investment and innovation.

Australian agriculture became export-focused from an early stage, however, it was not without early difficulties. When Lachlan Macquarie became Governor of the colony of New South Wales in 1810 he found a settlement threatened by famine (McLachlan 1967). He prevented starvation by importing grain from India (NSW Migration Heritage Centre 2010), increasing agricultural production and livestock, and opening new tracts of farm land (McLachlan 1967). By 1860 Australia had 1.2 million acres (486,000 ha) under crops and 25 million head of livestock (ABS 2012a).

Australia’s first significant export commodity, wool, is still one of our top five agricultural exports—which in 2013–14 were wheat, beef, wool, cotton and dairy (ABARES 2014b). By the first half of the 20th century, agriculture accounted for around a quarter of the nation’s production and between 70 and 80 per cent of Australia’s exports (PC 2005). The actual volume and value of production has continued to rise but the relative importance of agriculture to the economy has been overshadowed as production and exports of other sectors, such as services, manufacturing and mining, have grown (PC 2005). Farm exports still account for 12 per cent of goods and services exports (ABARES 2013a).

Intervention by government has had varying degrees of success for the agriculture sector. Bounties, subsidies, tariffs, import embargoes, price underwriting, two-tiered pricing for domestic and export markets and stabilisation schemes have been employed at different times to try to provide stable returns to farmers. Examples include the Grow More Wheat campaign in the 1930s, the wool reserve price scheme in the 1970s and 1980s, and the ‘single desk’ statutory marketing arrangements in the wheat industry from 1948 until 2008.

In the 1970s the focus began to shift to productivity growth, flexibility and adjustment. From 1972, protection measures were gradually reduced, increasingly so throughout the 1980s and 1990s (Cockfield & Botterill 2007). National Competition Policy (NCP) reforms in the 1990s reviewed legislation that restricted competition and led to the dismantling of many statutory marketing arrangements (Cockfield & Botterill 2007). The success of NCP arguably gave farmers greater control over business decisions and freedom to better tailor their products to specific markets (Gray et al. 2014; PC 2000) but due to a number of factors has ultimately resulted in lesser proportionate returns.

Science, technology and innovation have been major drivers of productivity gains in Australian agriculture (for example, see Pollard 2000). From wheat varieties pioneered by William Farrer in the late 1800s to the development of the Australian Merino, targeted breeding was crucial to Australia’s early success (Henzell 2007). Other key technical advances included development of the inland rail system in the 1880s, mechanical refrigeration, heat sterilisation, cheap steel wire, forward marketing and the roll-out of irrigation infrastructure (Henzell 2007).

Over the last couple of decades, the agriculture sector has shifted towards more intensive farming, with more large-scale farms, and is now more closely integrated within the global agrifood chain (PC 2005). Advances in mechanisation, the use of robotics, as well as information technology progress have allowed greater production efficiency (Reid 2011). In addition to benefits on-farm, the provision of telecommunication systems has assisted to reduce the isolation of many rural communities. Genetic modification (GM) technology has also been a major advance in agriculture. For example, as noted by the Cotton Research and Development Corporation (submission IP377) and Cotton Australia (submission IP393), insect-resistant cotton in Australia has reduced the amount of insecticide use by up to 95 per cent and improved water use efficiency by 40 per cent.

### Agriculture today

The agriculture sector continues to make a significant contribution to the Australian economy—both nationally and in regional areas. The value of farm production was almost $54 billion in 2013–14. Agriculture contributed around 2 per cent of Australia’s Gross Domestic Product (ABARES 2014b) and 12 per cent of total Australian goods and services exports (ABARES 2013a).

Australia produces a diverse range of food and fibre products, with beef and wheat being the largest by value of agricultural production (Figure 11). Grains, sheep and beef cattle production is the largest employer, with around 107,000 employees in 2013–14, followed by horticulture with 63,000 employees, and dairy with 26,000 employees (ABS 2014d).

Figure 11 Value of Australian farm production, 2013–14

Source: ABARES 2014b

Australian agriculture continues to be export-oriented. In 2013–14 farm exports were worth $41 billion (ABARES 2014b). Australia’s top export region is Asia, accounting for 64 per cent of total agricultural exports in 2013–14. Our top three markets are China, Japan and the United States (Figure 12).

While Australia is a large agricultural commodity and food exporter, it is also an importer. In   
2013–14 Australia imported almost $15 billion of agricultural products, largely processed food (valued between 65 and 70 per cent of total agricultural imports) (ABARES 2014b; ABARES 2013a). While imports can provide consumers with more choice and year-round supply of seasonal produce, they also provide competition in the domestic market and often affect prices received by producers.

Being able to export our products gives Australian farmers the opportunity to sell to a wide range of markets and consumers. But trade is a two-way street. Accepting imports ensures our exports can reach their overseas destinations with less fear of retribution. As a predominantly food exporting nation, it is essential our produce reaches overseas markets in a timely and efficient manner. Given the exposure from both imports and exports—most Australian agricultural prices are strongly influenced by global prices—agricultural producers are competing in a global marketplace (Sheales & McDonald 2003).

Figure 12 Australian agricultural exports 2013–14, by country and by commodity (value shares)

Source: ABARES pers. comm. 2014; ABARES 2014b

The supply chain from the farm to domestic retail is highly complex and varied across the industry. In recent years the post–farm gate supply chain has seen consolidation in the processing sector, greater integration or coordination by supply chain partners and a greater focus on product differentiation to meet specialised markets like high-end restaurants and ready-to-eat meals. In 2012–13 Australian food and beverage processing was worth almost $88 billion (ABS 2014e).

Changes to the value chain over time have seen a significant decline in the margin received at the farm gate versus returns through the supply chain. This is a trend that has occurred in a number of sectors. New developments in food processing, for example, have increased the availability and consumption of highly processed convenience foods—including vacuum packed meals, where the food ingredients represent a relatively small proportion of the overall production cost. However, growth in the market power of the dominant retailers has also been a factor.

Agriculture forms a significant part of many regional economies. In 2011, although only accounting for around 2 per cent of total Australian employment, agriculture accounted for between 10 and 15 per cent of direct employment in outer regional and remote or very remote areas (ABS 2013d). There has been a gradual movement to larger regional centres over small rural towns over the last several decades (BITRE 2014a). Changes to farming such as the use of productivity enhancing technology mean farming requires less labour per unit of output, and transport improvements have allowed labour, inputs and markets to be further away from the site of production (BITRE 2014a).

## Challenges and opportunities

### Our competitive advantages

Australia has many competitive advantages in agriculture. We have an abundance of land spanning tropical, subtropical and temperate farming zones, a stable business environment and access to capital, a world-class rural research and development system, a highly skilled workforce, strong food safety and biosecurity systems, and proximity to growing international markets. Crucially Australia is free of many pests and diseases that undermine agricultural production in other countries around the world. This strong biosecurity environment also provides a marketing opportunity for Australian exporters.

Australia’s geographical location allows counter-seasonal production for northern hemisphere markets and relatively low transportation costs for exporting to Asia. For beef and grains, Australia’s freight advantage to Asia currently provides a premium of 5 per cent (Keogh & Tomlinson 2013). This places Australia in a good position to meet a share of the increased food demand from Asian countries with strong economic growth.

Australia’s strong biosecurity system allows access to export markets that may be closed to some of our competitors, providing a competitive advantage in higher value markets. For example,   
fruit fly–free status in Tasmania allows export of cherries to China without cold treatment, while our foot-and-mouth disease–free status allows export of cattle to Indonesia and beef to Japan and Korea. It also cuts the cost of production by reducing the need to spend time and money on pest control, and underpins our environmental and human health.

The future of the agriculture sector is closely linked to future growth and consumer trends in overseas markets. Internationally, Australian agriculture has a reputation for high quality, strong food safety and traceability systems, and environmentally sustainable production. Global food demand is projected to grow strongly in future decades. ABARES predicts average growth of 1.3 per cent per year in the real value of global food demand from US$2.9 trillion in 2007 to US$5 trillion by 2050—an overall increase of 75 per cent (Linehan et al. 2013). With much of this growth occurring in our region of the world, there is a substantial opportunity for us.

### Our challenges

On average, profitability in Australian agriculture is low, particularly given the riskiness of the business. The average rate of return including capital appreciation across all broadacre farms over the 20 years to 2012–13 was just 4.2 per cent, and 1.1 per cent excluding capital appreciation (Figure 13). Over the same period, dairy averaged a 4.4 per cent rate of return (2.2 per cent excluding capital appreciation). For horticulture, the average return over the five years to 2011–12 was 3.2 per cent (ABARES pers. comm. 2014). In comparison, the yield on 10-year government bonds—the safest investments in the country—was around 6 per cent over the same period (RBA 2014e). However, these average rates of return in the industry mask considerable variation, with the highest performing farms performing considerably better (Appendix C).

There are a range of factors driving the relatively low profitability of farming. These challenges are outlined in the following chapters, along with possible policy ideas suggested by stakeholders to address them. The issues are discussed under the headings of infrastructure; working with the States and Territories; competition and regulation; finance, business structures and taxation; foreign investment; education, skills and training, and labour; drought; water and natural resource management; research, development and extension; biosecurity; and accessing international markets.

Figure 13 Return on capital, all broadacre industries

Notes: **p** ABARES preliminary estimate; **y** ABARES provisional estimates.

Source: ABARES 2014c

## What do we need to do?

We need to improve the profitability of farm businesses. The top 25 per cent of farms earned significantly better rates of return than the average, driven by a range of factors, including differences in scale, the farm’s natural resources, management decisions and practices (ABARES 2013b), and influence in the supply chain.

Higher performing farms produced more than half of the agriculture sector’s output with the top 25 per cent of farms accounting for 54 per cent of the broadacre value of output, for the three years ending 2011–12 (ABARES 2013b). The bottom 25 per cent of farms accounted for 8 per cent of the broadacre value of output (ABARES 2013b). Lifting performance, particularly for the middle 50 per cent of farms, towards the levels achieved by the top 25 per cent will be critical to attracting the capital and labour required to meet the market opportunities ahead while making sure family farms can stay as the cornerstone of Australian agriculture.

Key elements of the profitability challenge are realising better access to markets, adoption of the latest R&D, education, connected infrastructure, finance, less regulation, reduced costs as well as open and transparent competition.

The Green Paper contains the Government’s assessment of the challenges and opportunities for improving Australia’s agricultural competitiveness and profitability and a range of possible policy ideas proposed by stakeholders. While not every idea raised is covered, many of the policy suggestions put forward are discussed—either specifically or in more general terms—in this Green Paper.

The Australian Government is considering a focus on policies that will achieve a number of principles as outlined in Figure 1 in the Overview.

The remainder of this Green Paper sets out critical issues raised by stakeholders and examines potential policy options. A broad range of ideas were aired during the consultation process. This paper seeks to present many of these ideas and options from stakeholders. Not all of these will be able to be pursued by the Government as some of them conflict with broader Government policy directions, while others would not be affordable in the current budget environment. Many of the policy ideas in this paper also overlap with the work of other reviews, such as the Harper Competition Review and Taxation White Paper. In instances where such overlap occurs, particularly where it relates to areas broader than the agricultural sector, any findings or recommendations arising from the Agriculture White Paper process may be referred to the other appropriate review processes. It will be important, also, that Australia’s policies remain consistent with our international obligations, as we expect from other countries.

As such, this Green Paper is presented as a discussion of possible options proposed by stakeholders for improving the competitiveness of the sector. Not all options discussed in the Green Paper will be taken forward in the White Paper. We are looking for your views on those ideas that will make the most difference.

Details of how to make submissions are on page iii. This feedback will be used to inform the development of an Agricultural Competitiveness White Paper. It is about thinking big for the future of Australian agriculture.

# Infrastructure

Reliable, efficient and accessible infrastructure underpins the competitiveness of the agriculture sector and enables opportunity for growth. The Government is committed to upgrading and developing infrastructure across Australia to support communities and industries, while also encouraging and facilitating private sector investment.

Efficient and cost-effective transport infrastructure is essential to moving the inputs needed by agriculture and the outputs through the supply chain, reducing costs and strengthening linkages to markets.

Modern communications technology can allow farmers to implement the latest technologies, raise productivity and be in contact with their markets. Water infrastructure, which is also vital, is covered in Chapter 9 – Water and natural resource management.

The Government is interested in further feedback from stakeholders on infrastructure needs. This includes the best way to plan for locally and regionally significant infrastructure as well as identifying specific infrastructure inefficiencies such as bottlenecks (or ‘first and last mile’ inefficiencies) and potential productivity improvements.

## What stakeholders said:

*‘…further focus is required specifically on rural and regional infrastructure. This includes an effective and timely NBN roll out, rail infrastructure, road infrastructure, ports, and services. Australian agribusiness need a holistic and connected view of infrastructure investment strategies and harmonisation. This view requires an identification of competitive infrastructure pipelines from farm gate to domestic or foreign customers.’* **Ridley Corporation, submission IP312**

‘*Australian agriculture requires commitment to a unified industry-wide, long-term strategy to infrastructure investment which involves unilateral input from government, supply chain operators, and industry participants*.’ **Rabobank, submission IP567**

## Outline of the issue

### Transport

Transport infrastructure is critical to Australia’s competitiveness. The freight network, including road, rail, intermodal facilities and sea and air ports, is a key component of this infrastructure. The network moves Australia’s domestic production and facilitates exports as well as bringing imported inputs for all stages of the value chain.

Over the past four decades, total freight volumes have quadrupled, predominantly due to significant growth in road freight and, more recently, strong growth in mining related rail freight volumes. From 2010 to 2030, the national freight task (including all goods) is estimated to increase by over 80 per cent (Figure 14). This includes an almost doubling of demand for freight moved by road (1.8 times) and rail (1.9 times) (BITRE 2014b).

Figure 14 Domestic freight, by mode, 1972–2040

Notes: freight movement is measured in tonne kilometres—the service of moving a tonne of payload a distance of one kilometre.  
Air freight activity is indistinguishable, in tonne kilometres, because it represents less than 0.1 per cent of total freight task.  
Source: BITRE 2014b

Agriculture is a sizeable component of the national freight task. Grains, sugar, fertilisers and other bulk products account for about 8 per cent of all rail freight, behind coal and iron ore (comprising 80 per cent). By value, the most transport intensive agricultural products are grains, beef cattle and ‘other agriculture’, which primarily covers horticulture (Tulloh & Pearce 2011).

A 2011 study found the cost of transport from farm to destination (including domestic and international locations[[1]](#footnote-1)), for a sample of products including wheat and beef[[2]](#footnote-2), averaged 21 per cent of the indicative farm gate value of the products (Goucher 2011). This emphasises the potential impact that transport cost savings could have on farmer returns.

Stakeholders regularly raised issues of transport costs and efficiency, highlighting issues such as:

* bottlenecks or points of congestion at key locations in the network (and flow-on effects through the network);
* inefficiencies in the ‘first and last mile’ such as lower access levels to freight routes at product origin and issues of congestion at product destination and at intermodal points;
* the maintenance backlog of existing freight networks;
* inefficiencies in differing infrastructure such as in the case of rail where freight may operate on narrow, broad or standard gauges and under different track operators and access regimes;
* a range of factors such as traffic congestion, road works and port bottlenecks, which can increase journey times and result in missing a port or rail slot; and
* deterioration in product quality during transport—for example the CSIRO (submission IP678) said that ‘perishable agricultural products such as mangoes and tomatoes incur losses between harvesting and retail of 40 per cent or more’—including losses from transport, storage and handling.

Stakeholders noted a need for governments and industry to work together to plan infrastructure that caters for existing and growing industry needs—for example, the Australian Trucking Association (submission IP667) considered that a coordinated approach to road planning and provision was crucial. They suggested Infrastructure Australia should focus on the entire road network, the largest part being local roads. Stakeholders also raised the need for private investment to play a greater role in infrastructure funding. There have been a number of recent private infrastructure investment announcements, such as the estimated $75 million investment into the Quattro Grain port at Port Kembla and GrainCorp’s (2014) proposed investment of $200 million into its grain storage network.

When planning or investing in infrastructure, the Government is aware of private investment and often factors this into decision-making. An example of this is the Government’s funding for the pre‑construction and early works for the Inland Rail, which is seeking to optimise private sector investment in the line and is also taking account of private sector investment in supporting infrastructure such as terminals and the mining sector. Governments also have a role in planning and supporting connecting infrastructure that supports network capacity such as additional intermodal terminal capacity like the Moorebank Intermodal Terminal project in south-western Sydney.

In the case of an open rail network that supports multiple users, such as the Hunter Valley Coal Network, the Australian Rail Track Corporation (the Government’s manager for the interstate rail network) operates under a 60-year lease from the New South Wales Government to manage access to the network. The Australian Rail Track Corporation (ARTC) has an investment programme over the next five years to ensure that rail capacity meets or exceeds capacity at port and rail does not become the bottleneck in the coal supply chain. Agriculture can be a beneficiary of these rail investments where capacity is available—fees charged in these instances generally reflect less than the full cost of capital given the primary purpose of the network.

Stakeholders also raised a range of other issues including: the priority given to passenger infrastructure relative to freight infrastructure by governments, the need for investment in infrastructure, the need for a revised regulatory approach, poor access outcomes for freight infrastructure users in some instances, inadequate funding being given to small, but important, infrastructure investments (such as rail branch lines) and excessive safety regulations.

Stakeholders raised concerns about transport regulations. These included:

* access limits and permit requirements for high productivity vehicles on certain roads;
* differences between States and Territories in the application of ‘load ratings limits’, road rating and vehicle specifications that force re-routing or decoupling; and
* constraints on seasonal movement of agricultural equipment (noting that these regulations are often introduced for safety or engineering purposes).

Stakeholders held concerns about the delay in implementing changes to the current Pay As You Go (PAYGO) model for heavy vehicle charging and longer term proposals to introduce mass–distance–location charging. Under PAYGO, a new heavy vehicle charges determination will be implemented from 1 July 2016. If implemented from 1 July 2014, this new determination would have resulted in reductions in charges for most heavy vehicles. The delay in implementing the new determination was a result of concerns by governments about the implications of lower government revenues for the quality of road services (TIC 2014a).

Stakeholders also raised concerns about longer-term proposals to introduce more direct user charging. In particular, stakeholders raised concerns about heavy vehicle operators based in rural and remote areas and servicing the agricultural sector potentially being disadvantaged under a mass-distance-location charging regime. The Heavy Vehicle Charging and Investment reform process, which concluded in June 2014, found that governments need to address a number of supply side issues before reforms to heavy vehicle charging could be implemented. To this end, jurisdictions have commenced work to implement initial heavy vehicle road reform measures. The initial measures recognise the need to improve the transparency of information provided to the heavy vehicle industry on road conditions and service standards, provide the heavy vehicle industry with assurance that road agency planning and funding processes are robust and transparent and, where appropriate, enable industry to be more closely consulted in decision-making processes (TIC 2014b).

The majority of road infrastructure in remote and regional Australia is provided as a community service obligation, to maintain an acceptable level of access by communities and industry to the road transport network. Ensuring the maintenance of adequate levels of heavy vehicle road services in remote and rural areas will be a fundamental objective of any future heavy vehicle reforms.

Improving transport infrastructure is critical to opening up opportunities for new markets and customers, either domestic or export, for agricultural producers.

### Communications

Stakeholders raised the need for effective and affordable telecommunications systems, including consistent and reliable access to satellites, mobile phone network coverage and broadband internet. Stakeholders emphasised the importance of internet (speed and availability) and mobile phone coverage for day-to-day farm management and to enable them to access online information, training and education.

The National Broadband Network (NBN) will assist Australia’s agricultural competitiveness through creating numerous opportunities, including: real-time access to market information; improving interaction with family and friends through video links, reducing the barriers of distance; and facilitating training to agricultural producers through online tertiary and vocational education courses, meaning that family members can study from home, reducing the population flow from rural to urban areas.

The Tasmanian Government (submission IP694) highlights Sense-T as good example of the benefits of advanced communications technology. The Sense-T programme is a major public and private investment to develop economy-wide sensor networks and technologies. Commercial sensor systems use a wireless network within each farm, and the NBN or 3G, to draw real-time data into a ‘cloud’ to be aggregated with historical and spatial data, creating a real-time digital view of the whole state. Information will be available to help businesses, governments and communities better conduct sophisticated modelling and data analysis in real-time. Sense-T will also create a range of prototype web and phone applications (apps) driven by real-time sensor data to help Tasmanian farmers manage their farms, minimise their environmental impact and maximise their access to markets.

The Government is committed to improving access to communications technology for all Australians, including those in regional areas, who often face the greatest difficulties with service.

## Infrastructure: What the Government is already doing

The Government has committed to delivering vital transport infrastructure for the 21st century**,** including investing over $50 billion in road and rail infrastructure (administered through the Infrastructure Investment Programme and the Asset Recycling Initiative) and a commitment that Badgerys Creek will be the site for an airport for western Sydney. Key transport infrastructure commitments are outlined in Table 1 below.

Table 1 Summary of the Government’s major transport infrastructure commitments

| **Type of infrastructure** | **Major Government infrastructure commitments 2013–14 to 2018–19** |
| --- | --- |
| Road | * $6.7 billion to upgrade the Bruce Highway * $5.6 billion to finish the duplication of the Pacific Highway * $3 billion for the East–West Link in Melbourne * $2.9 billion for the Western Sydney Infrastructure Plan for road transport upgrades to facilitate economic growth in western Sydney * $2.5 billion for the Roads to Recovery Programme * $1.5 billion and up to $2 billion concessional loan to the WestConnex project in Sydney * $1.2 billion for the Toowoomba Second Range Crossing * $930 million to continue the Gateway Motorway North upgrade in Brisbane * $925 million for the Perth Freight Link in Western Australia * $590 million to upgrade the Swan Valley Bypass in Western Australia * $564 million for the Black Spot Programme * $400 million to upgrade the Midland Highway in Tasmania * $308 million to upgrade the Great Northern Highway in Western Australia from Muchea to Wubin Stage 2 * $300 million towards renewal and replacement of bridges to improve productivity and community access (Bridges Renewal Programme) * $248 million to the Heavy Vehicle Safety and Productivity Programme * $229 million for the National Highway Upgrade Programme * $174 million to upgrade the North West Coastal Highway in Western Australia * $33 million to upgrade the Outback Way—Western Australia/Northern Territory and Queensland |
| Rail | * $692 million for the North Sydney Freight Corridor * $300 million on the Melbourne–Brisbane Inland Railway for pre-construction and early works including to finalise plans, engineering design and environmental assessments * $142 million on the Port Botany Rail Line * $120 million for the Tasmanian Freight Rail Revitalisation Programme * $38 million for Port Rail Shuttle services at the Melbourne Metropolitan Intermodal System * $17 million to improve the Kewdale Intermodal Rail Supply Chain |
| Air ports | * A decision that Badgerys Creek will be the site of a second airport for the Sydney region * $9 million for infrastructure upgrades to remote airstrips across Australia (Regional Aviation Access Programme) * Air cargo security—developing options to strengthen Australia’s current air cargo security to ensure trading partners continue to allow the import of Australian products by air |
| Sea ports | * Review of Coastal Trading—the Government is undertaking consultation to identify ways to reduce the regulatory burden in the shipping industry to provide access to efficient and competitive shipping services * Tasmanian Freight Equalisation Scheme—helps alleviate the high sea freight cost on eligible non-bulk goods * Introduction of the Port Terminal Access (Bulk Wheat) Code of Conduct, a mandatory code that regulates the behaviours of bulk wheat port terminal service providers and exporters |
| All modes | * Freightline publication series providing commodity-based freight and data flows, including on agricultural commodities * **$1 billion National Stronger Regions Fund to boost regional economic development though the expansion, upgrade and construction of new local infrastructure** * **$5 billion** for the Asset Recycling Initiative, which provides incentive payments to encourage the States and Territories to sell assets and recycle the sale proceeds into new productivity-enhancing infrastructure |

**Long-term planning:** The Government is working with State, Territory and local governments and industry on better long-term planning. This work involves governments implementing integrated approaches to address port and freight challenges and to guide planning and investment decisions, together with mapping key freight routes connecting nationally significant places for freight (TIC 2013). In addition, the Transport and Infrastructure Council has committed to develop a National Remote and Regional Transport Strategy that takes ‘full account of the key issues and possible solutions identified to resolve the significant transport challenges faced in remote and regional Australia’ (TIC 2014b).

**Strategic approach**: Future decisions will also be underpinned by a number of reviews, including:

* Infrastructure Australia’s full audit of Australia’s asset base to feed into a comprehensive 15-year infrastructure plan and a northern Australia audit that will identify the critical infrastructure investment required in the region.
* The Productivity Commission’s final report into Public Infrastructure, which included ways to reduce infrastructure construction costs and address barriers to private sector financing.
* The Productivity Commission’s Tasmanian Shipping and Freight Inquiry report, which included an examination of Tasmania’s shipping costs, the competitiveness of Tasmania’s freight industry structure and the effectiveness of current Tasmanian Transport Schemes including the Tasmanian Freight Equalisation Scheme.

**Port Terminal Access (Bulk Wheat) Code of Conduct**: The Government introduced a mandatory code on 30 September 2014 to regulate the conduct of port terminal service providers to ensure that exporters of bulk wheat have fair and transparent access to port terminal services. This code replaces access arrangements under the *Wheat Export Marketing Act 2008*.

**Heavy vehicle charging and road reform**: Transport ministers have agreed that jurisdictions will commence work to implement initial heavy vehicle investment and access reform measures to improve information provided to industry about road conditions and service standards, to improve the transparency of road agency planning processes, and where appropriate to enable industry to be more closely involved in planning processes.

**Improving national heavy vehicle access:** In February 2014 an important step was taken towards improving heavy vehicle productivity and safety with the commencement of the Heavy Vehicle National Law. This followed the establishment of the National Heavy Vehicle Regulator in January 2013, which encourages and enforces safer and more productive heavy vehicle operations across borders through consistent application of one set of national regulations.

As a major consumer of road freight transport, the agricultural and farming sectors will be impacted significantly by the national heavy vehicle reform. It will allow the transport of stock and products to domestic and export markets faster and more efficiently than before. Heavy vehicle access is also improving with the use of pre-approved routes, which will save transporters time by reducing the need for the national regulator to consult with road managers on a case-by-case basis. The National Heavy Vehicle Regulator has negotiated over 460 access route pre-approvals with 130 local governments since February.

**National Broadband Network (NBN):** The Government is rolling out Australia’s first national wholesale-only, open access communications network to bring high-speed broadband and telephone services within the reach of all Australian premises. The NBN is a $41 billion project for which the Australian Government will contribute $29.5 billion in funding.

**Satellite broadband services:** Around $2 billion is being spent on designing, building and launching the NBN long-term satellite services (LTSS) and for other LTSS equipment and services. The LTSS is designed to bring a step change in the experience of broadband users in regional and remote Australia, with peak download speeds of 25 megabits per second (Mbps) and upload speeds of 5Mbps. These speeds exceed those typically available to ADSL2+ users in metropolitan Australia today. As a temporary measure until the LTSS becomes operational in early 2016, NBN Co has deployed the interim satellite service and recently launched a subsidy scheme to help up to 9,000 homes, farms and small businesses in regional and remote areas purchase a reasonably priced commercial satellite service.

**Mobile Black Spot Programme:** The Government is providing $100 million to improve mobile coverage and increase competition by rolling out new mobile base stations. The funding will be allocated through a competitive selection process designed to leverage significant co-contributions from industry, local and State governments, and communities.

**Linking regions with export markets:** The Government is improving links between regional communities and export markets through the Inland Rail and other infrastructure investments. The commitment to construct the new Inland Rail between Brisbane and Melbourne and to investigate a 24/7 rail link to the Port of Brisbane is expected to reduce current transit times by about a quarter (for Melbourne to Acacia Ridge) and result in the switching of about two million tonnes of agricultural products currently using road transport to the railway by 2050.

The Inland Rail will extend the national rail network with new and upgraded class 1 track, primarily in the agricultural belt from Parkes in New South Wales to Toowoomba in Queensland, and provide new or improved access to the ports of Melbourne, Port Kembla, Botany, Newcastle and Brisbane. Other connecting upgrades include Port Botany rail upgrades and other freight and intermodal work in greater Melbourne and in western Sydney.

**Attracting foreign investment:** The Government is attracting foreign investment into transport and logistics infrastructure including through recruiting senior investment specialists to Austrade to facilitate major investment projects and considering, on a project-by-project basis, options to partner with the private sector in the funding and financing of new infrastructure projects.

## Infrastructure: What stakeholders proposed the Government should consider

**Policy idea 1—Building new transport infrastructure**

Efficient and cost-effective transport is vital to the competitiveness of the agriculture sector. There are significant bottlenecks and problems accessing transport routes where agricultural produce is grown, at intermodal hubs and at final destination ports. The Government is committed to working towards filling Australia’s infrastructure gaps to meet the infrastructure needs of the 21st century. Some specific stakeholder suggestions include:

1. **Linking public and private freight lines and port infrastructure**—The Government is interested in stakeholder views on the locations where productivity could be lifted by improving access to existing or new privately-managed freight rail networks and port infrastructure (such as by the mining sector) with the national rail network. In particular, the Government is interested in identifying mechanisms to maximise the number of ports accessible to agricultural producers in regional areas and improve access through existing rail infrastructure.
2. **Investigation into all-weather access rural roads that may increase productivity of interstate freight movement, including sealing a third east–west continental road through Central Australia**—The Government is interested in stakeholder views on the benefits and costs of investments to improve all-weather access to key interstate freight routes. One example might be a third east‑west highway crossing Australia, which could enhance opportunities for more efficient movement of goods across the nation.
3. **Identifying air freight hubs in regional Australia as potential opportunities to significantly reduce transport times to markets**—Stakeholders have identified air freight hubs in rural and regional Australia as potential opportunities to improve transport of agricultural products from areas such as Broken Hill, Mildura, Kununurra, Tamworth, Toowoomba and northern Queensland (such as Townsville, Cairns and Mackay). The privately financed Brisbane West Wellcamp airport (located west of Toowoomba) is scheduled to open later this year (Bailey 2014), with QantasLink flights scheduled to commence from 17 November 2014. Regional air freight hubs have the potential to significantly reduce transport times from remote areas to capitals and overseas markets. However, given the cost of both airport infrastructure and air freight, it may not be economically viable to use air freight in many regions. The Government is interested in stakeholder views on possible locations, the benefits and costs of investments, possible sources for funding, and whether there are barriers preventing the private sector pursuing these opportunities.
4. **Examining infrastructure for ‘greenfield’ developments that may support growth in new areas and open up new opportunities for Australian farmers**—The Government is interested in information on specific infrastructure projects that will support growth in new areas and open up new opportunities for Australian farmers and the agriculture sector more broadly, particularly through making the most of private investment. For example, this could include infrastructure that supports linkages to markets from irrigation production in northern Australia.

**Policy idea 2—Improving existing infrastructure and transport regulation**

The Government is committed to upgrading existing infrastructure across Australia and reducing transport costs.To address these needs, stakeholders have suggested that mechanisms are required to incorporate information on local infrastructure needs and bottlenecks into infrastructure planning and funding decisions. Options are also sought on areas where transport regulation can be amended or removed to improve the efficiency of the transport system and reduce business costs. For example, the Government is considering reform of coastal shipping regulations, to increase the competitiveness of shipping costs and reduce costs faced by producers.

Many stakeholders also pointed to specific investments that they believed would build productivity in the agriculture sector as well as benefit other industries or local communities. For example:

* sealing, duplicating or upgrading specific roads and replacing wooden bridges so they can accept heavy vehicles, potentially reducing transport times and costs [[3]](#footnote-3);
* building heavy vehicle bypasses to improve transit times and safety for communities[[4]](#footnote-4);
* further standardising rail gauges to enable flows within and across State borders and improving railway lines to decrease handling and travel time[[5]](#footnote-5);
* upgrading and extending rail sidings to reduce the need to break and shunt trains[[6]](#footnote-6); and
* upgrading or developing specific intermodal freight terminals to improve logistics planning and to provide for increased and more efficient consolidation of freight to allow for efficient use of transport services[[7]](#footnote-7).

The Government is interested in stakeholder views on the expected economic costs and benefits and possible funding sources and funding models for such proposals, noting that any decisions on specific investment projects would need to be considered alongside overall national priorities and objectives.

**Policy idea 3—Enhancing communications**

The Government is committed to ensuring that farmers and regional communities have access to reliable and affordable communications systems. Views are sought on areas of focus for future government and commercial investment in communications infrastructure, as well as options to assist farmers and regional communities to best use the communications infrastructure currently being deployed. The Government is interested in information on how government programmes and services can be best designed to ensure farmers and regional communities have access to the reliable and affordable communications systems—be they satellites, mobile phone networks, or broadband internet—on which their businesses rely.

# Working with the States and Territories

Stakeholders raised a number of issues that are primarily the responsibility of State and Territory governments. Examples included State and local infrastructure, stamp duty, cost of utilities (water, power and gas), transport regulations, environmental laws such as native vegetation conservation, planning legislation, work health and safety regulation, and animal welfare.

The agriculture portfolios of State and Territory governments have indicated that they are committed to working together to assess their contribution to improving the competitiveness of Australia’s agriculture sector.

## What stakeholders said:

*‘Further, the issue of red tape reduction must be tackled at a cross-jurisdictional level, with states and the Commonwealth working collaboratively to identify areas of overlap, duplication or confusion for farm businesses to comply with.’* **Sheepmeat Council of Australia, submission IP679**

*‘Greater collaboration between the States and the Commonwealth in regard to transporting of agricultural commodities across boundaries will support the agriculture sector nationally. Currently transport legislation varies from State to State creating unnecessary red tape, time delays and inefficiencies.’* **Regional Development Australia (RDA)—Riverina, submission IP632**

## Outline of the issue

Many of the policy ideas raised in the Green Paper would require the Government to work with the States and Territories to deliver improved outcomes for Australian agriculture, and the community more broadly. For example, issues for biosecurity, drought, research, development and extension (RD&E), regulation, water and infrastructure discussed throughout this Green Paper require a collaborative approach across governments. However, other issues raised by stakeholders are primarily the responsibility of the States and Territories—these are outlined below.

The Government recognises that the States and Territories are sovereign in their own sphere and will ultimately need to decide what they will do. Consideration of the policy ideas below should recognise the waste and inefficiency that can arise from duplication and overlap between different levels of government. By acting and working together, along with individuals, companies and organisations, governments can improve the competitiveness of the Australian agriculture sector.

Stakeholders often did not distinguish between levels of government when commenting on regulatory burdens. Significantly, many of the government policy issues identified by stakeholders as reducing competitiveness were not agriculture specific but rather applied to all businesses in a jurisdiction. Notwithstanding this, stakeholders sought consideration of the cumulative burden of these matters and the unique features of farm business. Table 2 provides an overview of Commonwealth and State and Territory involvement and regulation in areas relating to agriculture, highlighting the complexity of regulation.

Table 2 Agriculture value chain and the impact of regulations

| **Key Australian Government involvement/regulation** | **Key stages of agricultural cycle** | **Key State/Territory government involvement/regulation** |
| --- | --- | --- |
| * native title * environmental protection and biodiversity conservation | acquisition of arable land | * land use and planning regulation * native title |
| * Aboriginal and Torres Strait Islander cultural heritage * natural heritage, world heritage * international treaties and conventions covering natural and cultural heritage * licensing and approval of chemicals, fertilisers and pesticides * environmental protection and biodiversity conservation | preparation of land | * land use and planning regulation * native vegetation legislation * water regulation * weed and vermin control regulation * laws relating to Aboriginal and Torres Strait Islander cultural heritage, relics and sacred sites * use of chemicals, fertilisers, pesticides * natural heritage * environmental protection/assessment * building regulations |
| * chemical and pesticide supply and registration * access to drought support * fuel tax regulation * national pollutant inventory * biosecurity regulation * immigration regulation * water access and regulation * research and development funding and support | farming   * cropping * animal husbandry | * animal welfare regulation * transport regulation affecting use of farm machinery * vehicle/machinery licensing regulation * livestock regulation and identification * access to drought support * work, health and safety regulation * fire control regulation * weed and vermin control regulation * livestock disease control regulation * livestock movement regulation * water access and regulation * chemical and pesticide use |
| * export certificates * immigration regulation * environmental regulation * industrial relations regulation * national pollutant inventory | on-farm processing | * building regulations * machinery operations * certification and labelling * industrial relations regulation * work health and safety regulation |
| * national land transport regulatory frameworks * shipping and maritime safety laws * international maritime codes and conventions * competition laws/access regimes * animal welfare | transport and logistics | * transport regulations * government‑owned public/private transport infrastructure * access regimes |
| * marketing legislation (mandatory codes and acquisition) * food safety regulation * quarantine regulation * export controls * export incentives * WTO obligations * market access and trade agreements * taxation | marketing   * boards * customers | * interstate certification arrangements * taxation |

Adapted from: Gray et al. 2014

## Working with the States and Territories: What the Government is already doing

**Deregulation:** Reducing red and green tape is an ongoing priority for all governments. There are a number of deregulation activities being overseen through the Council of Australian Governments (COAG) that should assist with agricultural competitiveness. COAG has agreed to look closely at improving the performance of regulators and the benefits of consolidating regulatory functions, including through the amalgamation of regulators, so businesses, community organisations and individuals need to interact with as few regulatory bodies as necessary.

**Food processing:** Work to reduce red tape in processing is being done by particular jurisdictions (Victoria in beef and dairy and South Australia in dairy) (COAG 2014a). These jurisdictions will report to COAG on findings and actions in December 2014 (COAG 2014b).

**Environment:** A One-Stop Shop for environmental approvals is being implemented to reduce duplication between the Commonwealth and the States and Territories, while maintaining high environmental standards. A national review of environmental regulation is also being undertaken to identify unworkable, contradictory or incompatible green tape across jurisdictions.

**Wild dog control:** The Government is working with the States and Territories, including providing $10 million for pest management through the February 2014 drought package.

**Delivering and implementing programmes:** The Government has reached agreement with the States and Territories to deliver Farm Finance concessional loans, Drought Concessional Loans and emergency water infrastructure as well as implement the Murray–Darling Basin Plan for water reform.

**Reform of the Federation White Paper:** The Australian Government is working with the States and Territories to produce a White Paper on the Reform of the Federation. The White Paper will seek to clarify roles and responsibilities to ensure that, as far as possible, the States and Territories are sovereign in their own sphere. More information (including terms of reference) can be found at <http://federation.dpmc.gov.au/>.

## Working with the States and Territories: What stakeholders proposed the Government should consider

**Policy idea 4—State government deregulation**

Deregulation is a priority for COAG, with governments already looking at ways to reduce red tape and duplication and improve the performance of regulators. Stakeholders suggested some ideas for deregulation that fall within State and Territory responsibilities. These included:

1. **Removing excessive native vegetation laws**—Stakeholders raised concerns with State-based native vegetation laws, both around restrictions on agricultural land use and the financial and time costs associated with compliance. Specifically, stakeholders argued that current laws hindered changes in land use (for example, from grazing to cropping), limited the ability to manage weeds and did not account for regional differences within a State. For example, it was argued that an application to clear a large stand of remnant native vegetation should be treated differently from an application to remove a single tree to install a pivot irrigation system or to improve the efficiency of cropping. Similar issues have also been raised by the Productivity Commission (2004). The Government encourages States and Territories to ensure that regulations are flexible enough to deal with individual circumstances so that environmental outcomes can be achieved alongside improved farm profitability.
2. **Removing excessive work health and safety requirements**—Stakeholders expressed a desire to remove excessive work health and safety (WHS) requirements. Farm businesses that operate across State boundaries expressed frustration at different WHS arrangements applying in different States. For example, for businesses operating across more than one State, annual benefits from a consistent approach to WHS laws were estimated to be around $179 million (Access Economics 2009). COAG has agreed to explore ways in which the model WHS laws could be improved to reduce red tape and make it easier for businesses and workers to comply with their WHS responsibilities. The Government encourages the consideration of agricultural stakeholder concerns as this is being progressed. The Government has also announced that it will commission advice on the best way to expand access to the Commonwealth workers’ compensation and WHS regime to employers, as premium payers. This would provide an opportunity for farm businesses operating in multiple jurisdictions to operate under the national scheme if desired.
3. **Improving the efficiency of the native title system**—The Government was encouraged to work with the States and Territories to examine ways to improve the efficiency of the native title system and encourage greater economic development for Indigenous and non-Indigenous people, including in agriculture. The Commonwealth, State and Territory Ministers responsible for native title recently met for the first time since 2009 to renew and reinvigorate discussions about the operation of the *Native Title Act 1993*. Ministers discussed how Commonwealth, State and Territory governments could work collaboratively, as jurisdictional partners, to improve efficiency in the system (Brandis & Scullion 2014).

**Policy idea 5—Protecting the resource base**

A strong agriculture sector requires the natural resource base to be maintained for future generations. Stakeholders made a number of suggestions for the States and Territories, including:

1. **Limiting the adverse impacts of mining on the agriculture sector**—Stakeholders expressed a concern that the quality of their agricultural land and their life on the farm were being affected by mining activities adjacent to or on their land. Some stakeholders suggested that farmers get a return from mining activities on their land, through a share of royalties. Some stakeholders also suggested that access to freehold land be granted with the agreement of the landowner and that steps be taken to ensure that no long-term damage was done to aquifers so as to change the agricultural capacity of the district as a result of extraction activities.
2. **Providing opportunities for farmers to convert leasehold land into freehold**—Stakeholders expressed concerns about their level of rights as landowners. Some stakeholders felt that there was adequate incentive in the ownership of land to ensure that farmers took appropriate steps to look after it and maintain its value. It was also felt that the States and Territories could provide opportunities for farmers to convert leasehold land into freehold.
3. **Ensuring greater consistency in biosecurity regulations between Australian jurisdictions**—Stakeholders were often confused about the different roles of government in the biosecurity system and the consistency of approaches across jurisdictions on issues such as fruit fly. The Government is interested in working to ensure greater consistency in biosecurity regulations between Australian jurisdictions, in response to stakeholder concerns around this issue.
4. **Quarantining prime agricultural land from mining activity**—Some stakeholders also suggested that measures be put in place to prevent mining on prime agricultural land. However, it can be difficult to determine what constitutes ‘prime’ agricultural land and the definition may change over time. The Queensland Government recently passed legislation to clarify the process for approval of mining and gas development. It gives farmers in specified priority agricultural areas greater influence over decisions to allow mining projects to proceed.

**Policy idea 6—Strengthening farm businesses**  
There are a number of State and Territory policy changes that could be made to allow farm businesses to operate more effectively. These include:

1. **Implementing a nationally consistent and mandatory approach to farm debt mediation**—Some stakeholders indicated their preference for a nationally consistent and mandatory approach to farm debt mediation. Arrangements applying in New South Wales were offered as a possible model. The Australian Government could work with State and Territory governments, financial institutions and financial sector regulators to explore the feasibility of this proposal.
2. **Subsidising farm energy audits**—Stakeholders consistently raised rising energy costs as an important concern. They also mentioned that the advantages of using off-peak energy were being eroded by changes in charging practices by energy suppliers. Some stakeholders suggested that governments provide a grant to farmers to subsidise energy audits aimed at improving the efficiency of energy use and reducing energy costs. New South Wales ([www.environment.nsw.gov.au/sustainbus/energysaver/](file://internal/dfs/group/Agriculture%20Competitiveness%20Taskforce/Green%20Paper/7-%20Exposure%20Draft/www.environment.nsw.gov.au/sustainbus/energysaver/)) and Queensland ([www.cciq.com.au/services/ecobiz/](http://www.cciq.com.au/services/ecobiz/)) schemes were provided as examples that could be considered by other State and Territory governments to identify opportunities to reduce energy costs for farmers.
3. **Streamlining development application processes**—Stakeholders, such as the Victorian Farmers Federation (submission IP546), raised concerns about the complexity and time taken to approve changes to land use. Application processes that involve different areas of government and different application processes can be frustrating for applicants. The submission from Primary Industries and Regions SA (submission IP535) noted that they have appointed some ‘senior level case managers to support businesses undertaking significant and complex projects ... as the single point of contact for each project’. This approach benefits a farm business by providing a single government official to assist the business with navigating through the different pieces of regulation involved in a development application. Such an approach could be considered by other States and Territories.
4. **Enforcing animal welfare legislation, as well as strengthening laws to stop trespass on farms**—The Australian Government recognises that animal welfare is a concern for the Australian community. No-one, including the Australian Government, supports animal cruelty, least of all farmers and all those that rely on agriculture for a living. Each State and Territory government is responsible for implementing and enforcing domestic animal welfare legislation. It is important that States and Territories drive reform in this area. Reform includes enforcing animal welfare legislation and developing and implementing animal welfare standards and guidelines to achieve good animal welfare outcomes. It could also include encouraging industries to develop proactive measures to develop quality assurance programmes to demonstrate that on-farm practices reflect good farming practice for management, animal welfare, food safety, biosecurity and traceability. Without detracting from the fact that no government should condone animal cruelty, it is also important that the States and Territories take action to protect farmers, their homes and their places of business from disruptive and illegal activities undertaken by animal activists. Stakeholders suggested, and the Australian Government encourages, that States and Territories strengthen their laws to stop trespass on farms and to meet the challenges of new invasive technology including surveillance devices.
5. **Adopting the Co-operatives National Law**—Improved coordination between farm businesses through the establishment of cooperatives were identified by some stakeholders as a good way for farm businesses to achieve greater economies of scale and improved profitability without losing individual control of their operations. State and Territory governments, which regulate cooperatives, have agreed to implement the Co-operatives National Law (CNL), which replaces an ageing and fragmented legislative system. The CNL:

• allows cooperatives to operate on a national basis—cooperatives registered in a jurisdiction that adopts the CNL or passes consistent cooperatives legislation have reduced compliance costs and are automatically able to carry on business in other States and Territories that adopt the CNL or pass consistent legislation; and

• provides better access to external capital funding through a type of hybrid security—cooperative capital units—that allows access to external capital without compromising member democratic control.

Cooperatives are subject to both Corporations Law and the CNL. States and Territories could consider opportunities to minimise duplication of the CNL with Corporations Law. A possible area is disclosure requirements.

# Competition and regulation

Competition and regulation were areas of significant concern for many stakeholders. The uneven level of market power through the supply chain was seen as a major cause for lower returns to farmers. This issue was raised by farmers in their negotiations with processors (sometimes with a dominant or monopoly position in their region) and with the two large retailers, as well as small and medium sized processors in dealings with the big players in the market.

The Government is committed to ensuring that competition laws in Australia provide a sound basis for ensuring firms act in a competitive manner. Current competition laws generally seek to prevent the misuse of market power and allow for collective bargaining (including by farmers) in certain circumstances, to negotiate better deals.

Unnecessary or complex regulations were also strong themes in stakeholder feedback. Particular areas of concern were agricultural veterinary chemicals, transport regulations, animal welfare standards, and land planning and environmental requirements. The Government is committed to reducing the regulatory burden across Australia by $1 billion a year—and working with State, Territory and local governments to reduce the burden where this lies outside Australian Government responsibility.

## What stakeholders said:

*‘There needs to be greater transparency and responsibility in the supply chain. Farmers are always being told to find more efficiencies and savings but while the farmer makes the greatest investment to produce their crops, it’s clear the greatest share of profit sits between the farmers and the consumer.’* **Bartholomew Guiseppe Brighenti, submission IP322**

*‘Regulations should have very clear outcomes [that] they are addressing and need to have a robust scientific basis which is mindful of the market implication.’* **Russell Sully, submission IP216**

## Outline of the issue

### Competition

The majority of food sold on the domestic market is eventually sold through four channels: supermarkets, convenience stores, institutional food service providers and retail food service outlets. While the value chains of food are complex and varied, many stakeholders have raised concerns around the market power of intermediaries such as processors and supermarket retailers. Issues raised focused on market concentration and sector business models that limit farmer options at point of sale. Some stakeholders have conveyed this as an imbalance in negotiating power between farmers, processors and supermarkets.

A number of stakeholders reflected that, while the cost of production had increased over time, farm gate returns remained stagnant and instead the market cost of goods was largely controlled by processors and retailers[[8]](#footnote-8). Port Curtis Milk Suppliers Co-operative Association (submission IP286) suggested that, in the short run, the marginal cost of products (in this case, milk) is almost zero (as the cows cannot be ‘turned off’) resulting in market power being with the processors in the short term.

The recent Productivity Commission (PC) report into the costs of dairy product manufacturing found that, within the dairy industry, businesses are very diverse and there can be significant variation in the cost structures depending on scale, product mix, production system or location (PC 2014a). Over the decade to 2009–10, the cost structure of Australian dairy product manufacturing has remained broadly unchanged, although there has been some fluctuation in the relative importance of particular elements (Figure 15). The PC also found that, while Australian dairy product manufacturers face some cost disadvantages relative to their competitors, there are also some relative advantages (including lower raw milk costs) (PC 2014a).

Figure 15 Australian dairy manufacturing cost structure, 1998–99 to 2009–10

Notes: **a** ‘wholesale trade’, which represents margins on products sold wholesale to dairy product manufacturers, is a substantial proportion of the ‘other’ category (about 6 per cent of industry output in 2009–10).

Source: PC 2014a

English and Greenwood (2012) found that beef from a 500-kilogram live animal, sold to the abattoir at $3 per kilogram for the hot carcass, costs $2.73 per kilogram to process in the abattoir and $5.55 per kilogram in the butcher shop, requiring a retail price of $11.28 per kilogram just to cover costs.

For many producers, a lack of transparency and certainty in price has led to difficulties in planning or investing and the perception that producers have been unfairly dealt with by other players in the supply chain. Some stakeholders, such as Robert Mulkearns (IP433), suggested that government intervention was needed to compel public price information. The information was regarded by some stakeholders as important to give farmers a better understanding of the operation of markets and to support farmer decision-making.

To manage some of the supply chain dynamics, there are a number of formal mechanisms in place for farmers, including:

* Collective bargaining provisions under the *Consumer and Competition Act 2010* (Cth) (CCA) allow competitors to come together to negotiate with a supplier or customer over terms, conditions and prices (actions that would otherwise be in breach of the CCA). The farm sector has a disproportionately low use of such arrangements compared to other sectors of the economy.
* Unconscionable conduct provisions under the Australian Consumer Law prevent actions that ‘should not be done in good conscience’. Business behaviour can be deemed unconscionable if it is particularly harsh or oppressive and is beyond hard commercial bargaining (ACCC 2014a). The recent move by the Australian Competition and Consumer Commission (ACCC) to take action against a large supermarket for unconscionable conduct in its relations with suppliers is an example of this mechanism at work (ACCC 2014b).
* The Horticulture Code of Conduct, a mandatory code designed to ensure transactions between growers and traders are transparent and clear and that there are dispute resolution procedures. Some stakeholders raised issues around the effectiveness of this code[[9]](#footnote-9).

Stakeholders suggested that current CCA provisions were inadequate. They considered that it was not designed to address power imbalances between participants at different points in the supply chain and that the competition policy framework more broadly could limit the development of the scale required to redress negotiating power imbalances.

Farmer and agribusiness stakeholders identified that having a strong understanding of their costs of production and good negotiation skills resulted in better decision-making about volume and pricing of their products. This is especially the case in a context where ‘grocery buyers [are] using sophisticated negotiating and interrogation tactics—some new to Australia—designed to rattle and destabilise suppliers’ (Mitchell 2014).

Farmers can also use formal business structures, such as cooperatives, to increase their bargaining power without necessarily losing control over the individual business operation. Some stakeholders felt that the Government could do more to promote and recognise the role that cooperatives play[[10]](#footnote-10).Canada, for example, has an area within its national government that provides a single focal point for cooperatives analysis, advice and support to promote cooperative business innovation and growth as well as incorporation (Industry Canada 2014). The Australian Government will consider what it can do to foster more cooperatives in the agriculture sector to develop, noting that regulation of cooperatives is in the jurisdiction of the States.

In addition to financial management and negotiation skills, farmers are likely to be in a stronger negotiating position when they have a greater choice of markets to supply their products into. Some stakeholders suggested that market channels would be a more effective area of focus than legal frameworks. Examples of these include export markets and direct sales channels such as farmers markets. Farmers markets are smaller scale marketplaces held regularly in public locations such as schools or showgrounds. Markets are one way that farmers can sell direct to consumers and allow farmer stallholders to ‘maximise profit margins and be price makers’ (Australian Farmers Market Association, submission IP209).

In support of alternative channels to market for farmers, the ACCC (2008) found evidence that:

* growers who generally have less of their business committed to supplying major supermarket chains (MSCs) receive better terms from the MSCs;
* growers who have failed to develop alternative options to the MSCs are extremely vulnerable to the price pressure from MSCs; and
* growers with more developed outside options, no matter what their size, are more likely to negotiate more advantageous terms with MSCs.

A further option could be for farmers to invest up the value chain in order to capture a greater share of the margins available beyond the farm gate. This could be through vertical integration—as done by Houstons Farm in Tasmania (Bonney et al. 2007)—through joint investment with processors or retailers or through working with buyers to develop year-round supply of products, as done by Harvest Moon ([harvestmoon.com.au](http://www.harvestmoon.com.au)).

### Regulation

Regulation must be effective and efficient. A recent report into on-farm red tape costs estimates that farmers spend a total of 20.6 days, or 8.6 per cent of the working year, consumed with red tape (Holmes Sackett 2014).

Stakeholders raised a number of issues in relation to regulation, including ensuring greater consistency in areas such as animal welfare standards, land planning and environmental requirements, and heavy vehicle registration. The Retailer and Supplier Roundtable also identified major regulatory hurdles in transport inefficiencies, duplication across governments and inflexible labour laws (Retail and Supplier Roundtable 2014). Many of the regulatory issues identified by stakeholders and the Retail and Supplier Roundtable relate to State or Territory regulations and policy options and are covered in Chapter 3 – Working with the States and Territories. Reducing the costs of complying with government regulations is also a key focus for the Australian Government. The Government has committed to a $1 billion reduction in the regulatory burden on businesses, individuals and community organisations, including regulation in the agriculture sector.

Stakeholders recognised the value of food regulations that provide confidence for Australians domestically and support Australia’s reputation as a reliable source of clean and quality food internationally.

An area of regulation where concern was raised by stakeholders was in relation to Country of Origin Labelling (CoOL). Stakeholders considered that consumers could be misled by the current system and argued for greater clarity in current CoOL definitions as well as an effort to improve consumer understanding of the system[[11]](#footnote-11). As with other regulatory frameworks, CoOL attempts to strike a balance—between informing consumers about where their food is made or produced and the regulatory burdens on business of this obligation. Where these aims are not balanced or being met, there may be a need for change to the regulatory framework.

The House of Representatives Standing Committee on Agriculture and Industry is inquiring into CoOL for food. The inquiry will consider whether the current CoOL system provides enough information for Australian consumers to make informed purchasing decisions. It will also determine if Australia’s CoOL laws are being circumvented by staging imports through third countries. The ACCC has also recently released updated industry guidance on CoOL (ACCC 2014c).

Another area raised regularly by stakeholders related to the costs imposed through the regulation of chemicals. In 2012–13, chemicals (including herbicides, animal health products and insecticides and fungicides) represented a cost of over $1.4 billion for farm businesses (ABARES 2013a). The Australian Pesticides and Veterinary Medicines Authority (APVMA) regulates agricultural and veterinary chemicals to the point of sale. Pesticides and veterinary medicines are controlled under the *Agricultural and Veterinary Chemicals Code Act 1994 (Cth)* to protect the safety of human and animal health and the environment.

Stakeholders raised concerns about elements of the chemical regulation framework, including the time taken to process applications for registration of new chemicals, the need to reassess chemicals that have been approved for use in other countries and access to chemicals for minor uses[[12]](#footnote-12). Regulation must balance the risks of chemical use against the burden imposed by regulation. The Government is improving the regulatory framework for agricultural and veterinary chemicals.

The Government’s priorities for improving agricultural and veterinary chemicals regulation include:

* avoiding unnecessary and inadequate regulation;
* ensuring Australia has an agriculture and veterinary chemical regime allowing industry access to chemicals whenever they can be used safely;
* ensuring the costs and constraints imposed by regulation are proportional to the risks being managed;
* encouraging the introduction of newer, safer chemicals to the Australian market and encouraging new uses for existing chemicals;
* encouraging better, safer, industry practice and relying on good industry stewardship; and
* driving a seamless national regulatory system.

Many stakeholders commented on the regulation of genetically modified (GM) organisms, with some advocating for GM technologies to facilitate higher productivity of Australian farms. Others pointed to the marketing advantage of GM-free status. Australia has a strong regulatory framework to manage any risks to human health and safety or the environment from GM technology. There continue to be limitations imposed by some States and Territories on growing GM crops for marketing reasons. Stakeholders noted the importance of national consistency[[13]](#footnote-13). The Government believes that farmers should have the choice to adopt the approaches that best suit their business needs, including through the use of GM technologies.

Stakeholders also raised concerns about transport regulation, as discussed in Chapter 2 – Infrastructure.

## Competition and regulation: What the Government is already doing

### Competition

**Competition Policy Review:** On 4 December 2013 the Government commissioned a broad, independent examination of how the competition framework is working. This is the first comprehensive review of Australia’s competition laws and policy in over 20 years. Australia’s competition policy needs to be fit for purpose, and updated for the economic opportunities and challenges Australia will face in coming decades. Increased globalisation, population ageing and new technologies are rapidly changing the way our markets operate. The independent Competition Policy Review Panel released its Draft Report on 22 September 2014. The Draft Report sets out the Panel’s draft recommendations and seeks further input from stakeholders. Submissions are invited by 17 November 2014. The review is due to report to Government by March 2015.

**Unfair contract terms:** The Australian Government wishes to [protect small businesses](http://www.treasury.gov.au/ConsultationsandReviews/Consultations/2014/Small-Business-and-Unfair-Contract-Terms/FAQs#protections) by providing them with the same protections available to [consumers](http://www.accc.gov.au/consumers/contracts-agreements/unfair-contract-terms).

**Direct financial penalties for breaches of prescribed industry codes:** The *Competition and Consumer Amendment (Industry Code Penalties) Act 2014* provides a framework for penalties under industry codes of conduct, proposed to be applied to the new Franchising Code of Conduct from 1 January 2015. This includes powers for the ACCC to issue infringement notices and for the court to impose pecuniary penalties for breaches of a civil penalty provision of an industry code.

**Industry Innovation and Competitiveness Agenda:** The Government has announced initiatives to promote national competitiveness and productivity, including options for further deregulation to reduce the costs and restrictions imposed on businesses.

**ACCC action:** The ACCC is reviewing aspects of supermarket behaviour following industry complaints. In some instances, the ACCC is taking action, including by initiating proceedings in the Federal Court of Australia against Coles[[14]](#footnote-14) for engaging in alleged unconscionable conduct in its Active Retail Collaboration programme, in contravention of the Australian Consumer Law (ACCC 2014b).

**Food and Grocery Industry Code of Conduct:** The Food and Grocery Code was presented to the Government on 18 November 2013. Under the proposal, retailers can voluntarily be bound by the Food and Grocery Code, which would be enforced by the ACCC. The Government is currently considering whether to prescribe the Food and Grocery Code as a regulation under the CCA (discussed further under Policy idea 8 below). Further details can be found at: [www.treasury.gov.au/ConsultationsandReviews/Consultations/2014/Improving-Relationships-Food-Grocery-Sector](http://www.treasury.gov.au/ConsultationsandReviews/Consultations/2014/Improving-Relationships-Food-Grocery-Sector).

**Budget measures:** The Government provided additional funding in the 2014–15 Budget for institutions and activities that support competitive markets, including the ACCC and the Small Business and Family Enterprise Ombudsman, and extending unfair contract term provisions to small businesses.

### Regulation

**Regulatory reform:** The Government has committed to removing the cost imposts on Australian farmers by abolishing the carbon tax and to reducing the regulatory burden on businesses, individuals and community organisations across Australia by $1 billion a year. This includes reducing regulations in the agriculture sector. The deregulation agenda includes a focus on improving the efficiency of agriculture and veterinary chemicals regulation, including removing the requirement for such chemicals to be periodically re-approved and re-registered. The Government is also providing $8 million to the APVMA to increase access to chemicals for minor uses. The Government is undertaking consultations to inform development of a new Regulator Performance Framework to assess and improve regulator performance.

## Competition and regulation: What stakeholders proposed the Government should consider

**Policy idea 7—Improving market competition**

The Government aims to facilitate and support a regulatory environment that allows agricultural markets to operate efficiently and transparently to support competition. Many stakeholders argued that there was a lack of transparency and certainty in the price of agricultural products and that this had led to difficulties in planning or investing. Stakeholders also argued that producers were often at a negotiating disadvantage when compared to the processors, wholesalers and retailers they sell to—mainly reflecting size and market share relative to others in the value chain. Stakeholders have suggested that the Government:

1. **Introduce options to increase price transparency throughout the domestic supply chain**—More information for farmers on agricultural product prices through the supply chain was raised by stakeholders as important for getting fairer outcomes in negotiations with purchasers, especially processors and retailers. One option could be for ABARES to develop and provide weekly reports on price indices for agricultural products that more reliably reflected the range of market transactions. ABARES could also be asked to report regularly on comparable input costs in major competitor countries. Such reports would be new, though complementary to existing ABARES reports (such as *Agricultural commodities* and the *Weekly Australian Climate, Water and Agricultural Update*). They would be made freely available on the ABARES website for farmers, the broader public and the media—including for use by private extension services and government agencies.

Another option suggested by stakeholders (such as Robert Mulkearns, IP433), to provide greater price transparency, was to regulate disclosure of transactions not undertaken on a public platform, such as saleyards or online auction systems. While this would increase price transparency, it would impose a requirement to regularly report on transaction and add regulatory costs, which may be passed back to farmers. Regulation of agricultural prices to increase farm gate returns was also raised. However, such schemes have resulted in adverse outcomes for industry at times—as occurred with the wool reserve price scheme, which ultimately led to a large stockpile of wool and depressed wool prices for many years. They can also result in artificially high land values, higher prices for domestic consumers (and lower consumption), reduced international competitiveness and high costs to taxpayers (Gray et al. 2014).

1. **Introduce new marketing mechanisms which might restore balance of power to the producer**—Stakeholders made a number of suggestions about how marketing systems could give farmers a better return on production[[15]](#footnote-15), including mapping the existing value chain to identify areas of monopoly or inefficiency; increasing transparency (for example, through reporting requirements for supermarkets or mandatory display of animal weights in saleyards) supporting marketing systems with independent appeals mechanisms; or establishing a real-time, electronic bidding system for livestock regulated by government (for example, see the proposal for a primary production pricing bill outlined in Moore 2014). The Government is interested in stakeholder views on whether there are new marketing systems or other tools or mechanisms that could restore the balance of power to producers.
2. **Facilitate greater use of cooperative structures**—Cooperatives are a type of business structure that can assist farmers to increase their bargaining power without necessarily losing control over the individual business operation. While cooperatives are regulated by the States, the Government is interested in understanding obstacles to establishing new cooperatives and whether there are any Government initiatives that could be undertaken to promote take-up.

**Policy idea 8—Strengthening competition laws**

The Government is committed to ensuring that competition laws in Australia provide a sound basis for ensuring firms act in a competitive manner. Current competition laws generally seek to prevent the misuse of market power and allow for collective bargaining (including by farmers) in certain circumstances, to negotiate better deals. The Competition Policy Review, conducted by an independent panel chaired by Professor Ian Harper, is examining these issues and the panel released its draft report on 22 September 2014. Stakeholders are encouraged to also comment on the findings of this report.

Stakeholders consulted as part of the Agricultural Competitiveness White Paper suggested improvements to competition laws such as making it easier to prove that market participants had misused market power (s46). They also raised issues including divestiture, exclusive dealing (s47), powers to obtain information, documents and evidence (s155) and the unconscionable conduct provisions of the *Competition and Consumer Act 2010* (CCA), and whether there are barriers to the emergence of major Australian agribusiness companies (‘national champions’) of global scale for exporting to international markets. Specific changes suggested include:

1. **Revisions to the CCA**—Stakeholders suggested changes to the CCA to:

i. *make it easier to prove breaches of market power provisions* such as by applying the ‘substantial market share’ threshold in the Birdsville Amendment to section 46(1) of the CCA (the general misuse of market power provision);

ii. *introduce a flexible anti-competitive ‘effects test’ in the misuse of power provisions*; and

iii.*increase penalties for breach of the CCA*including a general divestiture power enabling courts to break up a business that repeatedly breaches the CCA, such as the provisions in the United States (*Sherman Act 1890*) and United Kingdom (*Enterprise Act 2002*) for breaches of their respective misuse of market power provisions.

1. **Reviewing competition laws to consider whether there are any barriers to greater consolidation among agribusiness firms** — Consolidation could encourage emergence of major Australian agribusiness companies of global scale in agriculture sectors of traditional strength (such as meat, dairy, grains, wool, oilseeds and sugar). One area for consideration may be the approach used by the ACCC in determining the size of the market under consideration—noting that the Australian economy is open to competition from abroad (including through online markets). In a report commissioned by the Business Council of Australia, McKinsey says ‘New Zealand’s dairy exports [and milk production] have accelerated; Australia’s have flatlined’ (McKinsey 2014). McKinsey recommended that Australia consider emulating New Zealand’s decisions in relation to Fonterra. A recent inquiry by the Productivity Commission noted that there are a range of factors in addition to competition policy, like the natural resource environment and trade agreements, that have affected Fonterra’s success (PC 2014a).
2. **Increasing the resources of the ACCC**—Additional resources could include specialist agribusiness knowledge or creating an agricultural ACCC to focus on sector-based issues and **requiring the ACCC to publish more information on investigations and their outcomes**, noting that some stakeholders made contrary suggestions such as the need for a robust anonymous complaint process to bring out more evidence than the current system does.
3. **Creating a supermarket ombudsman with penalty powers and a mandatory code of conduct for supermarkets (across all commodities) backed by direct financial penalties.**

The scope of the current Competition Policy Review includes many of these issues. The Government is interested in feedback on these suggestions and stakeholders are encouraged to also provide submissions to this review directly. The Government will consider all these views in the context of responding to the Competition Policy Review.

**Policy idea 9—Improved regulation**

The Government is committed to making sure that unnecessary red and green tape is removed and that necessary regulation is effective but imposes the least possible costs for business and individuals. Stakeholders suggested changes to the regulation of AgVet chemicals as one area for red tape reduction. Country of Origin Labelling was an area identified for regulatory improvement so that the imported and domestic components of a product were clearly labelled. Further details on these are provided below:

1. **AgVet chemicals regulation**—Agricultural and veterinary chemicals were an area identified by many stakeholders as over‑regulated. The Government has initiated reforms in this area. Reforms suggested by stakeholders include making better use of the advice of trusted foreign regulators to streamline chemical assessments. This change reduces the need for conducting comprehensive first-principles assessments of all applications (consistent with the directions outlined in the Government’s Industry Innovationand Competitiveness Agenda). Any changes must still take account of specific Australian conditions. Another option is to introduce discretion for the Minister for Agriculture to issue temporary permits for chemicals used within the last three years in defined circumstances.
2. **Country of Origin Labelling for food**—Regulation on Country of Origin Labelling (CoOL) for foods was considered by stakeholders as confusing for consumers. Suggestions focused on the need for clear, accurate and transparent definitions for CoOL and greater consumer understanding of what it meant. Australia’s CoOL framework aims to inform consumers about where food is grown or made without placing unnecessary red tape burdens on agribusiness. The framework requires almost all food to be labelled with its country of origin and prohibits the making of false, misleading or deceptive origin representations. However, it may be possible to make labelling on products clearer as to the imported and domestic components of a product. The Government would like stakeholder input on any further steps it should take to ensure that consumers clearly understand the origin of their food.

# Finance, business structures and taxation

Stakeholders noted that significant capital investment would be required to take advantage of future growth opportunities but that current profitability levels and existing business structures may not be conducive to attracting investment.

The level of debt in the agriculture sector is a major concern for stakeholders and the Government. While the overall level of debt in the sector is not high relative to farm assets or other sectors nationally, it is clear that segments of the sector and geographic regions face unsustainable debt burdens. As a consequence many farmers may not be in a good position to service their debt when faced with an unexpected downturn.

Many stakeholders acknowledged that raising profitability and improving competitiveness would require more farmers to become more business focused and market oriented. Some noted that access to reliable and independent business information and advice was crucial to improving business performance. Due to resource, distance and time constraints, many farmers are often unable to look into new opportunities that could help lift their business performance and improve their bottom line.

Stakeholders raised a number of concerns about the taxes imposed on the agriculture sector by Commonwealth and State and Territory governments. The Government believes it is important that the tax system is not an unnecessary burden and does not create undue barriers to investment in the sector.

## What stakeholders said:

*‘Farmers at the lower performing end are feeling stress, while the higher end of the market is making good returns. Public policy to consider how to help those businesses in the middle of the market lift their performance is critical. This may include improving skills in financial governance, balance sheet and asset management, and business performance.’* **ANZ, submission IP639**

*‘Separating farmland from the operating business can also attract different forms of capital into agriculture ... Splitting the focus of both parties can also drive efficiency gains by having each party focus on their relative strengths.’* **PPB Advisory Pty Ltd, submission IP578**

## Outline of the issue

### Financing

The agriculture sector has traditionally relied on bank debt and retained earnings for finance (Bondietti 2008; Sanyal 2014). In 2012–13 around 30 per cent of agriculture businesses sought finance, almost twice the average for all industries (15.7 per cent). This partially reflects the lumpiness of farm cash flow. Around 97 per cent of these businesses sought debt finance and 92 per cent of those reported that finance was obtained (ABS 2014f).

Rural debt levels have risen over the last decade to a total of $64 billion in 2012–13, with bank lending to businesses in the agriculture, forestry and fisheries sector making up $61 billion (RBA 2014f). Most of the rise in gross debt over the last decade occurred prior to 2008 and debt has been relatively stable since then. Key drivers of the increase included lower interest rates, increasing farm scale, structural change towards more capital intensive operations, and the availability of interest-only loans (ABARES 2013c; ABA 2014). Higher debt in the 2000s was also supported by rising land values, with these often not backed up with higher returns that could be earned from that land (ABARES 2013c).

While the absolute level of debt has risen, lending to agriculture has grown in line with lending to other sectors of the economy (Figure 16). Further, higher debt levels, in aggregate, do not necessarily imply financial difficulty for the sector (as opposed to individual farms in difficulty). For many farms, the additional debt has been used to finance new land purchases and capital improvements (ABARES 2013c). Higher performing farms tend to carry more debt, with the average ratio of debt to total assets at around 16 per cent for the top 25 per cent of broadacre farms, compared to 9 per cent for the middle 50 per cent and 11 per cent for the bottom 25 per cent in the five years ending 2012–13 (ABARES 2014d).

Despite higher debt levels, the ability of most farms to service this debt appears to be improving, although this is not always the case. Higher farm receipts and lower interest rates have resulted in a decline in the proportion of farm receipts needed to cover interest payments from around 12 per cent for broadacre farms and 10 per cent for dairy farms in the late 2000s to around 7 per cent for broadacre farms and around 8 per cent for dairy farms in 2013–14 (ABARES 2014e). The proportion of broadacre farms with relatively low additional borrowing capacity (equity ratio of less than 70 per cent) and relatively high debt servicing commitments (interest-to-receipts ratio exceeding 15 per cent) is estimated to have been 6 per cent in 2013–14, down from 8 per cent in 2006–07. This is well below the highs of around 12 per cent recorded in the early 1990s. Around 11 per cent of dairy farmers had low additional borrowing capacity and high debt servicing commitments in 2013–14 (ABARES pers. comm. 2014), down from 18 per cent in 2009–10 (ABARES 2014e).

For some farms, debt is at unsustainable levels, at least during times of poor cash flow. Notably, impaired loans have risen over the last two years and, according to the Australian Bankers’ Association, in 2013 they accounted for around 3 per cent of loans nationally (Figure 17). This is slightly above levels experienced for other Australian businesses in 2010, following the Global Financial Crisis. Impaired loans may be significantly higher than the national average in some parts of the sector and some geographical areas. The Government agrees that greater information about the extent and distribution of debt in Australian agriculture is important.

The northern Australian cattle industry has been particularly affected by financial stress—due to a combination of drought and the mid-2011 government-imposed disruption to live cattle exports to Indonesia, which resulted in lower cattle prices, falling pastoral property valuations and consequently higher debt-to-equity ratios. At 30 June 2013, northern Australian beef industry farms held an estimated $3.7 billion in debt, which represented 70 per cent of total aggregate farm debt held by Australian beef industry farms (despite the industry accounting for only 53 per cent of the total value of sales by beef industry farms) (ABARES 2014d). The proportion of farm receipts needed to meet interest payments has remained above 16 per cent for northern beef industry farms each year since 2007–08 (Thompson & Martin 2014). In comparison, the proportion of farm receipts needed to meet interest payments for broadacre farms nationally has been below 10 per cent through this period (ABARES 2014f).

Figure 16 Bank lending to agriculture

Note: Total bank lending to rural business adjusted for consumer price index (CPI) base March 2014.

Source: RBA 2014g, ABS 2014g

Figure 17 Arrears on bank lending

Source: ABA submission IP687

The Government is concerned about rural debt levels and farm debt servicing difficulties for some farmers. In response, the Government has introduced farm finance at concessional interest rates through the Farm Finance Concessional Loans Scheme until June 2015 to facilitate the restructuring of debt for long-term viable farms. Under the Farm Finance Concessional Loans Scheme, eligible farm businesses can apply to refinance up to half of their existing commercial borrowings in the form of a loan with a reduced interest, or concessional, rate for a maximum of five years. Importantly, by restructuring existing debt, the loans do not add to a farm business’s overall debt.

Banks have an important role to play in assisting farmers in financial difficulty. Farmers and banks usually work together to alter the terms of a loan if the farmer faces a downturn in earnings. While some stakeholders indicated that banks increased interest rates for farmers with high financial risk, there are also examples of competition between banks resulting in reduced interest rates for   
well-performing farmers. Farm businesses with lower financial risk should be able to access lower rates of interest than those with higher financial risk.

It is industry practice to try to resolve the repayment of debt without relying on the legal rights under a mortgage contract (ABA 2014). Banks encourage their customers to use Rural Financial Counsellors and independent mediators to help reach agreement on repayment of debt. The Rural Financial Counselling Service (RFCS) programme provides grants to State and regional organisations to provide free rural financial counselling to primary producers, fishers and small rural businesses who are suffering financial hardship and have no alternative sources of impartial support. However, farmers who do not meet the eligibility criteria for this programme may also benefit from external advice. The Government is considering whether farmers have access to the advice and information they need through private advisers or if there is a further role for government. Some stakeholders indicated their preference for a nationally consistent, and possibly mandatory, approach to farm debt mediation, with arrangements applying in New South Wales offered as a possible model. There may be an opportunity for the Australian Government to work with State and Territory governments and financial institutions to explore this proposal.

Alternatives to bank debt as a key source of finance are emerging. Options for bringing external equity capital into agriculture may offer a number of advantages, including spreading risk more broadly, helping with intergenerational transfer of assets and giving investors broader diversification options. Some options may also help new entrants get a foothold. For example, share farming or leasing allows young farmers to get experience and contacts, while corporate farming might allow young farm workers or managers to slowly accumulate capital through employee share schemes.

Alternative models can combine the benefits of attracting larger scale and institutional investment while still retaining family ownership. For example, a number of cooperatives have raised funds either through channelling funds from institutional investors via leasing arrangements or through cooperative capital units. As suggested by King & Wood Mallesons (submission IP527), models like those might also help to fill gaps in provision of finance from more traditional sources, like equipment finance. Other models which could be pursued include special purpose vehicles holding passive minority equity stakes across a range of farms, securitisation of bank rural debt portfolios, or crowd-sourcing.

At present large scale external equity investment in the sector, such as from superannuation funds or other institutional investors, is limited. This may, in part, be due to a lack of liquid investment options. Less than 20 per cent of farm businesses are companies or trusts (ABS 2013e) and very few are listed on the stock exchange or available for external investors. Investors often need to purchase a farm in its entirety to get exposure. Institutional investors also need clear and transparent performance and management information, which is not widely available in family-held businesses. They also seek large investments in order to justify the costs of due diligence. New thinking would have us working with superannuation funds to create a product where the farmer gives superannuation equity for concessional access to finance.

Relatively low returns, high volatility of returns and a relatively poor track record of experience of investing in the sector are making some institutional investors wary. For example, some funds had bad experiences with certain managed investment schemes that were motivated by short-term tax considerations and involved, in some cases, excessive and opaque fees.

In order for new agricultural areas to be opened and developed—including in northern Australia—there will be a need to attract new investment to agriculture. Investors will need to see the possibility of earning returns that are at least as high as alternative investments and that cover the risk of these new ventures. Developing appealing investment options will be critical in attracting capital. This could potentially involve securing markets for future production upfront, through   
off-take agreements with large commodity buyers, thereby providing greater certainty for investors.

### Business structures

More than 95 per cent of Australian farms[[16]](#footnote-16) are family owned and operated (ABARES 2013d). This compares with 94 per cent in the United States (USDA ERS 2013). Australian family owned and operated farms account for 77 per cent of farmland operated by broadacre farmers in Australia, with 90 per cent of Australian farmland dedicated to broadacre farming (ABARES 2014d). The most common forms of farm businesses[[17]](#footnote-17) are partnerships and sole proprietorships (which combined make up around 80 per cent of farms). Partnerships and sole traders tend to be smaller—63 per cent of partnerships and 85 per cent of sole traders had gross turnover of less than $200,000 in 2011–12, while only 46 per cent of companies had turnover below this amount for the same year (ABS 2013e).

High-performing Australian farms, as measured by rates of return on capital, tend to be larger. Between 2007–08 and 2011–12 top performing broadacre farms were on average around 2.1 times larger than middle performing farms in terms of scale of operation and 2.9 times larger in terms of total cash receipts (ABARES 2013b). Generally, larger farms generate higher receipts and have lower costs relative to the amount invested. Larger farms may be better able to capture productivity gains (Nossal et al. 2008). Appendix C provides further information on the characteristics of top performing farms.

Economies of scale and greater commercial focus sometimes can be achieved with business structures that leverage size and collaboration such as partnerships, companies or cooperatives. Share farming, leasing and securing external investment funds offer additional options for combining financial and management capital within a farming enterprise. The appeal of each business model depends upon governance, scale of operation and investor objectives. Achieving scale does not necessarily have to involve relinquishing control to a corporate head office in the city. A number of collaborative farming models, like equity partnerships, successfully operating in Australia retain local control (for example, see Box 1 in the Overview).

For larger scale businesses, cooperatives also offer opportunities to pool capital and achieve economies of scale and have many of the same advantages as company structures. However, cooperatives have the additional benefit of retaining direct ownership with the family farm and can assist with keeping smaller and medium sized operations viable, which in turn can help maintain local communities.

Some of Australia’s largest agricultural firms are cooperatives—including CBH Group and Murray Goulburn Co-operative Co Limited. Five large Aboriginal pastoral stations are joining forces to attract foreign investment and create jobs, with plans to expand further. The Aboriginal Pastoral Co-op aims to pool resources between stations to produce and sell cattle year round, help conduct international business and marketing and employ more Indigenous workers (McConnnon & Bell 2014).

State and Territory governments have agreed to implement the Co-operatives National Law (CNL), which replaces an ageing and fragmented legislative system. Cooperatives registered in a jurisdiction that adopts the CNL, or passes consistent legislation, will have reduced compliance costs and will be automatically able to carry on business in other states and territories that adopt the CNL (or consistent legislation). The CNL also provides better access to external capital funding by allowing a type of hybrid security—cooperative capital units—to be issued. Policies to promote cooperatives are discussed further in Chapter 4 – Competition and Regulation.

Regardless of the business structure, successful farms require good management, a sound commercial focus and access to investment capital. Greater understanding of the different models that are available would allow farmers to make more informed decisions about the best model for their circumstances. Identifying new ownership and management structures or alternative financing models is central to attracting more investment from both domestic and international sources of capital.

### Business decision-making

In addition to larger scale of operation, higher performing farms tend to invest more in expanding their business and have a higher level of management capability. This is consistent with findings from Management Matters (Green et al. 2009), which highlighted the link between increases in managerial capacity and the ability of an organisation to be more innovative and strategically focused. More generally, there are a number of skills that have been found to improve business performance, including: financial planning, management of people, change and innovation, management of natural resources and climate impacts, work–life balance, negotiation and succession planning (Australian Institute of Management 2003; Bone et al. 2003; Keogh et al. 2011; and PC 2009).

Small business operations tend to have simple management structures (usually with no specialised finance, personnel or regulatory/legal managers or systems); limited resources, including finance, staff and skills; and a focus on the local market or a single State or Territory (PC 2013). Limited resources, capability and time mean that most small business operators are often focused on   
day-to-day operations rather than on looking for opportunities to grow or improve performance. The Government could consider a greater role for Rural Financial Counsellors in this respect. Such services would be especially valuable for young farmers or new entrants to farming who can struggle to get a foothold in the industry. Research on factors that improve business performance could also be used to inform the work of advisory and support services.

### Taxation

The Government is committed to having lower, simpler, fairer taxes that support higher economic growth. This will support productivity, investment and competitiveness in the agriculture sector.

Taxation liabilities for the agriculture, forestry and fisheries sector averaged $497 million per year over the four years to 2011–12 (ATO 2011; 2012; 2013; 2014). According to the Productivity Commission (2014b), the average benefit received by primary producers (including agriculture, forestry, fishing and primary production support services) from tax concessions was $392 million per year for the four years to 2011–12. This compared to average budgetary tax concessions of $353 million per year over the same period for the mining sector and $765 million per year for the manufacturing sector, which had average annual tax liabilities over the four years to 2011–12 of $8.4 billion and $23.1 billion respectively.

The Government has committed to a new era of reform in Australia aimed at lifting productivity and making the most of the underlying potential of our economy.

The Government’s White Paper on the Reform of Australia’s Tax System will produce a comprehensive Tax White Paper, to provide a considered, longer-term approach to taxation that is consistent with the Government’s core principles of fairness and simplicity. As part of this process, the Government intends to release an initial discussion paper inviting comments from the public. The Government will take any proposed tax changes flowing from the Tax White Paper to the Australian people at the next election.

Suggestions to improve the business, finance and taxation arrangements in the agriculture sector were numerous reflecting the high priority that stakeholders attach to reform in these areas.

## Finance, business structures and taxation: What the Government is already doing

The Government has a number of policies and programmes in place to facilitate sound business decisions on structures and financing:

**Rural Financial Counselling Service:** The RFCS provides information to help farmers in financial difficulty.

**Concessional loans:** The Government is providing concessional loans through the Farm Finance Concessional Loans Scheme until June 2015.

**Farm debt mediation:** The Government is considering options for a nationally consistent approach to farm debt mediation and will engage relevant stakeholders.

**Financial System Inquiry:** The Government is conducting a Financial System Inquiry, which will set out a blueprint for the future of our financial system.

**Advice on business structures:** The Government provides advice on business structures through the business.gov.au portal, the Australian Taxation Office and the Australian Securities and Investments Commission. Some State governments also provide information on alternative business models.

**Business.gov.au:** The Government developed anonline, whole-of-government, single business service resource providing information to plan, start and grow business.

**Industry Growth Centres:** The Government will establish, as part of its Industry Innovation and Competitiveness Agenda, five Industry Growth Centres including one for food and agribusiness from early 2015. It will be an industry-led organisation with a focus on addressing sector-wide impediments to productivity and competitiveness.

**Crowd-sourced equity funding:** The Government will consult on a proposed regulatory framework for innovative start-ups and other small enterprises seeking to raise initial or early stage capital.

**Tax concessions:** In addition to a broad range of general and small business tax concessions, farmers are able to access provisions introduced specifically for primary producers:

* **Income averaging** allows primary producers to even out income across years so their tax liability is more aligned with that of a taxpayer on a stable income;
* **Farm management deposits** (FMDs) allow primary producers to carry over income from years of good cash flow and draw down on that income in years when they need cash. This enables primary producers to defer the income tax on their primary production income from the income year in which the deposit is made until the income year in which the deposit is repaid;
* **Non-commercial business losses**—where assessable income excluding net capital gains from other sources is less than $40,000, primary producers do not need to satisfy the normal requirement to meet one of the four business tests for offsetting business losses against other accessible income;
* **Immediate deductions for landcare operations**, such as drainage work to prevent salinity, erosion control activities or erecting fences under an approved management plan;
* **Three-year write-off of water facilities**, covering dams, tanks, bores, wells, irrigation channels, pipes and pumps;
* **Ten-year write off for electricity connections and telephone lines,** which are far more expensive to install in rural areas compared to urban areas;
* **Accelerated deduction for horticultural plants,** including immediate deductibility for plants with an effective life of fewer than three years;
* **Deferral of profit on the forced disposal or death of livestock**—for example, sale due to drought, fire or flood;
* **Insurance recoveries,** which allow an assessable insurance recovery to be spread in equal instalments over five years;
* **Deferral of profit on double wool clips**—if, due to fire, flood or drought, a primary producer is forced to undertake an early shearing and therefore sells two wool clips in one income year, the grower can elect to defer the profit on sale of the second clip to the following year; and
* The **wine producer rebate** entitles wine producers to a rebate of up to $500,000 each financial year in respect of the Wine Equalisation Tax (WET), a value-based tax on wine consumed in Australia that applies at 29 per cent of the value of the wine at the last wholesale sale (before adding GST).

**Agricultural levies:** The Australian Government also uses its taxation powers to impose, collect and appropriate a range of primary production levies to fund R&D and other industry activities in instances of genuine market failure. For example, the levy for Emergency Animal Disease Preparedness ensures industry shares the costs of early detection and effective responses to animal disease with Commonwealth, State and Territory governments. This requires the demonstration of majority industry support.

**ATO discretion:** The Australian Taxation Office can help people affected by drought and other natural disasters by allowing more time to pay tax debts or arranging for tax debts to be paid in instalments, without incurring interest charges. In special circumstances, the Commissioner for Taxation may release individuals from payment of income tax, fringe benefits taxes and some other taxes where it is shown that payment would cause serious hardship. The Tax Office considers a taxpayer’s circumstances on a case-by-case basis.

**Company tax cut:** The Government has committed to lowering the rate of company tax from 30 per cent to 28.5 per cent from 1 July 2015. Around 7 per cent of Australian farms operate as companies and will benefit from this change (ABS 2013e).

**Fuel tax credits scheme**: The Government is committed to maintaining the fuel tax credits scheme. Some stakeholders have argued for extending the credit to off-farm vehicle use. However, such a move would be inconsistent with the principal reason for the rebate, which is to ensure that inputs to production are not taxed.

**Tax White Paper:** The Government will prepare a comprehensive White Paper on the Reform of Australia’s Tax System (Tax White Paper) that will be completed before the end of 2015.

## Finance, business structures and taxation: What stakeholders proposed the Government should consider

**Policy idea 10—Improving access to finance**  
The Government wants effective finance mechanisms to provide farmers with the capital they need to grow. Stakeholders suggested a number of options for assisting Australian farmers to better meet their financing requirements, including:

**a. Permanent concessional lending**—Stakeholders suggested extending the Farm Finance Concessional Loans Scheme on a permanent basis to improve sector profitability and support farmers facing difficult circumstances.

The current temporary concessional loan scheme has been helpful in assisting long-term viable farmers restructure their debt and invest in productivity improvements. Some stakeholders suggested that the scheme had increased competition for the banks, encouraging them to lower their interest rates. However, there is a risk that a permanent concessional lending facility would encourage farmers to take on more debt, crowd out commercial lenders and impede adjustment in the agriculture sector. It would be important to ensure that any permanent scheme was focused on long-term viable farms, or it will only serve to prop up farms that are underperforming and subject to high financial risk.

Stakeholders suggested creating a rural reconstruction bank to provide concessional loans. The Government has no plans to progress this proposal. The issue is currently being considered by the Senate Economics Legislation Committee.

Some stakeholders suggested the development of an income-contingent loans scheme, either for the broader agriculture sector or for specific groups such as young farmers. This would involve loans with debt repayment directly linked to income (for example, to reduce or stop interest payments during droughts). The Government encourages the financial sector and industry to continue to consider such financial innovations. However, a Government-supported scheme of this nature would have the same problems as the permanent provision of concessional loans, discussed above.

**b. Incentives for institutional investment in agriculture**—Greater investment in the agriculture sector by institutional investors, including superannuation funds, could potentially provide additional capital to expand the sector and take advantage of new growth opportunities. Some options suggested by stakeholders included:

i. *New superannuation products for farm investment*. Stakeholders suggested that novel financial instruments could be developed to allow superannuation funds to invest directly in farm businesses. This could involve the creation of superannuation products that exchange cash for partial equity in a farm. Such a concept could assist in sharing risks faced by primary producers while providing equity capital to farm businesses to facilitate the adoption of productivity measures or to allow them to increase scale. However, given the primary purpose of superannuation funds is to generate returns to fund retirement, it would be important that any investment into farm business provided competitive outcomes relative to other investments.

ii. *Government bonds for agricultural infrastructure*. Stakeholders suggested the Government could issue special bonds to finance agricultural infrastructure investments, with taxation concessions for investors. Similarly, bonds might also be developed and issued by a private sector financial intermediary—with these available for sale to investors, including superannuation funds. Issuing special Government bonds to finance agricultural infrastructure could increase the Government’s overall cost of borrowing and fragment the government bond market.

**Policy idea 11—Improving tax system efficiency and equity**

It is important that Australian farmers are subject to fair taxation arrangements that recognise the unique circumstances of farming. In general, taxation policy changes should be considered in the context of the Government’s Tax White Paper. However, specific policy changes that relate only to the agriculture sector could be considered in the Agricultural Competitiveness White Paper. Stakeholder suggestions included:

1. **Non-commercial loss rules**—Stakeholders suggested that the Government:

i. *Remove the $250,000 maximum income threshold or raise it to $1 million*. Currently, taxpayers can offset losses from a business against other income, like wages, if:

● their other income is less than $250,000; and

● they meet a business test, by proving that either: the business produces assessable income of at least $20,000, has made a profit in three of the past five years, uses real property of at least $500,000 or uses other assets of at least $100,000.

There is presently no maximum income threshold applying to an individual taxpayer seeking to offset losses from passive investments, including in rental properties or shares (for example, through negative gearing). Hence, taxpayers with income in excess of $250,000 may be discouraged from directly investing in the rural sector at a time when agriculture is hungry for capital.

The threshold was introduced in 2009 to prevent high-income individuals from offsetting deductions from non-commercial business activities against their assessable income. The $250,000 threshold applies to all taxpayers who seek to apply the non-commercial loss rules.

The Commissioner of Taxation can exercise discretion to waive the non-commercial loss rules in cases where the taxpayer can show that the business is genuinely commercial or if there are special circumstances that stop the business being profitable in a given financial year. This may include poor seasonal conditions that prevent a business, such as a farming business, from meeting the assessable income test in a particular year.

Removing or increasing the $250,000 threshold could stimulate investment in rural properties, with anecdotal evidence that the introduction of the threshold in 2009 accompanied a softening in the rural property market for some districts (particularly those close to major population centres). However, increased land prices may discourage new and younger industry entrants by resulting in higher capital start-up costs and lower annual rates of return on farm investments.

ii. *Raise the exemption threshold*. Primary producers are not required to meet the business tests outlined above if their assessable income (excluding any net capital gains) is less than $40,000. Raising this threshold would allow more farm businesses to use the   
non-commercial loss rules and increase the attractiveness of rural properties to potential new industry entrants. However, this could discourage farm consolidation and scale efficiencies if it were to result in smaller-scale farming.

More generally, relaxing the non-commercial loss provisions may increase land values and encourage less productive use of farming assets by investors that are primarily driven by taxation benefits.

1. **Increasing thresholds for the Farm Management Deposits Scheme**—Stakeholders suggested a number of changes to the Farm Management Deposits (FMD) scheme that would provide farm businesses with greater flexibility in managing variations in their income. Based on these suggestions, the Government is seeking views on the following changes to the scheme.

i.*Increasing the $400,000 deposit limit*. The FMD scheme is currently limited to deposits of up to $400,000 per individual. This could be increased, for example, to $1 million. A higher cap could encourage increased use of the scheme as a risk management tool. This may benefit farmers with larger, variable income receipts (for example a crop producer receiving a bumper crop once every few years) so that they can become less reliant on traditional forms of drought assistance.

ii. *Increasing the $100,000 off-farm income cap.* The Government has recently increased the off-farm income cap from $65,000 to $100,000, with effect from 1 July 2014. This recognised the need to encourage farmers to adopt risk management practices, which could include both using the FMD scheme to manage the risk associated with farm income, and having an alternative income source to manage the risk of adverse events, such as drought. The Government is interested in whether a further increase to the cap is needed at this time. Further increasing the off-farm income cap would ensure that farmers were not penalised for seeking off-farm income as an alternative risk management practice.

iii. *Extending eligibility of the FMD scheme to companies and trusts.* Extending the FMD scheme to companies would allow companies with income derived from farming to manage risk by deferring the payment of tax to a later income year. In order to limit this to primary production income, a change in taxation arrangements for companies to differentiate between primary production and non-primary production income would be required. This could increase the complexity of company tax assessments. However, there may be little taxation benefit in extending FMDs to companies since the tax rate paid on the income will be the same regardless of which year the income is recognised for tax purposes.

While farmers who are beneficiaries of a trust can access the FMD scheme, the trust itself cannot hold an FMD. Stakeholders have communicated that this restricts the ability of the trust to hold profits over a financial year for the purpose of being able to reinvest it back into the business. In trusts, the profits distributed to beneficiaries are taxed at the beneficiary’s marginal tax rate and any profits held by the trust are taxed at the top marginal tax rate. Allowing a trust to hold an FMD would provide an additional tax benefit to an agricultural trust, relative to other trusts, and would be a departure from the longstanding taxation principles applying to trusts.

iv. *Re-establishing early access provisions for times of drought.* Before Exceptional Circumstances (EC) arrangements ceased on 30 June 2014, the FMD scheme had early access provisions. This benefited FMD holders affected by an EC declaration by allowing them to withdraw their funds within 12 months of deposit, without losing the tax benefits of the scheme. The Government invites submissions on whether an early access provision is necessary and on the conditions for early access.

**c. Depreciating farm plant and equipment**—Stakeholders have suggested the need to change the effective life schedules for farm plant and equipment to better reflect the period of usage and timing of replacement. Making sure that the period over which an asset can be depreciated for tax purposes matches the actual on-farm life of the asset could encourage farmers to upgrade to newer technologies more quickly and so enhance productivity. For example, Protected Cropping Australia (submission IP601) suggested that the current schedules that apply to greenhouses were too long.

Taxpayers, including farmers, can ordinarily apply a range of methodologies when depreciating assets. This enables them to either use the accepted depreciation schedules or alternatively adopt an approach best suited to their individual circumstances. A suggestion for 100 per cent write-off in one year of new drought preparedness water infrastructure and new fodder storage is discussed in Chapter 8 – Drought and a further proposal for 150 per cent depreciation over three years for water infrastructure is discussed in the Chapter 9 – Water and Natural Resource Management.

**d. Zone Tax Offset**—Some stakeholders proposed changing the boundaries of the eligible zones for the Zone Tax Offset to include a greater range of farm areas and for the offset to be increased. It was suggested that tax zones recognise that people living in rural and remote areas do not have access to the same level of publicly funded services as people in metropolitan areas—for example, health, education and transport amenities. Redefining the zones so that they are focused on areas that reflect this could help reduce financial pressures on farmers who are socially and economically disadvantaged by limited access to local services, high transport charges and general cost of living pressures not prevalent in urban regions.

The offsets were introduced in 1945 to recognise the disadvantages of residing in specific areas of Australia including harsh climatic conditions, isolation and the high cost of living compared to those of other parts of Australia. The specific areas consist of:

● Zone A, which covers nearly the entire continent above the 26th parallel and some offshore islands with the exception of approximately 50 per cent of eastern Queensland. Zone A includes Darwin.

● Zone B, which is deemed to be less remote and includes the remainder of the continent except for highly populated areas. Cairns, Townsville and Mackay are included in Zone B.

There are also special areas in both zones deemed to be most remote, which are more than 250 kilometres from the nearest urban centre and had a population 2,500 or more at the 1981 census.

Zone Tax Offsets are also being considered in the context of the White Paper on Developing Northern Australia. The Green Paper on Developing Northern Australia, released on 10 June 2014, noted that changes targeting a specific region needed to take into account budgetary impact, complexity and legislative limitations. Further, the Australian Constitution places constraints on what laws may be validly enacted by the Parliament, with federal taxation unable to provide differential treatment between States.

**e. Tax loss trading**—Some stakeholderssuggested that allowing trading of tax losses to other businesses could assist farm cash-flow in low-income years. This was raised most commonly in terms of banks buying tax losses in exchange for debt reduction or interest rate relief. This would be unlikely to be a dollar‑for‑dollar exchange, as the benefit to the purchasing business would be the tax savings they could make and they would also expect to do better than this to cover the transaction costs. Such an approach could introduce significant complexity to the tax system and encourage loss-making.

1. **Income tax averaging**—Under current tax averaging provisions, farmers can elect to even out income and tax paid over a maximum of five years. This reflects the high variability of farm income and ensures that farmers do not pay more tax over a number of years than taxpayers on comparable but steady incomes. At present, farmers who opt out of the tax averaging provisions cannot re-enter. Stakeholders suggested the current approach ignores the fact that farm business circumstances can change significantly and that a previous decision to not use the tax averaging provisions may not be the right decision under new business circumstances. They noted that allowing farmers to opt back in after a period of time (for example, 10 years) may take account of changing circumstances.

**g. Wine Equalisation Tax**—Some stakeholders suggested that the Wine Equalisation Tax (WET) rebate should be reduced or better targeted and integrity measures tightened. The rebate is estimated to cost $320 million in 2013–14 (Australian Government the Treasury 2014). The WET is an ad-valorem tax applied to all wine sold in Australia. It was introduced on 1 July 2000 when wine became subject to the GST and was levied at 29 per cent. Wine was previously subject to wholesale sales tax at 41 per cent. The WET is levied at the wholesale level with the GST applied to the WET-inclusive sale price. Wine exports are not subject to either GST or WET.

The WET producer rebate scheme provides a rebate of up to $500,000 to each wine producer (or group of producers) each financial year. It replaced a smaller WET cellar door sales rebate. The rebate effectively exempts a wine producer’s first $1.7 million of wholesale wine sales from WET each year.Due to the Government being required to extend the scheme to New Zealand, around $25 million was rebated to New Zealand producers in 2011–12.

Better targeting the WET rebate could potentially free-up resources, which could be applied to other Government priorities. We are seeking stakeholder views on possible reforms to the scheme’s operation.

**Policy idea 12—Farm Business Improvement**

Farm businesses need to consider the most appropriate business structures for their circumstances, and access business information and rural services that allow them to operate at their best. To promote more competitive farm businesses with better support for farmers, stakeholders suggested:

**a.** **Business advice**—Stakeholders suggested that access to independent expert advice and assistance would improve their decision-making, assist with future business directions and help them develop strategies to improve business performance and competitiveness. Advice was sought on business structures, financing options and models, succession planning, application of new innovations, risk management, skills development and workforce planning.

One option would be to extend the existing Entrepreneurs’ Infrastructure Programme to the whole of the agriculture sector. The Programme uses advisers, drawn from industry, to ensure businesses get the advice and support they need to improve their competitiveness and productivity. The Programme’s business evaluation service provides a free, whole-of-enterprise analysis carried out on-site by skilled and experienced advisers who are usually former executives or managers from industry. Following completion of the business evaluation, a business can apply for a Business Growth Grant to reimburse up to half of the cost (up to a maximum of $20,000) to make business improvements recommended in the business evaluation report.

The Programme is focused on targeting support to businesses in five identified growth sectors of the economy as well as the enabling technologies and services that support these sectors. The food and agribusiness sector is one of the growth sectors supported by the Programme, and is focused on post farm gate businesses. To access programme services businesses in this sector located in remote Australia are required to have a turnover between $750,000 and $100 million and all other areas between $1.5 million and $100 million. Businesses are also required to have an Australian Company Number.

The Government is interested in stakeholder views on whether the Entrepreneurs’ Infrastructure Programme is the right means to support small and medium businesses in the agriculture sector. This could involve widening the existing eligibility criteria to include, for example businesses involved in the primary production of food—such as farming or fishing—as well as taking account of the unique features of agriculture—such as the prevalence of very small businesses and the dominance of sole trader and partnership business models.

**b. Rural Financial Counselling Service (RFCS)**—The Government is interested in stakeholder views on expanding the support services role of the RFCS. The RFCS currently provides free financial counselling to primary producers and small rural businesses that are suffering financial hardship and have no alternative source of impartial support.

Under an expanded model, the RFCS could act as a first point of contact and referral service for all agricultural businesses, including to promote learning and extension activities and provide links with mental support services. The function of the RFCS could include assistance for farmers to access external resources and referral services on ways to improve their personal wellbeing and business sustainability as well as direction on where to access extension services. The RFCS support line would provide links to existing support mechanisms from government and industry providers and could be used as a reference point for agricultural resources and research.

The Government has tasked the National Rural Advisory Council (NRAC) to undertake a review of the RFCS programme. In particular, NRAC will assess the need and awareness of the service, its effectiveness, current structure and future role. The review is due to report in late 2014.

**c. Collaboration programme**—Stakeholders suggested there may be merit in establishing a programme to encourage collaboration between agricultural businesses by providing a networking service to bring interested parties together. Stakeholders recognised the value of working together in negotiations with other parties to improve their bargaining position. Collaboration or formal cooperation between businesses can also generate economies of scale (for example by being able to pool machinery) and facilitate business development through sharing information, experiences and learning. Such collaboration can be in breach of the CCA, but there is a provision (section 88 of the CCA) that allows the ACCC to authorise actions such as collective bargaining when the public benefits would outweigh the detriments to competition. The Government could encourage collaboration by providing a networking service that brought interested parties together. It could also include helping businesses find collaboration partners at different points in the supply chain to help realise benefits from vertical integration.

# Foreign investment

Foreign investment has helped to build Australia’s economy, including our agriculture sector, supporting economic growth, jobs and prosperity. Foreign investment has historically been an important source of capital for agriculture and will continue to be so in the future. Over coming decades, significant investment in capital will be required to generate growth and productivity in Australian agriculture (Port Jackson Partners 2012). Some of that capital will need to come from offshore because domestic sources of capital are insufficient.

Community feeling on the issue of foreign investment is strong. Three in five Australians are opposed to foreign ownership of agricultural land (Oliver 2014). Some stakeholders felt that further restrictions on foreign investment were needed while others argued we needed to attract more foreign investment to improve competitiveness. Poor information on the extent, location and origin of foreign investment in Australian agriculture has constrained public debate around the issue of foreign direct investment. The Government recognises community concerns about the sale of agricultural land and agribusinesses to foreign investors and is committed to increasing scrutiny and transparency around foreign ownership of agricultural land and agribusinesses.

## What stakeholders said:

*‘There is considerable debate on how to fund the advancement of the sector with the wariness to seek foreign investment predominately driven by lack of understanding, poor data and media perceptions.’* **Royal Agricultural Society of Victoria, submission IP496**

*‘Australia earlier benefited from foreign investment but now other sovereign nations are seeking to benefit from our efforts and shore up food security for their nation*.’ **Catherine J. Kelly, submission IP219**

## Outline of the issue

Australia has traditionally relied on foreign investment to meet shortfalls in its domestic savings. The beef industry has developed over time with investment from countries such as the United Kingdom, Argentina, the United States and Japan (Moir 2011). Investors from the United States also contributed expertise, technology and money to develop the cotton industry in Narrabri, New South Wales, dramatically changing the scale and intensification of cotton farming in Australia (Henzell 2007).

Australia’s foreign investment regime is very open, consistent with Australia’s requirement for high inflows of foreign investment based on a historical excess of investment over savings. Foreign investment in agriculture is important for growth and innovation, for creating links to global value chains, and it can contribute to the prosperity of local businesses, rural communities and the Australian economy. Foreign investment can continue to play an important role in expanding production in the sector and potentially help to boost returns at the farm gate. Without foreign investment, production, employment and income would all be lower.

Comprehensive information on foreign investment in Australian agriculture and agribusiness is limited (ABARES 2011; The Coalition 2012; NFF 2013). Based on what is available, just over 99 per cent of Australian farm businesses, 90 per cent of farmland and around 86 per cent of water entitlements were fully Australian-owned as at December 2013 (ABS 2014h). According to the Foreign Investment Review Board (FIRB), the value of approved foreign investment proposals in the agriculture, forestry and fishing sector was $2.9 billion in 2012–13, around 2 per cent of the total value of approved investments (Figure 18) (FIRB 2014). The largest sources of investment, in order of value, were the United States, Switzerland, China, Canada and the United Kingdom.

Figure 18 Total approvals by value by industry sector in 2012–13, proposed investment

Source: FIRB 2014

Community feeling on this issue is strong, with mixed views received from stakeholders. Some stakeholders felt that further restrictions on foreign investment were needed, including lowering thresholds for review of the acquisition of agricultural land and agribusinesses. Others saw the need for greater consideration of food security in national interest considerations[[18]](#footnote-18). Some argued that Australia needed to attract substantial foreign direct investment in agriculture[[19]](#footnote-19). Almost all stakeholders agreed that having greater information about the extent of foreign investment in Australian agriculture was important.

The Government welcomes foreign investment that is in Australia’s national interest and supports a case-by-case approach to considering foreign investment proposals. The Treasurer can block foreign investment proposals found to be contrary to the national interest or impose conditions or undertakings on an investment to address national interest concerns.

Consistent with its 2013 election commitments, the Government has already introduced some additional measures to strengthen the screening process for foreign acquisition proposals related to agricultural land and agribusinesses. These include the December 2013 appointment to the FIRB of Mr Patrick Secker, bringing experience in agriculture to the board.

The Government has also committed to developing a national register of foreign ownership of agricultural land and lowering the thresholds for FIRB scrutiny of proposed foreign private sector purchases (the threshold for all state-owned enterprises will remain at zero). Provision for the new thresholds of $15 million for agricultural land and $53 million for agribusinesses was included in the free trade agreements negotiated and concluded with Japan and the Republic of Korea.

At present foreign investment is reviewed to ensure it is not contrary to Australia’s interests. National interest considerations include national security, competition, other Australian Government policies, impact on the economy and community and character of the investor. Where a proposal involves a foreign government investor, the Government also considers whether the investment is commercial in nature or whether the investor may be pursuing broader political or strategic objectives that may be contrary to Australia’s national interest.

Stakeholders suggested that we needed to better ensure that foreign investment had a positive impact on the sector (NFF submission, IP536), and that this may help in alleviating community concerns around foreign investment. The Government seeks views on options to better promote, and concentrate on, productive new greenfield investment that creates new assets, substantially adds value to an existing asset or positively changes the nature of that asset.

## Foreign investment: What the Government is already doing

**Foreign land ownership:** The Government has committed to establishing a register of foreign ownership of agricultural land to improve transparency.

**Foreign Investment Review Board** (FIRB): The FIRB examines foreign investment proposals and advises the Treasurer on these proposals. The Government is improving FIRB scrutiny of investment proposals in the agriculture sector, including by:

* improving the FIRB’s expertise in, and focus on, agriculture by appointing an agriculture industry representative to the FIRB board; and
* consistent with its 2013 election policy, the Government is committed to lowering the thresholds for FIRB scrutiny of proposed foreign private sector purchases of farm land and agribusinesses (the threshold for all state-owned enterprises will remain at zero).

**Attracting foreign investment:** Austrade works to promote, attract and facilitate productive foreign direct investment into Australia, to help build Australian industry and create jobs and growth. Most recently, this has included:

* working with States and Territories to nominate agribusiness and food as one of five national investment priorities; and
* appointing a senior investment specialist for agribusiness and food to help facilitate proposed investments that will contribute to industry growth.

## Foreign investment: what stakeholders proposed the Government should consider

**Policy idea 13—Improving the transparency of foreign investment**  
The Government is currently developing a register of foreign ownership of agricultural land. Stakeholders suggested that extending the proposed register to cover water and agribusinesses would provide greater transparency of overseas investment in the Australian agriculture sector and allow for a more informed debate about foreign ownership issues around our natural resources. The register should take account of the size and value of holdings and businesses. However, additional reporting by businesses creates an additional regulatory burden. Stakeholder views are sought on the net benefits of extending the register to include water and agribusiness.

# Education, skills and training, and labour

Stakeholders emphasised that ongoing skills development, education and training was important to retain and attract new entrants to farming. The Government is supporting the education and training sector through providing higher education and vocational education and training (VET) funding. State and Territory governments also have an important role to play through the provision of secondary education in agriculture in agricultural and other colleges.

Stakeholders raised concerns about high labour costs in Australia and the need to be able to access and attract more workers, both low and high skilled. All workers in Australia should be fairly remunerated and have minimum terms and conditions for employment. We need to foster a stronger work culture in Australia, including through the Government’s ‘earn or learn’ strategy announced in the 2014–15 Budget. While jobs for Australians are a first priority, many agricultural jobs are not being filled locally and this creates a need for imported labour (AWPA 2013). The Government is interested in ways it can extend and simplify already successful visa programmes, such as the Working Holiday Maker (417) and the Temporary Work (Skilled) (subclass 457) visas.

## What stakeholders said:

*‘At Australian high schools, agriculture careers are still wrongly portrayed as unattractive, with few opportunities for advancement …There is a need for a workforce strategy to articulate the need and role for education and training and to ensure that there are well established career paths for new entrants.’* **Australian Council of Deans of Agriculture, submission IP538**

*‘There is currently no pathway for promising, but unqualified backpacker workers on 417 visas to transition to a 457 visa. Without an agriculture-related degree, backpackers on a 417 do not meet the requirements to be sponsored by a farm employer. This is despite these backpackers holding engineering, project management, electrical and business qualifications.****’* Cotton Australia, submission IP393**

## Outline of the issue

Australian agriculture is considered a highly skilled sector—with 70 per cent of the sector working as managers, administrators or professionals (compared to 40 per cent for national average). This is because the sector has a high proportion of small scale owner-operated businesses with few employees (AECgroup 2010). However, agriculture has a lower attainment of formal qualifications compared to the rest of the Australian workforce—in 2013 only 47 per cent of agricultural workers held post-secondary qualifications compared to 69 per cent of the total Australian workforce (ABS 2013f). There has been a gradual decline in the number of young farmers over the last 30 years, and farm employees are older than in other sectors of the economy—with a median age of 53 compared to 40 recorded in 2011 (ABS 2012a). This is also the trend in many developed nations, including Canada, the United States and the United Kingdom (Barr 2014).

The perceived lack of career path and ability to transfer skills can act as a barrier to enter a career in agriculture. Stakeholders pointed to the need to develop and promote clear career pathways in order to attract young people into the industry[[20]](#footnote-20).

Linking labour and skills under a broader agricultural workforce plan would be useful in:

* determining current and future skills and employment requirements of the industry;
* assessing the suitability of the education system to meet these requirements; and
* highlighting career pathways to attract future agricultural students.

The Australian Workforce and Productivity Agency’s Food and Beverage workforce study, published in October 2013, outlines the current and future skills needs of the agrifood workforce from agricultural production to food and beverage processing. In July 2014, the National Farmers’ Federation submitted a proposal to Government for a National Agriculture Workforce Development Plan, including sustainable and effective long-term workforce strategies for the sector. The Government encourages industry, employers and education providers to work together to develop clearly articulated career pathways for attracting students, including through existing bodies such as the Primary Industries Education Foundation and Primary Industries Centre for Science Education.

### *Education and skills*

#### School education

Several stakeholders suggested that agriculture needed to be embedded as a core subject in our education system[[21]](#footnote-21). The Government believes that it is appropriate for agricultural issues to be integrated through the education system in a way that builds agricultural literacy.

The Government announced the Agriculture in Education initiative, in the Mid‑Year Economic and Fiscal Outlook in December 2013, and the programme commenced in mid 2014. The initiative is funding the creation of teaching resources to support teaching about agriculture across a range of learning areas in the Australian curriculum. Although agriculture is not a separate discipline in the Australian curriculum, agricultural content is available to teachers within major disciplines outlines such as science, maths, geography and history. Teachers, schools and the State and Territory governments have the flexibility to prioritise this content to provide agricultural learning to students.

Stakeholders also noted the higher cost burden of education for families in regional areas[[22]](#footnote-22). Schooling can be limited or unavailable in small regional communities that can mean children need to travel to cities or regional centres, particularly for higher education. This means farming families are often subject to costs for boarding school or assisting older children with accommodation and living costs.

Agricultural schools are also limited in regional Australia (Table 3). Additional schools in regional areas could help to lower costs for farming families. While the Government encourages this, States and Territories are responsible for schools.

Table 3 Australian schools that identify as agricultural schools

| **School (public)** | **Location** | **School (private)** | **Location** |
| --- | --- | --- | --- |
| Bass High School | Bass Hill, NSW | Catholic Agricultural College Bindoon | Bindoon, WA |
| Cleveland District State High School | Cleveland, QLD | Chevalier College | Burradoo, NSW |
| Farrer Memorial Agricultural High School | Tamworth, NSW | Emerald Agricultural College | Emerald, QLD |
| Hagley Farm Primary School | Hagley, TAS | Georges River Grammar | Georges Hall, NSW |
| Hurlstone Agricultural High School | Glenfield, NSW | Longreach Pastoral College | Longreach, QLD |
| James Ruse Agricultural School | Carlingford, NSW | New England Girls' School and St John's Co-Educational Junior School | Armidale, NSW |
| Urrbrae Agricultural High School | Netherby, SA | Northholm Grammar School | Arcadia, NSW |
| Western Australian College of Agriculture | Six campuses in WA: Cunderdin, Denmark, Esperance, Harvey, Morawa and Narrogin, | Pymble Ladies’ College | Pymble, NSW |
| Scotch College | Torrens Park, SA |
| St Brendan’s College | Yeppoon, QLD |
| St Paul’s College | Walla Walla, NSW |
| The SCOTS PGC College | Warwick, QLD |
|  |  | The Southport School | Southport, QLD |
|  |  | Tocal College, CB Alexander Campus | Paterson NSW |
|  |  | Tudor House Preparatory School | Moss Vale, NSW |
|  |  | West Moreton Anglican College | Ipswich, QLD |
|  |  | Yanco Agricultural High School | Yanco, NSW |

Notes: This table may not be a complete list of Australian schools that function as agricultural schools.   
Source: Adapted from Australian Schools Directory 2014

School-based apprenticeships are one of the most effective ways that school students can connect with employment pathways, including agriculture. Work is currently being undertaken by the Assistant Minister for Education and other stakeholders to update the 2001 vocational education in schools framework. This work will include a focus on increasing the number of school-based apprenticeships, including in agriculture.

#### Higher education

Higher education is critical, especially given the increasing complexity of managing a farm business and the importance of agricultural R&D expertise to the sector. While historically there have been declining enrolments and completions in agricultural related courses, there are signs that a shift is occurring, with the higher education sector reporting preferences for agriculture-related courses increasing by 11 per cent in 2013 (Department of Education pers. comm. 2014).

Stakeholders suggested that tertiary courses for agriculture needed to be supported by universities and well advertised to prospective students. Stakeholders suggested amending the HECS-HELP scheme to provide greater incentives to students enrolling in agriculture (for example, by reducing or removing the requirement for students to repay their HELP debts when they gain agriculture-related qualifications)[[23]](#footnote-23). The Government is interested in options to attract students to agricultural careers.

There are a wide range of professional career paths available in the food and agriculture sector that should be promoted as a desirable choice for students. The Government would encourage universities to maintain and promote agricultural courses, including clear career pathways, and to incorporate flexible learning options where appropriate.

Stakeholders suggested education providers offer flexible options such as reducing time required on campus or increasing online training. Online training will become more accessible as the National Broadband Network is rolled out. The Government encourages industry to work with education providers to tailor training to ensure formal courses meet the needs of industry participants.

#### Vocational education and training

Australia’s vocational education and training (VET) system provides people with the skills they need in the workplace and the workforce with skills to increase productivity in businesses and the economy as a whole. Central to the Government’s Industry Innovation and Competitiveness Agenda, VET reform proposals include:

* developing a national VET system that is governed effectively with clear roles and responsibilities for industry, the Commonwealth and the States and Territories and targeted and efficient government funding that considers inconsistencies between jurisdictions or disruption to the fee-for-service market;
* delivering a new model for Apprenticeship Support services; and
* establishing a single industry-led VET advisory body to drive training policies, quality assurance training packages and determine industry research priorities.

Agricultural businesses have indicated that they prefer short-course or modular training to formal qualifications (NRAC 2013; Bone et al.2003; AgriFood Skills Australia 2014). Stakeholders have suggested that funding be allocated on the basis of completed units rather than courses. The Government will seek to introduce contestable funding for developing and updating training packages to place business at the centre of the process. In addition, the new Government Industry Skills Fund will be geared towards the flexible delivery of training necessary to improve industry competitiveness, including developing skill sets.

AgriFood Skills Australia looks at skills and workforce development across five main sectors: rural and related industries (including agriculture, horticulture, conservation and land management, and animal care and management), food, beverage and pharmaceutical processing, meat, seafood and racing (greyhound, thoroughbred and harness). AgriFood is focused on skills and training, predominantly in the VET sector. Although it creates linkages with schools and higher education, Agrifood’s mandate does not cover these education levels. Stakeholders suggested that AgriFood take a more active role in these areas.

### *Labour*

Labour costs, associated with both local and overseas labour, are a major input cost for Australian farmers. During consultations stakeholders raised concerns about the inflexibility of award arrangements, particularly with regard to penalty rates and minimum hours. The Government recognises that the nature of agricultural work requires further consideration of the award arrangements for the sector by the Fair Work Commission.

The Government encourages industry to make a strong, cross-sectoral submission to the Fair Work Commission Review of Modern Awards (expected to be completed in 2015). This could address issues raised by stakeholders, such as changes to thethree-hour minimum work period in the Pastoral Award and increasing flexibility to recognise constraints in the agriculture sector (for example, milking must take place every day for animal health and welfare).

#### Visa schemes

The Government’s preference is that a strong agriculture sector will create rewarding jobs for Australians. The Government is fostering a work culture and encouraging workforce participation by assisting young Australians to ‘earn or learn’ or Work for the Dole, which will increase labour availability across many sectors, including agriculture. However, gaps in the local workforce—due to a number of factors, including remote locations, seasonality and working conditions, as well as lags between education and training investment for an appropriately skilled domestic workforce—mean agriculture will also continue to use overseas labour.

The Working Holiday Maker (WHM – 417) and the Temporary Work (Skilled) visa (subclass 457) programmes provide a critical source of additional labour. For example, a 2011 survey of the horticulture sector found that 73 per cent of respondents used backpackers as their main source of labour (Hay & Howes 2012). Stakeholders consistently requested that visa programmes be extended and made more flexible. At present, some businesses report having to engage full-time office administrators to handle the compliance burden of superannuation arrangements as they relate to visa holders.

Stakeholders expressed the need for a clearer pathway from WHM to a 457 visa to permanent residency for ‘valuable’ 457 visa holders where farmers were willing to employ them longer term. This was considered a means to grow regional areas with people wanting to live in regional Australia.

The Seasonal Worker Program was also recognised as providing greater access to labour during peak harvest periods—but that lowering the cost of the programme would increase uptake.

#### New entrants

Attracting new farmers to agriculture is important in safeguarding the transfer of knowledge and expertise to future generations and to reinvigorating the sector with fresh talent, ideas and enthusiasm.

The number of young owner-operator farmers has declined since the 1970s. Since 1976, the number of farmers under the age of 35 has fallen by more than 75 per cent (Barr 2014).

This is largely the result of fewer opportunities for young farmers to enter agriculture, due to:

* the decreasing number of Australian farms, accompanied by increased average farm size and purchase price, leaving fewer opportunities for young persons to acquire land and enter agriculture;
* a decrease in the rate of exit from farming amongst farmers aged over 65, with the population of farmers aged over 65 increasing by 55 per cent since 1991; and
* a fall in the recruitment of the youngest farmers (under 25 years) relative to the recruitment of other entrants, as longer years are spent in education.

According to the National Farmers’ Federation (submission IP536), ‘[u]ltimately to attract and retain workers, and to encourage the next generation of farmers, agriculture must be profitable and ensure that it is a desirable employer’.

New business models may create opportunities for new entrants to agriculture. The adoption of the tenant farming model, for example, has been suggested as a means to attract new entrants who may be otherwise unable to purchase land directly (Murphy 2014). Under the tenant farming arrangement, landowners contribute their land and often a measure of operating capital and management and tenant farmers contribute their labour along with, at times, varying amounts of capital and management. Depending on the contract, tenants can make payments to the owner of a fixed portion of the product, in cash or in a combination.

There may also be a case for support measures to attract existing and potential new entrants (such as mentoring, networking and training opportunities). For example, the Future Farmers Network (submission IP512) proposed ‘… a next generation program to help support young people in Australian agriculture’. Competitor countries such as the United States have programmes devoted to training, outreach and mentoring of new and beginning farmers that complement local initiatives to build skills in farm and business management (including developing capabilities important for supply chain management such as branding and marketing).

Any new initiative to support new and existing young farmers would need to support and complement, rather than overlap, existing Australian Government, State and Territory government, and industry-led initiatives. These include State and Territory government concessional loans and initiatives for young farmers, Australian Rural Leadership Foundation programmes, Nuffield Australia Farming Scholarships, the Marcus Oldham Rural Leadership Award and the Young Farmers’ Masterclass. Young farmer networks, such as the Future Farmers Network and Young Dairy Network Australia, also help support young farmers.

## Education, skills and training, and labour: What the Government is already doing

### Education

**Australian Curriculum review:** The review will work towards ensuring the Australian Curriculum provides flexibility in teaching so that schools can improve understanding of food and fibre production, agricultural and primary industries in Australia.

**Teaching agriculture:** $2 million is being provided for a new programme, Agriculture in Education, to develop new resources to help teachers better understand food and fibre production and processing, and promote the range of agricultural careers available.

**Flexible Literacy Learning for Remote Primary Schools Programme:** This programme will provide $22 million over four years to fund effective approaches to teaching in selected rural and remote primary schools.

**Assistance for Isolated Children (AIC) allowance**: The Government provides financial support to families in regional or remote communities with children in education.

**Higher education subsidies:** Government subsidies for higher education are being expanded to Australian students enrolling in accredited undergraduate courses at any registered higher education institution including public and private universities, and non-university higher education institutions including private colleges and some TAFEs. This will provide more opportunities for people to study diplomas, advanced diplomas and associate degrees in agriculture and may provide incentives for institutions wishing to specialise in agriculture. The Government is also removing the loan fees currently charged to students who take out a VET-FEE-HELP or FEE-HELP loan to assist with the costs of tuition.

### Skills

**Industry Skills Fund:** From 1 January 2015, the Government is providing $476 million over four years to establish the Industry Skills Fund to support the training needs of micro, small and medium enterprises that cannot be readily met by the national training system. This programme will deliver training (including skill sets) and support services (including mentoring and foundation skills). This fund includes two new training programmes ­­for young people in regional areas—the Training for Employment Scholarships and the Youth Employment Pathways.

**AgriFood Skills Australia:** This is one of 11 not-for-profit Industry Skills Councils that engages and consults with industry and other key stakeholders in the development of qualifications and skill sets including for rural, meat, and food and beverage processing industries.

**Vocational Education and Training Reform:** The Government is seeking to implement reforms to develop clearer responsibilities, better value for money and a more competitive market.

**Trade Support Loans Programme:** $439 million has been provided over five years from 2013–14 for this programme. This will provide apprentices with financial assistance of up to $20,000 over a four-year apprenticeship.

**Science and Innovation Awards for Young People in Agriculture:** These awards acknowledge achievement and inspire others to pursue careers in agriculture.

### Labour

**Skilled worker visas:** The Government offers visa schemes to increase available skilled workers, such as Regional Sponsored Migration Scheme visa (187) and Temporary Work (Skilled) visa (subclass 457) and labour agreements.

**457 visa review:** The independent Integrity Review examined the scope for deregulation while maintaining integrity in the 457 visa programme. As outlined in the Government’s Industry Innovation and Competitiveness Agenda, reformswill focus onoptions to reduce the burden from regulations, particularly those introduced between 2008 and 2013, including by simplifying sponsorship requirements for employers, improving arrangements for approved sponsors, streamlining the visa application process, amending English language and skill requirements, and moving to a risk-based approach for compliance and monitoring.

**Cultural exchange visas:** The Government also offers a number of visas that provide cultural exchange and the opportunity for overseas participants to be employed in agriculture. These include the Working Holiday Maker visa (417 and 462), the Seasonal Worker Program (416) and youth exchange programmes (Special Program visa 416).

**Designated Area Migration Agreement (DAMA):** The Commonwealth and Northern Territory customised DAMA for the Northern Territory will enable employers who are unable to recruit Australian workers to supplement their workforce with skilled overseas workers. Targeted skilled migration under the DAMA guidelines will provide incentives to grow businesses and local economies for the benefit of Australians.

**Safe haven enterprise visas:** The Government is creating a new five-year visa to encourage irregular maritime arrivals (IMAs) already in Australia and found to be in need of protection to work or study in a designated regional area. State, Territory and local governments must opt-in to participate and those with labour shortages are expected to be the most interested in the arrangement.

**Employment Services:** The Government is committed to building a world class employment service system and is investing $5.1 billion over three years from 2015­–16 in the new system. The Government is in the process of reforming the employment services framework and introducing a more modern, streamlined and efficient system that better matches job seekers with employers while reducing red tape for providers. The new system will include a regional loading that recognises the additional costs of service delivery in regional areas.

**National Harvest Labour Information Service:** This service disseminates information about harvest‑related work opportunities across Australia and helps growers to supplement local labour with out-of-area workers, where there is an acknowledged local shortfall during harvest times.

**Relocation Assistance to Take Up a Job:** This programme helps connect job seekers with regional jobs by providing relocation payments of up to $6,000 for eligible job seekers who move to a regional area. Families with dependent children will receive up to an extra $3,000.

**Stronger participation incentives for job seekers:** From 1 January 2015 all new job seekers under 30 years of age claiming Newstart, Youth Allowance (other) or Special Benefit must participate in job search and employment service activities for up to six months before receiving income support. As part of these incentives, employers will be able to receive a wage subsidy of $6,500 when employing a young job seeker who is part of this measure and has been unemployed for 12  months or more.

**The Job Commitment Bonus:** This will encourage long-term unemployed young Australians to find and keep a job and remain off welfare by receiving cash incentives for the job seeker of up to $6,500.

**Wage subsidies:** A Restart wage subsidy of up to $10,000 is being provided for around 32,000 mature-aged job seekers each year to re-enter the workforce.

**Indigenous training and employment programmes:** These programmes are being reviewed to identify how training and employment services can better link to the commitment of employers to provide sustainable employment opportunities for Indigenous Australians.

## Education, skills and training, and labour: What stakeholders proposed the Government should consider

**Policy Idea 14—Strengthening agricultural education**

The Government is interested in ensuring the availability of comprehensive education for an agricultural career at secondary and tertiary level. This should include a clear pathway for agricultural education and training at all scholastic levels as well as options for life long learning for those in the industry. Higher education and VET are critical both for existing farmers and to bring new people into the industry, as well as to maintain Australia’s agricultural R&D expertise capacity.

Stakeholders frequently raised the difficulties faced by young farmers in getting a foothold in the industry, due to lack of clarity about career options, growth possibilities and high capital costs. Options for further consideration include:

1. **Working with States and Territories to provide specialised learning in agriculture in the future**—Stakeholders expressed the benefit of a good agricultural education for a career in farming. Agricultural high schools like Farrer in Tamworth New South Wales, Yanco near Leeton in southern New South Wales, and agricultural colleges like Dookie and Marcus Oldham in Victoria and Gatton and Longreach Pastoral College in Queensland provide vital training for an agricultural career. It will be important to ensure that these schools have the resources to continue to specialise in agriculture into the future. Such schools need to be well supported by State governments and could be linked through ‘Agricultural High School Forums’ to encourage a strong professional and agricultural education network (Pratley 2013).
2. **Establishing a young farmers mentoring and networking programme**—It was proposed that a new programme be established that provides mentoring, networking and training opportunities for the next generation of farmers. Grants could be provided for partnerships and collaborations led by local community-based, agricultural education and young farmer organisations to provide advice on new opportunities and information on business models and options to enter farming without having to purchase a farm. An expanded RFCS or business advice programme could refer young farmers to this programme.
3. **Increasing financial support for regional education**—The Government currently provides the Assistance for Isolated Children (AIC) allowance to support families in regional or remote communities with children in education. This includes support for families with students who must board away from home (up to $9,133 per year), are enrolled in distance education course ($3,833 per year), or require a second home to be maintained to allow children to attend school daily ($223.31 per fortnight, per student up to three students per family).  
     
   Stakeholders reported that these payments, although helpful, have not increased at the same rate as school costs so that the effect of the grant was diminished[[24]](#footnote-24). Views are sought on whether assistance of the AIC for individual families should be expanded. For example, this could be done by increasing assistance payments, broadening the definition of geographically isolated or lowering the parental asset test threshold required for the Additional Boarding Allowance.  
     
   Stakeholders also suggested a living away from home allowance for students from remote areas undertaking tertiary agriculture study. The Government, through Youth Allowance, provides financial help for young people who are studying full-time, undertaking a full-time Australian Apprenticeship, training, looking for work or sick. Students who live away from home in order to study or train may be eligible for higher rates of Youth Allowance. Views are sought on whether Youth Allowance assistance or eligibility criteria should be expanded. These issues are also likely to be considered by the Government-commissioned McClure Review of Australia’s Welfare System and the Government’s response to the Forrest Review of Indigenous Jobs and Training.  
     
   While recognising the financial burden of education on regional families, the Government considers that public funding should be balanced between individual assistance and investment in agricultural education generally.
4. **Creating national agricultural tertiary centres of excellence**—Stakeholders suggested that a new model for developing skills in the regions was required to meet the demand of rural industry and that a partnership approach would achieve the desired outcome. A partnership approach would use multi-level providers (researchers, producers and marketers) to deliver a comprehensive suite of programmes tailored to industry requirements. National and regional centres of excellence would be guided and supported by agricultural industry bodies and could include teaching research and extension programmes (AJ Mackenzie and Peter Ryan submission IP258). Centres such as the Queensland Climate Centre of Excellence provide a platform for agrifood businesses to connect with researchers through RDCs, universities, CRCs, and the CSIRO. By investing in collaborative networks, governments could encourage and facilitate greater innovation across the whole food and fibre value chain and broader uptake of new agrifood processing technologies.

The regional centres of excellence could also, for example, be modelled on the Tasmanian Institute of Agriculture (TIA), a joint venture between the University of Tasmania and the Tasmanian Government. This government-university partnership in agriculture uses a   
solution-orientated (impact-focused) approach to research, development, extension and education. Feedback is sought on specific courses of action that may be considered for further discussion and possible implementation with governments, providers and industry.

**Policy Idea 15—Strengthening labour availability**  
The Government has implemented a number of measures to encourage Australian job seekers to take up available jobs. However, stakeholders argued that visa programmes were an important means of supplementing domestic labour supply for the agriculture sector where it is not possible to source labour locally. Stakeholders emphasised the importance of being able to access additional labour when needed and recommended broadening the scope of existing visa schemes. Views are sought on a number of options raised to improve the responsiveness and reduce the compliance burden of existing visa programmes:

1. **Expand the Working Holiday Maker (417) visa**—Stakeholders suggested expanding the Working Holiday Maker (417) visa programme, for example, by increasing the qualifying age, the number of eligible countries or permitting off-shore applications for a second visa from individuals who have previously come to Australia on a 417 visa.
2. **Broaden skills coverage of the Temporary Work (Skilled) visa (subclass 457)**—Stakeholders advocated broadening the range of skills covered by the 457 programme to ensure coverage of some occupations that are highly skilled. The Government is considering the 22 recommendations from *Robust New Foundations – An Independent Review into Integrity in Subclass 457 Programme* which made specific recommendations about the Consolidated Sponsored Occupations List.
3. **Expand the Seasonal Worker Program (SWP)**—Stakeholders suggested expanding the industry coverage of the SWP to all agriculture sectors and reducing costs for farmers to employ under the SWP such as by reducing the requirement for farmers to contribute to flights and domestic transfer costs of employees.
4. **Streamline application processes**—Stakeholders suggested reducing red tape on the Temporary Work (Skilled) visa (subclass 457) by reducing application waiting periods and encouraging greater uptake of labour agreements. In relation to 417 visas, stakeholders suggested reducing the compliance burden with superannuation arrangements (for example, by raising the minimum income threshold beyond which superannuation must be paid or rolling superannuation contributions into salaries) and the automatic provision of tax file numbers to visa applicants. The Government has announced its intention to look at reducing the superannuation compliance burden on small business employers including those that employ workers for short periods. The Government is considering the 22 recommendations from *Robust New Foundations – An Independent Review into Integrity in Subclass 457 Programme,* which made specific recommendations on streamlining and simplifying the 457 visa process.
5. **Provide clear pathways to residency**—While noting that there are already a range of visa options available for temporary skilled workers to move to permanent residency visas, stakeholders called for further changes and clearer pathways to make it easier to retain quality workers. Suggestions included exploring options for streamlined recognition of the skills of visa applicants with experience but not formal qualifications.

# Drought

Drought is a recurrent feature of Australian farming that contributes to farm business risk and income volatility. Over the period 2004 to 2011, the annual value of output for the agriculture sector was almost twice as volatile as the next most volatile industry (finance and insurance) (Keogh 2012).

During consultations, stakeholders often said that the best way to prepare for drought was to be more profitable. There was a view that this enabled farmers to invest in preparedness for drought–both through physical infrastructure (such as water infrastructure and feed storage) and maintaining financial assets.

Individual farmers are best placed to determine how to manage their particular circumstances and prepare for drought in a way that suits their business. However, there are community expectations of a role for government in providing appropriate support to farm families and otherwise viable farm businesses suffering severe droughts. The States and Territories also have an important role in providing drought assistance programmes. The Intergovernmental Agreement (IGA) on National Drought Program Reform signed by all jurisdictions in May 2013 established the response to drought for future events. Under the IGA, the Australian Government is committed to delivering: the Farm Household Allowance, the Farm Management Deposits Scheme and, along with the States and Territories, better coordinated social support services and tools and technologies to inform farmer decision-making. The IGA came into effect on 1 July 2014.

The White Paper will consider drought preparedness and in-event drought support measures as part of the Government’s commitment to review the adequacy of current support. In line with this, the options for further consideration are grouped in this chapter under drought preparedness and   
in-drought support.

## What stakeholders said:

*‘… Government policy should facilitate preparation by farmers for future drought events. Policies need to recognise that preparedness requires time, skills and resources to be effective, and must also acknowledge that there may be future drought events which are beyond the reasonable capacity of farmers to prepare for.’* **National Farmers’ Federation, submission IP536**

*‘Transparency, where governments clearly state the limits of any future drought support during better times will give the message to farmers that they must be self-reliant and plan ahead.’* **Eyre Peninsula Natural Resource Management Board, submission IP547**

## Outline of the issue

Australian farming is characterised by extreme seasonal fluctuations—including recurring droughts. The Bureau of Meteorology and CSIRO have predicted that droughts are likely to become more frequent and severe in parts of Australia (Hennessy et al. 2008). It is a challenge that farmers must prepare for, to be competitive and profitable in the future. Stakeholders broadly agreed on the need for farmers to better prepare for drought and many suggested that the Government have a role in this. There was also agreement that farm families in difficulty should be supported, in ways similar to that of other Australian families who receive welfare support during times of financial difficulty.

However, there were mixed views on the role of the Government in assisting the business costs of farms during drought—ranging from the Government not providing any farm business support to intervening much more strongly. Stakeholders raised a variety of options including loans, levies, insurance and subsidies. There was also a view that the Government needed to deliver certainty in its in-drought assistance, as farmers noted its importance to decision-making.

Some stakeholders argued that drought assistance should not go to farmers that have not put in place strategies to prepare for drought. Government support should not be seen as a replacement for what a farm business should be doing for itself. The farmers that are undertaking drought preparedness activities and have their plans in place will be more resistant to the effects of drought.

The Government is looking to assist farmers to become more profitable in the long term so they are better able to prepare financially and physically for drought. Many of the policy ideas in this Green Paper can contribute more generally to this increased resilience.

Preparedness measures can take a number of forms, including saving through Farm Management Deposits (FMDs) or other vehicles, investing in infrastructure or facilities to store fodder or water, or purchasing insurance. The Government has recently made changes to the FMD scheme to make it more useful to farmers, but further changes could be considered. Existing tax policies allow for depreciation of water infrastructure over three years and fodder storage over its effective life. Further changes could be considered to provide more rapid depreciation for tax purposes to encourage greater preparedness investment.

Insurance is one of the most efficient risk management tools, provided insurance markets are competitive and well developed. In Australia, traditional single peril insurance (such as hail and frost) has been available for some crops over past decades. However, new products are evolving such as weather index products and multi-peril crop insurance (Box 2). These products are well established in overseas markets and risks can be reinsured globally, meaning underwriting and ruinous payouts from a widespread event (such as a drought across eastern Australia) are not necessarily a constraint to them being broadly offered. However, greater certainty around government intervention in times of drought will be required before the farm insurance market can fully mature. Some stakeholders suggested that the Government provide a direct subsidy towards farmers’ insurance premiums, similar to some countries overseas (such as the United States and Canada). The Government does not support this because it believes insurance products should be commercially based. Such approaches in other countries are also high cost and administratively complex.

Stakeholders called for further clarity about the assistance that would be available during a drought event. The National Farmers’ Federation (submission IP536) argued that the Government had a role in providing assistance for ‘drought events which are beyond the reasonable capacity of farmers to prepare for’; however, this remains an ill-defined concept.

Some stakeholders advocated incorporating drought into the Natural Disaster Relief and Recovery Arrangements (NDRRA). Drought was removed from these arrangements in 1989 in recognition of the special nature, effects and duration of drought (Drought Policy Review Task Force 1989). A subsequent review of drought policy led to the establishment of the National Drought Policy in 1992.

Box 2 Latevo—Revenue protection insurance

Latevo International’s Certainty Insurance™ product, underwritten by global insurer Allianz, is based on a customised crop income protection model that offers a recovery of cropping costs in the event of a farmer being hit by the effects of frost, flood, drought or other weather-related and   
revenue-affecting perils.

Latevo’s insurance model functions like most traditional insurance policies by first undertaking a customised risk assessment. In addition to working with farmer advisers to obtain relevant operational information, Latevo uses a five-year revenue and expense history calculation to conduct an assessment of the estimated costs that it would replace in the event of a peril. Generally the cash cost of production, including seed, chemical, fertiliser, interest and overheads would be made available in the form of coverage to growers.

Global insurance pools effectively minimise the down side planting risk by ensuring that, under a worst case scenario, the financial outlay associated with a farmer’s annual planting programme is recovered. This approach offers confidence and certainty to croppers, particularly those that have suffered a succession of bad years and may be having difficulty absorbing the costs of new-season plantings (Latevo International submission IP533).

The Government is seeking stakeholder views on the most appropriate programme mix (on-farm, household, business, social or other) to assist farmers to prepare for, manage through and recover from drought. This includes what the Government is already doing and options for further consideration.

## Drought: What the Government is already doing

**Intergovernmental Agreement on National Drought Program Reform:** In May 2013, the Australian, State and Territory governments signed an Intergovernmental Agreement on National Drought Program Reform (the IGA). The IGA contains five elements, which commenced from 1 July 2014:

* a farm household support payment (Farm Household Allowance);
* 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 farm decision-making.

The national approach to farm business training is a State and Territory responsibility under the IGA. State and Territory governments also share responsibility with the Australian Government for social support services and tools and technologies to inform farmer decision-making.

The IGA also allows flexibility for governments to introduce programmes outside of the five elements, provided they are consistent with the principles for reform as well as a set of principles and processes for in-drought support.

The Government is committed to providing fair, fiscally responsible support for farmers facing hardship due to severe drought and remains committed to the principles underlying the IGA.

**Farm Household Allowance:** From 1 July 2014 the Farm Household Allowance became an ongoing legislated programme that provides income support to families in financial hardship, including those suffering loss of income due to drought.

**Farm Management Deposits Scheme:** The Government provides the Farm Management Deposits Scheme and other taxation concessions that can assist primary producers with managing income variability from drought. National FMD holdings were $4.14 billion at 30 June 2014, the highest ever. The revenue foregone in the short term to the Government from providing the FMD scheme to primary producers was estimated to be $155 million in 2013–14 (Australian Government the Treasury 2014); but it is also recognised that the scheme enables many primary producers to remain viable and continue to pay tax over the longer term.

**Drought assistance package:** On 26 February 2014, the Australian Government announced a range of temporary assistance measures to assist farm families and businesses in drought-affected areas, including:

* Interim Farm Household Allowance (now replaced by the Farm Household Allowance);
* $280 million in concessional loans for drought-affected farmers;
* $12 million for emergency water infrastructure rebates;
* $10.7 million for additional mental health and social support services; and
* $10 million for pest management in drought-affected areas.

These measures are currently only short term and temporary, applying in 2013–14 and 2014–15.

**Rural Financial Counselling Service:** The Government also recognises the contribution that the Rural Financial Counselling Service performs during periods of drought.

**Other taxation concessions:** The Government provides a number of taxation concessions for primary producers that can assist with preparing for and managing through drought. These are discussed in the Chapter 5 – Finance, business structures and taxation.

**Natural Resource Management:** The Government’s initiatives to improve environmental resilience, including the National Landcare Programme, assist farmers to prepare for and manage through periods of drought by improving the sustainability of their land and water resources.

## Drought: What stakeholders proposed the Government should consider

A number of stakeholder suggestions included in other chapters could also provide benefits to farmers to prepare for drought or while in drought. These included suggestions to increase the flexibility of farm management deposits and a permanent concessional loan scheme. Other, more drought-specific, stakeholder ideas are provided below.

**Policy idea 16—Increasing drought preparedness**

A strong and profitable farm business is the best preparedness for managing drought. It allows farmers to invest in preparedness for drought—both through physical infrastructure (such as water infrastructure and feed storage) and maintaining financial assets. Individual farmers are best placed to determine how to manage their particular circumstances and prepare for drought in the best way that suits their business. A number of specific options were suggested to help farmers with this:

1. **Introducing accelerated depreciation for new water and fodder infrastructure**—For livestock producers, having feed and water available before a drought is an important management tool. A number of stakeholders suggested providing additional accelerated depreciation allowances to assist with drought preparedness investments. Currently, the depreciation schedule for investment in new water infrastructure, such as bores, is over three years and for new fodder storage facilities, such as hay sheds, over their effective life determined by the Australian Taxation Office. Stakeholders suggested allowing 100 per cent depreciation in one year for these investments. This would benefit producers by allowing a larger tax deduction in the year of investment, encouraging farmers to prepare for drought. The Government seeks stakeholder views on this approach and on the specific items that should qualify for immediate tax deductibility.
2. **Encouraging multi-peril crop insurance**—New commercial multi-peril crop insurance products are starting to enter the Australian market. Insurance products like this can help reduce the impact of adverse weather and drought on farm income by partially offsetting lost revenue.   
   One option to encourage insurance uptake could be to provide a grant to reduce the upfront costs associated with the risk assessment process for a multi-peril or revenue insurance product. This option could be used while new insurance providers are entering the market and establishing products and withdrawn over time as the market develops.

Another option—which falls within State and Territory responsibility—is removing or waiving stamp duty on insurance products. This would make insurance premiums more affordable for farmers. As the take-up of some insurance products—such as multi-peril crop insurance—is currently low, the effect on existing State and Territory revenue from this change would be small.

1. **Improving climate information**—The accuracy of the Bureau of Meteorology’s seasonal forecasts is expected to increase over time, with advances in the science of weather prediction and investments in technology. The challenge for farmers is to understand what this weather information means, its limitations and how to best use this information on their farm–which is where decision support tools can help. The Government is interested in how it could facilitate the greater use of farm decision support tools to ensure that advances in climate and weather information are being effectively drawn upon for the purposes of farm decision-making.   
   Stakeholders also expressed frustration at the coverage of the Bureau’s weather radars in some regional and remote areas. The Government is interested in stakeholder views on the areas where the Government could consider investing in additional weather stations to address gaps.

**Policy idea 17—In drought support**

There are community expectations of a role for government in providing appropriate support to farm families and otherwise viable farm businesses suffering severe droughts. The effect of drought goes beyond the business and the land, often affecting the social wellbeing of farmers, their families and their communities. The Government recognises that some stakeholders, such as the National Farmers’ Federation (submission IP536), consider that there is a case for the provision of direct farm business support during ‘drought events which are beyond the reasonable capacity of farmers to prepare for’.

1. **Additional mental health support in times of drought**—The Government could develop an approach to provide additional support for mental health in drought-affected areas in the future to complement existing mainstream mental health and social service supports, similar to the recent drought assistance package. This could be in the form of a mechanism to ensure additional funding can be made available for service providers when conditions begin to deteriorate in a community or region. This would ensure farm families have access to these support services, without the Government needing to develop a separate response to each drought. The Government welcomes stakeholder feedback on how to determine that conditions have deteriorated and what additional services are often needed in response.

The Government also welcomes feedback specifically on how the additional mental health and social support services as part of the February 2014 drought assistance package have worked, including whether any improvements could be made.

1. **Provision of additional assistance for prolonged and severe drought**—The Government welcomes stakeholder feedback on the definition of a drought event that is genuinely beyond the reasonable capacity of farmers to prepare for and the types of assistance measures that could be provided. The Government is interested in stakeholder views on the following issues:

• What makes a drought event ‘beyond the reasonable capacity of farmers to prepare for’, is it the severity, the length or a combination of both? Is there a minimal length of time that farmers should be expected to manage—especially given the other forms of support available—before direct farm business support is provided? Should a drought that is ‘beyond the reasonable capacity of farmers to prepare for’ be defined as a drought that exceeds past drought records? Could this criterion be applied at a local level (that is, should assistance be made available when a drought occurs if it has never occurred before in the local area)?

• Should eligibility be determined on a regional or individual basis or both, and should financial criteria be used?

• Should individuals have to satisfy a number of prerequisites before they access support? For example, should individuals be required to demonstrate prudent risk management and preparedness measures having been implemented prior to the provision of support?

• Should support just be limited to the period of drought or include a period of recovery after the drought has broken?

• Is it appropriate to treat a one-in-75-year drought differently from a one-in-20 year drought, and if so how?

• What measures should be provided to support farmers in such a drought?

The Government also welcomes stakeholder feedback on whether having a clear set of criteria and programmes, as well as a delineation of Australian Government and State and Territory responsibilities, will provide enough certainty about what drought assistance will be available in the future and when it might apply.

# Water and natural resource management

Agricultural production is underpinned by the sustainable use of land and water resources. Many stakeholders expressed concern about the degree of emphasis that has been given to environmental and social objectives in the use of Australia’s natural resource base. Others raised concerns over competition for land from mining and urban development, and the impact of some forms of mining on the quality and integrity of groundwater resources. Control of pest animals and weeds was also of concern to many stakeholders.

The future of agriculture depends on sustainable use of natural resources. Globally competing   
land-use pressures, limited surface water supplies and depleting reserves of groundwater are constraining the resources available for farming. Australian farmers, even more so than their global competitors, must adapt to climate variability. Effective management of environmental risks facing agriculture is likely to help safeguard future productivity and competitiveness.

Family farmers represent some of Australia’s best examples of outstanding environmental stewardship. They have the greatest incentive of all to manage their land and water sustainably—the opportunity to pass that land on to their children in a condition better than that in which they received it. Through successive generations of ownership, many family farms have acquired a deep understanding of local ecosystems and weather patterns, with their adaptive farming practices supporting the long-term sustainability of their land resources.

The Government places a priority on the productive use of natural resources for economic growth and development, including the development of new farming areas. This often involves investment in water infrastructure, which is primarily a State and Territory government responsibility. However, this use needs to be sustainable over the longer term. The Government is firmly committed to reducing green tape while maintaining a sustainable natural resource base. This includes working with the State and Territory governments, which are responsible for the vast majority of environmental regulations.

## What stakeholders said:

*‘Effective and integrated management of [soil, water and biodiversity] delivers beneficial ecosystem services and regenerates the natural resource base, enabling sustained, quality agricultural production.’* **Soils for Life, submission IP700**

*‘Land and natural resources stewardship and a duty of care to leave land and natural resources in an improved condition for future generations must be a fundamental principle and objective inextricably linked with long term sustainable productive agriculture.’* **Glenelg Hopkins Catchment Management Authority, submission IP67**

## Outline of the issue

### Water resources

Australian agriculture spans tropical, subtropical and temperate climates. This allows a very broad range of produce to be sourced virtually year-round from our farmers. However, water availability remains a significant constraint to Australian agricultural output. In 2011–12, around 59 per cent of the water used in Australia was for agriculture (ABS 2013c). The output from irrigated land accounts for around 29 per centof the gross value of agricultural production (ABS 2013g) despite irrigation accounting for less than 1 per cent of total land used for agriculture (ABS 2013c).

The 2004 National Water Initiative (NWI) provides a nationally-agreed framework to manage surface and groundwater resources for agricultural and urban use, and to optimise economic, social and environmental outcomes. The NWI was designed to create a nationally compatible water market, through planning and entitlements, regulation, pricing and market regulatory reforms. Placing a value on water provides incentives to invest in water-saving infrastructure and practice change to improve the efficiency of water use where water availability is constrained.

The Australian Government has invested more than $15 billion in water reform since the Howard Government released the National Plan for Water Security in 2007. The National Plan was designed to restore the health of river and groundwater systems and help irrigators and communities, particularly in the Murray–Darling Basin (MDB). Key elements of this investment include the $10 billion Sustainable Rural Water Use and Infrastructure Program. The programme includes $5.6 billion for irrigation infrastructure projects and improved water use (with over $5 billion within the MDB), $3.2 billion for water entitlement purchase and $1.3 billion for supply measures in the MDB.

Improving access to reliable water supplies and better managing existing water resources are essential for the continued growth of the agriculture sector. Irrigated land was responsible for large majorities of grape (93 per cent), cotton (92 per cent), fruit (80 per cent), and vegetable (79 per cent) production, all of rice production and over half of dairy production (52 per cent) (ABS 2013g).

Water resources in the north of Australia are less developed than in the south. This may afford our nation opportunities to make strategic investments in water resources to support the development of water-dependent industries. For example, CSIRO research indicates that 600 gigalitres per year of extractable groundwater could be available to irrigate between 50,000 and 120,000 hectares in northern Australia, depending on the crop type and irrigation efficiency (Grice, Watson & Stone 2013).

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 MDB (DAFF 2012). Water availability for agriculture could be improved through implementing water efficiency projects, improvements to existing water infrastructure and, where demand is justified, developing new water infrastructure. Water availability for agriculture could be increased through additional infrastructure projects, including through identification of new dams or aquifer recharge projects.

There are examples of such expansions occurring with a combination of Commonwealth, State and industry funding:

* Tasmanian Irrigation develops new irrigation projects as public–private partnerships—working closely with private landholders to establish how much water is wanted and sharing the cost of building a scheme between the public and the private sector. Ten schemes have already been developed in Tasmania.
* In Western Australia, the Ord Stage 2 expansion is estimated to increase irrigated farm land from 14,000 to 28,000 hectares within 10 years (Western Australian Government 2014). This could increase further with the Ord Stage 3 expansion across the Northern Territory border.

In 2014 the Minister for Agriculture chaired a Ministerial working group to identify how investment in water infrastructure, such as dams and groundwater storage, could be accelerated and to identify priorities for investment that can deliver Australia’s water supply needs in the future. This working group consulted States and Territories and identified a number of projects worthy of further investigation and consideration by governments. Most of the project proposals the working group examined were preliminary concepts or in the very early stages of assessing feasibility. Because major water infrastructure has long lead times, and requires substantial capital and maintenance for many years, any public or private investment needs to be based on comprehensive analysis of   
cost-effectiveness and feasibility. Projects also need to be financially sustainable for water users and avoid any negative third party impacts.

A list of possible projects identified by the working group with potential for Commonwealth involvement is provided in Table 4. Any Commonwealth involvement would require further assessment, which may reveal that some of these projects are not feasible or may be able to proceed with investment from States or Territories or private proponents.

Government involvement in water infrastructure development should be directed to activities that are in the national interest, deliver net economic and social benefits and broader public benefits. It is also expected that, given States and Territories have primary responsibility for water resources, there must be strong State or Territory government support for projects. The Government is seeking views on the role the Commonwealth could play to accelerate investment in water infrastructure.

To determine whether a project warrants Commonwealth involvement, a number of principles addressing the above considerations should be applied (Figure 19).

Figure 19 Principles for Commonwealth involvement in water infrastructure projects

A Pictorial shows the principles for Commonwealth involvement in water infrastructure projects:
• projects need to be nationally significant and in the national interest 
• there must be strong State or Territory government support with capital contribution and involvement of the private sector and where appropriate local government
• the investment should provide the highest net benefit of all options available to increase access to water, taking into account economic, social and environmental impacts 
• projects should address a market failure which cannot be addressed by proponents, State and Territory governments or other stakeholders and limits a project of national significance from being delivered
• projects should align with the Government’s broader infrastructure agenda to promote economic growth and productivity, or provide a demonstrable public benefit and address a community need
• projects should align with the National Water Initiative principles including appropriate cost recovery and, where full cost recovery is not deemed feasible, any subsidies are fully transparent to the community
• if providing capital, a consistent, robust analysis of costs and benefits is used and assessment is undertaken by Infrastructure Australia or similar experts

Infrastructure projects seeking $100 million or more in Commonwealth funding must be submitted to Infrastructure Australia (IA) for evaluation before being considered for funding by Government. Proponents must include a cost benefit analysis in their submission.

Water availability can also be increased by improvements in existing water infrastructure. This can improve the efficiency of water use as well as saving water for other productive, urban or environmental uses. Effective Government policies on developing new water infrastructure and improving existing water infrastructure will be important to future agricultural development in Australia.

Table 4 List of potential water infrastructure projects that could warrant possible Commonwealth involvement

| **Likely to be sufficiently developed to allow consideration of possible capital investment within the next 12 months** | |
| --- | --- |
| Gippsland: Macalister Irrigation District/Southern Pipeline | Victoria |
| Tasmanian Irrigation Tranche II: Southern Highlands | Tasmania |
| Tasmanian Irrigation Tranche II: Scottsdale | Tasmania |
| Tasmanian Irrigation Tranche II: Circular Head | Tasmania |
| Tasmanian Irrigation Tranche II: Swan Valley | Tasmania |
| Tasmanian Irrigation Tranche II: North Esk | Tasmania |

| **Could warrant future consideration of possible capital investment, but less advanced in stage of development** | |
| --- | --- |
| Gippsland: Lindenow Valley Water Security Project (Mitchell River) | Victoria |
| Emu Swamp Dam—Severn River, Stanthorpe (MDB) | Queensland |
| Nathan Dam, Dawson River | Queensland |
| Wellington Dam Revival Project | Western Australia |

| **Likely to be suitable for further consideration for possible assistance to accelerate feasibility studies, cost benefit analysis or design** | |
| --- | --- |
| Apsley Dam—Walcha | New South Wales |
| Lostock Dam enlargement—Hunter Valley | New South Wales |
| Mole River Dam (MDB) | New South Wales |
| Needles Gap (MDB) | New South Wales |
| Burdekin Falls Dam (including Water for Bowen) | Queensland |
| Connors River Dam—Sarina | Queensland |
| Fitzroy Agricultural Corridor—construction of Rockwood Weir and raising Eden Bann Weir | Queensland |
| Mitchell River System—Far North Queensland | Queensland |
| North Queensland Irrigated Agriculture Strategy: Flinders-Gilbert, large scale infrastructure proposals (e.g. IFED) and on-farm developments | Queensland |
| Nullinga Dam—Cairns | Queensland |
| Urannah Dam—Collinsville | Queensland |
| Ord Irrigation Stage III (water infrastructure components) | Western Australia  Northern Territory |
| Pilbara and/or Kimberley irrigated water pipeline system | Western Australia |
| Expanded Horticulture Production—Northern Adelaide Plains—waste water reuse | South Australia |
| Intensive Livestock and Horticulture Expansion—Northern Dams Upgrade—Clare Valley | South Australia |
| Exploring off-stream storage opportunities to increase water availability for agricultural development | Northern Territory |
| Adelaide River Dam/off stream storage | Northern Territory |

### Land resources

Agriculture accounted for 52 per cent (397 million hectares) of Australia’s land area in 2012–13 (ABS 2014c). Australian farmland is relatively inexpensive compared to that of some other countries (Figure 20). This reflects the relatively lower returns that can be earned from Australian land, in part due to our soils being ancient, fragile and relatively infertile with large areas of land prone to salinity or acidification. It also reflects Australia’s lower levels of farm subsidies, which have become capitalised into land values in some countries.

Figure 20 Cost of land per tonne of wheat, 2010

*Source: Savills 2012*

Native title groups, traditional owners, Indigenous landowners and Indigenous communities will be essential partners in the development of agriculture, particularly in northern Australia. Indigenous people hold rights or interests over large parts of northern Australia, including through communally held freehold or leasehold title, Aboriginal heritage sites and native title rights.

There may be opportunities to improve the efficiency of the native title system and encourage greater economic development for Indigenous and non-Indigenous people. Stakeholders highlighted the complexity and uncertainty that native title processes can create and the time they can take to conclude. Recently there have been improvements in the efficiency of the native title claims processes. For example, the average time taken to resolve a claim has fallen. The number of determinations in 2013–14 was more than six times higher than in 2009–10. Between 1 July 2009 and 30 June 2014, there were 173 determinations of native title of which 148 were settled by consent (Attorney Generals Department, pers. comms. 2014). This improves certainty for all parties with rights and interests in land. Nevertheless, an average of seven years to settle claims still creates uncertainty for all parties.

Any further reforms need to be consistent with fundamental legal principles, balance the rights struck by the *Native Title Act 1993* and support economic opportunities for Indigenous communities. The focus should be on improving the prospects for Indigenous Australians, without compromising cultural integrity.

Land is a limited resource and some parts of Australia are subject to competing land uses, particularly where mining industries are seeking access to land resources traditionally associated with agriculture. This is challenging governments, industries, companies and landholders to find workable solutions so that resources can be managed for the long-term benefit of all Australians.

Some stakeholders expressed an interest in restricting certain land to agricultural use in order to reduce pressure from mining and help maintain agricultural production. The Multiple Land Use Framework (and the substantial work done to date in states such as Queensland, South Australia and Western Australia around evidence‑based regulation which is commensurate with the risk of an activity) is an option that displays how both activities can co-exist. This is consistent with the findings of the Productivity Commission Inquiry Report into Mineral and Energy Resources Exploration, which recommended that the regulation of land use be informed by sound evidence and science, and broad consideration of the benefits and risks to the community.

Prime agricultural land and clean water resources are key assets for farmers, local communities and the nation as a whole. The Australian Government is committed to protecting the rights of farmers and the integrity of prime agricultural land and water resources. Farmers are entitled to a fair return for access to their land. This has the potential to benefit farmers through higher returns than would otherwise be earned from the property. Sustainable local communities and a lasting positive legacy from resource extraction must be built. In order to build and maintain coexistence the following principles should be at the heart of coal seam gas development (Figure 21).

Figure 21 Principles for coal seam gas

A Pictorial shows the three principles for coal seam gas production.  
• Principle 1: Access to prime agricultural land should only be allowed with the farmer’s agreement and farmers must be entitled to financial compensation for access to any of their land.
• Principle 2: There must be no long-term damage significant enough to impact surface or subsurface water resources which are utilised for agriculture or local communities.
• Principle 3: Prime agricultural land and quality water resources must not be compromised for future generations.


Source: Adapted from The Coalition 2013

### Soil management

A farmer’s natural resource base is also their productive capital. Farmers face significant incentives not to degrade the productive capacity of the land—for example, because they plan to leave properties to their children or they are concerned about the market value of their property (PC 2004). Initiatives to develop sustainable and productive farm practices are likely to deliver environmental and economic benefits to farmers and the broader community.

Australia’s soils are typically poor in nutrients (Wright, Reich & Westoby 2001), with more fertile districts used for intensive cropping. Healthy soils are fundamental to optimising land productivity and ecosystem functioning. However, some land management practices may contribute to landscape degradation (Cocklin, Dibden & Mautner 2006). Land degradation makes topsoil vulnerable to water and wind erosion, which then leads to reduced effectiveness of fertiliser and irrigation and, in turn, production and income losses.

By embracing sustainable agricultural practices and undertaking land preservation and restoration works, primary producers actively manage weed and pest incursions and prevent nutrient run-off and soil erosion. The resilience of Australia’s farming systems may be increased by farmers adopting land management practices such as no-till farming or maintaining recommended ground cover levels (GRDC 2007). These practices boost soil biodiversity and function, which optimises soil water use, increases nutrient cycling and reduces soil constraints on productivity such as acidification, sodicity (that is, soils with high exchangeable sodium, which adversely affects soil structure and drainage and restricts plant growth), structural decline, low levels of soil fertility and topsoil loss through wind and water erosion. Regenerative soil and land practices not only improve agricultural output but also develop landscapes that are more resilient to the impacts of drought and climate variability (FAO 2005).

The Government has supported farmers in these activities, and its broader NRM objectives, through investment in Landcare, over the past 25 years. Around 40 per cent of farmers are involved in Landcare (Landcare Australia 2014). Under the Cleaner Environment Plan, NRM investments are also occurring in Reef 2050 and the Green Army. The objective is to preserve and improve the natural asset base and ecosystem services that underpin agriculture, tourism, other sectors and community wellbeing.

Some stakeholders suggested that farmers receive stewardship payments for the delivery of ecosystem and biodiversity services to the community. Farmers already have an obligation to maintain their land consistent with legislative requirements, which arguably have become more onerous in recent decades. Where the community’s expectations result in the imposition of greater regulation to deliver a public benefit then there may be a role for greater public support to enable these changes and mitigate the impact on the landholder.

### Pests and weeds

Weed management and pest animal control is fundamental not only to the profitability of our farm businesses but also to preserving our natural landscapes and agricultural lands, maintaining the integrity of our waterways, strengthening the economic base of our agricultural industries and supporting the lifestyles of rural communities. Weeds and feral pests also threaten biodiversity by out-competing local plants and degrading the habitats of native fauna. Preventing the introduction and spread of weeds and pests safeguards the environmental, cultural, social and economic values of our land and natural resource base.

The costs of weed and pest management can be significant for landholders and governments (NRMMC 2007). Many stakeholders raised concerns about the economic and emotional impact of wild dogs attacking livestock in several regions of Australia. Wild dog attacks were estimated in 2008 to cost $48 million per year (Gong et al. 2009). Large numbers of native animals, such as kangaroos, can also put pressure on pasture production and cause economic loss, while birds and fruit bats place pressure on broadacre and horticultural crops.

Successfully addressing the challenges of weeds and pests involves a shared commitment between landholders, community groups and governments. To be effective, approaches need to be coordinated across all groups and informed by sound science. Ideally, risks should be prioritised around prevention and early intervention to minimise negative impacts and limit the costs of control. This includes sound biosecurity control at our external borders to prevent or limit the entry, establishment and spread of exotic species that may be harmful.

**Water and natural resource management:   
What the Government is already doing**

The Government is currently undertaking a range of measures to address the water, natural resource management and environmental sustainability challenges of a competitive agriculture sector. Examples include:

**Landcare**: The Government will provide $1 billion over four years for the National Landcare Programme. This includes an investment of $61 million through the Australian Government Reef Programme over the three years to 2015–16 in Water Quality Grants and Partnerships. These initiatives support land managers in adopting land management practices that will reduce the discharge of nutrients, sediments and pesticides into the reef lagoon as well as improve agricultural productivity and profitability. Land managers are also encouraged to develop and trial innovative land management practices that may become the new industry standard in the future. The new programme will merge Caring for our Country and Landcare to deliver a simple, local and long-term approach to national funding for the environment. It will also give Landcare a greater role in   
on-ground delivery and setting local and regional priorities.

**Green Army:** The Government will establish a ‘Green Army’, at a cost of $525 million over four years. This will provide opportunities for young Australians aged 17 to 24 to gain training and experience in pest and weed management and environmental and heritage conservation. It will foster careers in conservation management while delivering projects for environmental benefit.

**One-Stop Shop for environmental approvals:** The One-Stop Shopis being implemented to reduce duplication between the Commonwealth and the States and Territories, while maintaining high environmental standards.

**Identifying new water infrastructure:** A ministerial working group chaired by the Minister for Agriculture has developed a list of options for future water infrastructure development in Australia for further assessment and consideration.

**Increasing investment in water infrastructure:** The Government is contributing up to $22 million to support State government water-related infrastructure rebate programmes. Drought-affected farmers in Queensland and New South Wales will benefit by having the rebate for water infrastructure expenses for emergency animal welfare.

**Murray-Darling Basin Plan:** The plan will restore the Murray-Darling Basin to health while ensuring the viability of the Basin’s food-producing communities. In implementing the Basin Plan, the Commonwealth will:

* cap Commonwealth water purchases under the Basin Plan at 1500 gigalitres;
* prioritise water recovery through on and off-farm infrastructure investments; and
* increase market certainty by publishing a Water Recovery Strategy.

**Sustainable Rural Water Use and Infrastructure Programme (SRWUIP):** The majority of SRWUIP infrastructure funds are committed to projects in the Murray-Darling Basin for improving the operation of off-farm delivery systems and helping irrigators improve on-farm water-use efficiency. The water savings generated from these projects are shared between the Australian Government for environmental use and irrigators for consumptive use.

***Water Act 2007:*** The Government is reviewing the *Water Act 2007* to assess whether the objectives of the Act and the Basin Plan are being met and examine opportunities to reduce regulatory and reporting burdens under the Act without compromising its environmental standards.

**Emissions Reduction Fund:** The Carbon Farming Initiative will be transitioned into the Emissions Reduction Fund. Administrative arrangements will be streamlined to ensure farmers have opportunities to participate in the fund. This includes additional opportunities for farm, forestry and livestock management.

**Management of pest species:** Pest management is being progressed collaboratively by Australian governments. The Government will contribute up to $10 million to help drought-affected farmers reduce the impact of pest and feral animals, which during drought add further pressure to pastures and ground cover when feed is critical for livestock. It will also help manage the impacts of predators such as wild dogs and foxes on grazing animals concentrating around fewer watering points during drought. This funding will be provided to State and Territory governments to build on existing pest management programmes and will be delivered through local delivery organisations. In July 2014, the Government announced a $280,000 investment in wild dog management under the National Wild Dog Action Plan developed by WoolProducers Australia.

**Coal seam gas:** The Government is strengthening the science underpinning regulatory decisions around the impacts of coal seam gas and coal mining development on water resources through the work of the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development, funding bioregional assessments (across New South Wales, Queensland, South Australia and Victoria) and other research to address knowledge gaps.

**Multiple Land Use Framework:** The framework was endorsed by the Standing Council on Energy and Resources in December 2013. It is a tool that supports land use decisions based on merit and underpinned by community consultation. It aims to reduce delay and community division. The framework recognises that development of many Australian industry sectors is reliant on access to land, inclusive of multiple stakeholder needs covering economic, environmental, heritage, societal and cultural values.

**National Soil Research, Development and Extension Strategy:** The strategy was released in March 2014 and will ensure soils research becomes more targeted and collaborative and better meets the needs of farmers. Separately, the appointment of the National Advocate for Soil Health, former Governor-General Major General the Hon. Michael Jeffery, AC, AO (Mil), CVO, MC (Retd), has been extended until December 2014.

**Climate information and research:** The Bureau of Meteorology and CSIRO are developing regionalised projections to inform climate risk management. The National Climate Change Adaptation Research Facility at Griffith University has been funded with $9 million to ensure the continuation of important work on climate adaptation.

## Water and natural resource management: What stakeholders proposed the Government should consider

**Policy idea 18—Improving water infrastructure and markets**

Developing our water infrastructure and improving the efficiency of water trading markets are integral to the competitiveness of Australia’s irrigation industries. Stakeholders suggested some ideas to improve water infrastructure, markets and administration. These included:

**a. Dams and water infrastructure**—The Government is seeking to identify new dam and infrastructure projects that can deliver Australia’s water supply needs in the future, including options for moving water from northern catchments to southern and from eastern to western. These projects would be aimed at improving the management of Australia’s water resources to support economic development and respond to community and industry needs. The Government is interested in stakeholder views on opportunities to further improve water-use efficiency or increase the amount of water available to agriculture through infrastructure projects, including through modification to existing infrastructure and establishment of new dam sites or aquifer recharge projects.

**b.** **Taxation concession for water reticulation infrastructure**—Somestakeholderssuggested introducing a50 per cent per year deduction over three years (150 per cent in total) for on-farm water reticulation infrastructure. This could help encourage greater investment in water infrastructure for farm development and for drought preparedness. The Government seeks stakeholder views on this approach and on the specific items that should qualify for immediate tax deductibility.

**c. Water markets**—Stakeholders suggested greater flexibility in water use be encouraged within the Murray-Darling Basin Plan. More specifically, they suggested that water reforms continue to support irrigation businesses and rural communities, including through more efficient water trading markets and by examining options for counter-cyclical temporary trade of environmental water by the Commonwealth Environmental Water Holder to mutually benefit irrigators and the environment. Such an approach could assist in smoothing temporary water prices over time, with environmental water being purchased and used in times of relative water surplus and released onto the market in drier periods when demand for water from irrigators is greater. This would need to be done within legislative constraints and in a manner that would not compromise the environmental objectives of the Basin Plan.

Some stakeholders suggested that the functioning of the water market may be improved if speculators were banned from participating in the market. The Government seeks further views on this. Banning certain entities from participating in the water market based on the primary nature of their operations may be administratively difficult given some water trading companies own land assets while others could readily purchase it if required.

**Policy idea 19—Natural resource management initiatives**

Environmental legislation provides important protections for our natural assets. However, regulation needs to appropriately recognise the interests of rural landowners. Ideas included:

1. **Amending the *Environmental Protection and Biodiversity Conservation (EPBC) Act 1999****—* Stakeholders suggested that:

i. *The EPBC Act be amended to remove onerous on-farm conditions*, such as certain excessive flora and fauna caveats. Since the EPBC Act commenced in 1999, there have been 54 agriculture-related projects referred for assessment, of which eight projects have been subject to conditions. The Government is interested in hearing from stakeholders about specific examples where the Act imposes excessive conditions on farmers.

ii. *The Act be amended to ensure that national transport and infrastructure goals/corridors have right of way*. The Government is interested in hearing from stakeholders about specific examples where the Act impedes national transport and infrastructure objectives.

**b. More targeted pest and disease management and control**—Stakeholders suggested changing the way governments, landholders, communities and industries invest in the management of established pests and diseases to better target activities and clarify responsibilities. While the management of pest species is the responsibility of State and Territory governments, the Australian Government may become involved where there is a national interest. Australian Government investment in this area could focus on:

i. *Managing established pests and diseases on Commonwealth lands*.

ii. *Investing in changing the way pest animals and weeds are managed on farms*, where there is a broader community benefit that exceeds the costs involved, such as investigating new or more cost-effective pest animal or weed control technologies (such as developing new toxins and sprays, improvements in baiting efficiency and fencing controls), mapping the distribution of pest animals and weeds and transfer of new knowledge to farmers.

iii. *Supporting industry/community led action and innovation*—for example, by further enabling grassroots community groups to take ownership of local NRM challenges.

This approach would potentially benefit all stakeholders, through reduced duplication of activities and investment, improved responsiveness to complex pest and disease challenges, and the timely and effective partnering of expertise.

# Research, development and extension

The long-term growth of the agriculture sector is closely related to its ability to access innovations that maintain or enhance competitiveness. Many stakeholders emphasised the importance of continued investment in research and development (R&D) and in ensuring that this R&D found its way onto the farm through extension efforts.

The Australian Government is committed to investment in research, development and extension (RD&E) while also encouraging private sector investment. The Government also recognises the need to look at new ways of ensuring that RD&E results in real advances in productivity on the farm, particularly through private and public extension services.

## What stakeholders said:

*‘Continuing investment in RD&E, including international collaboration, is essential in developing the innovations needed to address future challenges and increase productivity, which are two of the preconditions for farm gate profitability.’* **The Council of Rural Research and Development Corporations, submission IP438**

*‘[T]here is a great need for a system for the dissemination of knowledge, the results of research and the experience of successful farmers.’* **John Shaw, submission IP226**

## Outline of the issue

RD&E is widely recognised as a long-term source of new technologies and a key driver of agricultural productivity growth. The Australian Government considers that RD&E and productivity improvements are essential to achieve growth opportunities and competitiveness for agriculture.

The public sector has traditionally been the main investor in agricultural RD&E. Governments fund rural RD&E because of its wide-ranging benefits, including ‘enhancing the productivity and competitiveness of the sector and contributing to better environmental and social outcomes’ (PC 2011).

Private firms in agriculture typically under-invest in RD&E, partly because of the long time lags between investment in RD&E and realisation of commercial success—which can be up to 35 years or more—and partly because the benefits of success are not easily captured exclusively by the investor (Keogh & Potard 2010; Mullen & Crean 2007). In addition, Australian agriculture is largely composed of small family businesses, which have a low capacity to individually conduct or invest in RD&E. Many stakeholders recommended increasing public RD&E funding, which provides the foundation for the rural innovation system[[25]](#footnote-25). The Australian Government believes that both public and private investments in RD&E are necessary contributors to productivity growth and is committed to a   
co-investment model.

Australia’s rural innovation system is globally unique and highly regarded (Figure 22). The system is underpinned by the National Primary Industries Research Development and Extension Framework, which coordinates national rural RD&E efforts across the Australian, State and Territory governments, and industry and research providers. Central to the system are the 15 rural Research and Development Corporations (RDCs) (Table 5), jointly funded by producer levies and matching Government funding. CSIRO assists industry through funding, conduct and application of research and is ranked in the top 10 global research institutions for agricultural and plant science. Rural RD&E is further supported by Government investment in research providers, including Cooperative Research Centres (CRCs) (Table 5) and universities.

Figure 22 Australia’s agricultural innovation framework

Universities

**Research programmes/ procurement**

**Core funding**

Australian Government

State and Territory governments

International (e.g. CGIAR)

Industry   
(e.g. levy payers)

Private

Rural RDCs

CSIRO and CRCs

Industry

Private

**Supply**

State and Territory government departments

Universities

Industry

Private

Australian Government (e.g. CSIRO, ABARES, BOM, BREE)

Government programmes (Australian Government and States and Territories)

Source: Adapted from PC 2011

During consultations and in submissions, stakeholders identified the following gaps in the RD&E model:

* cross-sector and transformational research;
* collaboration both among RDCs and between RDCs and other rural research providers (such as universities, CSIRO and CRCs)[[26]](#footnote-26); and
* extension services to facilitate the adoption of innovation by farmers.

Table 5 Agricultural RDCs and CRCs

| **Who are the RDCs?** | **What do they do?** |
| --- | --- |
| Australian Egg Corporation Limited (AECL) | An industry-owned RDC for egg producers. |
| Australian Grape and Wine Authority (AGWA) | A statutory RDC for the wine sector (covering whole value chain ‘from vine to glass’). |
| Australian Livestock Export Corporation Limited (LiveCorp) | An industry-owned RDC for livestock exporters—collaborates with MLA for RD&E funding. |
| Australian Meat Processor Corporation (AMPC) | An industry-owned RDC for red meat processors—collaborates with MLA for RD&E funding. |
| Australian Pork Limited (APL) | An industry-owned RDC for pig producers. |
| Australian Wool Innovation Limited (AWI) | An industry-owned RDC for woolgrowers. |
| Cotton Research and Development Corporation (CRDC) | A statutory RDC for cotton producers. |
| Dairy Australia Limited (DA) | An industry-owned RDC for dairy farmers and processors. |
| Fisheries Research and Development Corporation (FRDC) | A statutory RDC for the fishing industry. |
| Forest and Wood Products Australia (FWPA) | An industry-owned RDC for wood processors, forest growers and Australian importers of forest products. |
| Grains Research and Development Corporation (GRDC) | A statutory RDC for producers of 25 grain, pulse and oilseed crops (wheat, barley, oats, sorghum, maize, triticale, millets/panicums, cereal rye, canary seed, lupins, field peas, chickpeas, faba beans, vetch, peanuts, mung beans, navy beans, pigeon peas, cowpeas, lentils, canola, sunflower, soybean, safflower and linseed). |
| Horticulture Australia Limited (HAL) | An industry-owned RDC for producers and processors of fresh and dried fruit and vegetables. Horticulture Innovation Australia is expected to replace Horticulture Australia Limited as the horticulture industry services body.  The establishment of Horticulture Innovation Australia Limited follows a recent independent report into the performance of Horticulture Australia Limited which recommended a change to a new, grower-owned research and development company. |
| Meat & Livestock Australia (MLA) | An industry-owned RDC for the meat and livestock industry producers (cattle, sheep and goat meat)—under a collaboration agreement MLA receives and spends matched Government RD&E funding on behalf of AMPC and LiveCorp. |
| Rural Industries Research and Development Corporation (RIRDC) | A statutory RDC for small rural industries and national issues. Industries include: chicken meat, honey bees and pollination, horses, game birds, angora goats, rabbits, ostriches, crocodiles, kangaroo, dairy sheep and goats, buffalo, emus, camel, wild boar, native geese, essential oils and plant extracts, fodder crops, pasture seeds, rice, tea tree oil, wildflowers and native plants, bioproducts and energy, quinoa, seaweeds, coffee and native plants. |
| Sugar Research Australia (SRA) | Industry-owned RDC for the sugarcane industry. |

| **Who are the CRCs?** | **What do they do?** |
| --- | --- |
| Australian Seafood CRC | Established in 2007–08 for eight years. Programme funding $35.5 million for research and innovation in the seafood value chain—from wild harvest or aquaculture production, to the consumer. |
| CRC for High Integrity Australian Pork | Established in 2011–12 for eight years. Programme funding $19.9 million for innovative, collaborative, whole value chain R&D and education programmes. |
| CRC for Sheep Industry Innovation | Established in 2007–08 for five years. Programme funding $15.5 million for developing and delivering new tools to enhance animal wellbeing and productivity, to introduce a quality-based value chain for sheep meat and facilitate widespread adoption of DNA-based genetic technologies. |
| Dairy Futures CRC | Established in 2009–10 for six and a half years. Programme funding $27.7 million for inventing improvements to pastures and cattle that reduce the cost of production, reduce farmers’ exposure to external price shocks and allow for greater levels of production. |
| Invasive Animals CRC | Established in 2012–13 for five years. Programme funding $19.7 million to counteract environmental, social and economic impacts of invasive animals (such as rabbits, foxes, wild dogs, carp and feral pigs) through development and application of new technologies and strategic pest management approaches. |
| Plant Biosecurity CRC | Established in 2012–13 for six years. Programme funding $29.6 million to develop knowledge, scientific support and tools to safeguard Australia from the economic, environmental and social consequences of ever-increasing biosecurity threats. |
| Poultry CRC | Established in 2009–10 for 7.5 years. Programme funding $27million to achieve sustainable, ethical poultry production (reducing greenhouse gas, dust and odour emissions, pathogens and pollutants) without compromising food safety or welfare. |

One factor behind the perceived under-investment in cross-sector and transformational research is thought to be the central role of the RDCs in rural RD&E. A key strength of the RDCs, which are mostly sector specific, is an understanding of existing problems for their own industries and ability to focus RD&E investments accordingly and deliver practical short-term to medium-term solutions. This strength can come at the expense of longer-term, cross-industry RD&E that benefits all sectors (PC 2011). In 2011, the Rural Research and Development Council proposed that 40 per cent of the investment funding of RDCs be directed to transformational RD&E (CRRDC 2011), while the Productivity Commission recommended that the Government establish and fund a new RDC, ‘Rural Research Australia’, to invest in non-industry specific RD&E that promotes productive and sustainable resource use by Australia’s rural sector.

CRCs have proven effective when established to deal with cross-cutting issues, such as invasive species or natural resource management challenges. The CRCs’ networks across RDCs, universities, State and Territory governments and public research organisations (such as CSIRO) facilitate this work. Six agricultural CRCs will continue to be active in 2014–15 (receiving $29 million); Dairy Futures, High Integrity Australian Pork, Invasive Animals, Plant Biosecurity, Poultry, and Sheep Industry Innovation (Department of Industry 2014).

An example of another area that could benefit from cross cutting research through a CRC is agricultural development in Northern Australia. The White Paper on Developing Northern Australia will consider the establishment of a CRC responsible for developing northern Australia, taking into account the CRC programme review underway.

Some stakeholders also suggested streamlining existing RDC functions, undertaking a root and branch review of the RDCs, or fully privatising RDCs[[27]](#footnote-27). The Government is committed to the basic architecture of the RDC model. However, it recognises that there may be scope for reform of particular RDCs—as was recently highlighted in the review of Horticulture Australia Limited (ACIL Allen Consulting 2014). The completed Senate Standing Committee on Rural and Regional Affairs and Transport inquiry into industry structures and systems governing marketing and R&D levies on the sale of grass-fed cattle, and the recently announced inquiry into all marketing and R&D levies, are also likely to influence future policy directions.

Extension is critical to ensure that productivity improvements generated by R&D innovations are adopted by farmers. Publicly-funded extension declined from 24 per cent of total public agricultural RD&E in 1952–53 to around 19 per cent in 2006–07 (Sheng et al. 2011). State and Territory governments have traditionally played the major role in extension delivery but have reduced funding in recent decades due to budget pressures and changing priorities leading to a deficiency in this area (Parliament of the Commonwealth of Australia 2007).

The gap in extension service provision is gradually being filled by industry and private business providers. However, stakeholders raised concerns about the lack of impartial advice available. For example, many companies deliver extension for their own products. Stakeholders also suggested declining extension was affecting take-up of R&D, limiting productivity gains. Opportunities might exist to make better use of existing farm advice services such as the Rural Financial Counselling Service (RFCS) to deliver extension activities.

Stakeholders also suggested amending research block grants under the Government’s research performance funding, arguing that the balance of incentives had not encouraged universities to undertake some activities, such as providing extension services. In its current form, the allocation of RD&E funding to universities is weighted towards academic incentives, such as publications, rather than practical application by industry. Stakeholders also suggested that allocation of research funding be more transparent, accountable or require peer review[[28]](#footnote-28). The Government is considering the funding system as part of its broader Industry Innovation and Competitiveness Agenda, and the issues raised by the agriculture sector will be taken into account in these considerations.

## Research, development and extension: What the Government is already doing

**RDC model:** The Government is committed to maintaining the rural RDC model. This includes the Government matching industry levies up to 50 per cent of eligible R&D expenditure and 0.5 per cent of an industry’s gross value of production, subject to other legislated limits. In 2013–14, the Australian Government contributed approximately $262 million to RDCs (including $11.3 million non-matched funding to RIRDC) and industry contributed approximately $432 million (R&D, marketing, biosecurity and residue testing levies).

**Additional funding for RD&E** **priorities:** The Government has launched a $100 million rural RD&E grants programme, *Rural R&D for Profit*. This will provide grants for collaborative research projects that focus on delivering cutting edge technologies and applied research, with an emphasis on how the research outcomes will be used by producers.

**Investing in research:** The Government is providing $29 million to six ongoing agricultural Cooperative Research Centres in 2014–15. The Government also funds broader science and technology research—for example, through CSIRO and grants to tertiary research institutions. In September 2014 the Government announced a review of the CRC programme and its role in supporting business and research collaboration.

**R&D Tax Incentive:** The Government provides the R&D Tax Incentive to stimulate Australian industry investment in RD&E. In the Coalition’s *Policy to Boost the Competitiveness of Australian Manufacturing*, the Government also stated an intention to review access to R&D tax support.

**Boosting commercial returns from research:** The Government has released a strategy to boost commercial returns from research, including establishing a Commonwealth Science Council. Under the strategy the Government will consult with researchers and industry on proposals to generate commercial outcomes from its research investment. These include changing research funding arrangements to provide greater incentives for collaboration between research and industry and developing world-class research infrastructure to attract international researchers.

**Developing a 10-year plan for agricultural science:** In July 2014 the Government announced $500,000 for the Australian Academy of Science to develop 10-year plans for chemistry, agricultural science and earth sciences. The plan will be developed in consultation with industry, academia and the education sector to identify future needs and investment priorities for agricultural science.

## Research, development and extension: What stakeholders proposed the Government should consider

**Policy idea 20—Strengthening the RD&E system**Collaboration, cross-sector and transformational research and extension have been identified as current gaps in Australia’s RD&E system. The Government is interested in ways to promote better rural RD&E coordination and reduce duplication. This includes encouraging closer working relationships between the RDCs, CRCs, CSIRO, universities and other research entities, establishing common RD&E priorities, and assisting farm businesses to innovate by facilitating greater access to R&D tax incentives and the development of private markets in extension services. Views are sought on the options below:

**a.** **Updating the rural RD&E** **priorities to better align with community needs***—*In consultation with stakeholders and States and Territories, the Government intends to update the National Rural R&D Priorities to provide targeted direction for all rural research funders and providers. This update will help align public RD&E spending with national science and research policy and ensure rural RD&E focuses on raising productivity and profitability. More targeted and detailed priorities would give greater control over the allocation of public RD&E funding in the national interest. Through consultations to date the Government has identified four key areas for RD&E investment that will be essential for the future of Australian agriculture and is seeking stakeholder views on:

• *advanced technology*, to enhance innovation of products, processes and practices across the food and fibre supply chains—through technologies such as robotics, digitisation, ‘big data’, genetics and precision agriculture;

• *biosecurity*, to improve understanding and evidence of pest and disease pathways to help direct biosecurity resources to their best uses, minimising biosecurity threats and improving market access for farmers;

• *soil, water and natural resource management*, to manage soil health, improve water use efficiency and certainty of supply, sustainably develop new agricultural areas and improve resilience to climate events and variability; and

• *adoption of R&D*, with a focus over time on increasing private delivery of extension services.

**b.** **Establishing a new body, or tasking existing research bodies, to coordinate cross-sector research**—A new or existing body could be tasked with promoting agricultural research, ensuring research was focused on the rural R&D priorities, encouraging R&D activities across disciplines and identifying the next big potential transformational research areas to encourage investment, collaboration and uptake. This could be supported by: adapting the CRC model to prioritise funding to support more cross-sectoral and coordinated research (for example, invasive species or natural resource management challenges); requiring RDCs to spend a proportion of their funding or using part of the new $100 million for RDCs to fund cross-industry and transformational R&D; or encouraging the Australian Academy of Science—in collaboration with State and Territory governments and private research providers—to complete a stocktake of capability in agricultural sciences and provide a plan for further capability development.

**c. Enhancing access to the R&D Tax Incentive**—Stakeholders expressed interest in enhancing access to the Government’s R&D Tax Incentive for the agriculture sector. The incentive allows practical, business-driven decision-making about ‘what’ and ‘where’ RD&E needs to be undertaken (Banks 2000). The R&D Tax Incentive, and proposals to expand the scheme, will be considered in the context of the Tax White Paper process. However, comments received here will assist in that process. Revisions could include making the R&D tax incentive more easily accessible in relation to unmatched voluntary R&D contributions, which could encourage higher investment from industry.

**d.** **Promoting the development of extension services**—Many stakeholders said they wanted to ensure that RD&E was effectively delivered to farmers to get the maximum value from levy expenditure. Given the large private benefits from extension, any Government intervention should enable the development of private markets for extension services. This is most likely to occur through co-operative activities that involve private extension providers, the RDCs, universities and State and Territory governments. The Government is seeking stakeholder feedback on ways to promote the development of the market for extension services—such as expanding RDC efforts or specific funds being made available to facilitate the development of extension markets.

**e.** **Decentralising Government agricultural research functions (such as RDCs and agencies of the Department of Agriculture) to regional areas, as appropriate**—Relocating RDCs and other portfolio agencies to regional centres could provide opportunities for better stakeholder engagement, improved service delivery and promotion of regionally focused RD&E. The Government could consider opportunities to develop regional research hubs though co-location with universities and other research providers.

**f.** **Regular five-yearly assessments of the RD&E system**—Regular assessment will increase transparency, collaboration, accountability, prioritisation, and cost-reduction through regular review of participants in the Australian RD&E system including RDCs, CRCs, CSIRO and universities. Assessments would aim to ensure that the system was focused on improving the profitability and competitiveness of the sector and providing greater accountability for expenditure of public funds.

**Policy idea 21—Improving the rural RDCs**Funding to the RDCs should drive tangible outcomes for farmers to improve farm profits by targeting priority areas and minimising research overheads. Views are sought on the options below:

1. **Administrative changes to the RDC model to increase transparency and reduce costs, including giving RDCs a targeted set of objectives**—Stakeholders suggested that the efficiency and transparency of the RDC model could be improved by: simplifying research application processes through a single generic form for all RDCs; requiring all RDC annual reports to provide reasonably comprehensive coverage of key deliverables and associated outcomes achieved for that year; requiring all RDCs to keep up-to-date information on their websites (i.e. strategic plan, the priorities used to determine which projects they will fund, an overview of key activities, and a list of the key RD&E and industry services they are funding); and setting out a targeted set of key objectives for each RDC that would be periodically reviewed and amended to assist in a greater focus on outcomes. For example, stakeholder feedback suggested that the RDCs focus more on research that will result in commercial outcomes for farmers.
2. **Increasing the flexibility of levy arrangements**—Changes to the way levies are established, collected and revised could improve administrative efficiency and ensure that the maximum amount of funding was available for research. Stakeholders recommended a number of changes to R&D levies such as: consolidating the number of levies; allowing access to Government matched funding for the next financial year to meet current year commitments; and permitting increased industry flexibility to reapportion levy dollars across levy categories. Stakeholders also suggested: suspending payment of levies during difficult periods; imposing levies as a per cent of a producer’s value of production on all industries; or imposing a new levy to fund an industry wide financial insurance scheme[[29]](#footnote-29). The Government is interested in views on increasing the flexibility of the levy system to better meet R&D objectives. On 2 September 2014 the Senate Rural and Regional Affairs and Transport References Committee announced an inquiry into all marketing and R&D levies in the agriculture sector. The Committee is due to report by 24 November 2014.

# Biosecurity

There is strong support from stakeholders for a robust biosecurity system that is risk-based and that protects Australia’s animal and plant health status.

The Government works to maintain a biosecurity system that manages the risks posed by the entry, establishment and spread of exotic pests and disease that might affect the health of Australia’s plants, animals and people. This in turn supports our domestic industries through the provision of assurances around our favourable pest and disease status and area freedom to develop and build export markets.

## What stakeholders said:

*‘West Gippsland Fruit Growers support investment in biosecurity protection as a high priority as the cost of control for pest and disease would be devastating.’* **West Gippsland Fruit Growers, submission IP648**

*‘There is a clear need to continue legislative reforms to ensure Australia operates a cost-efficient and international best practice biosecurity system.’* **Horticulture Taskforce, submission IP551**

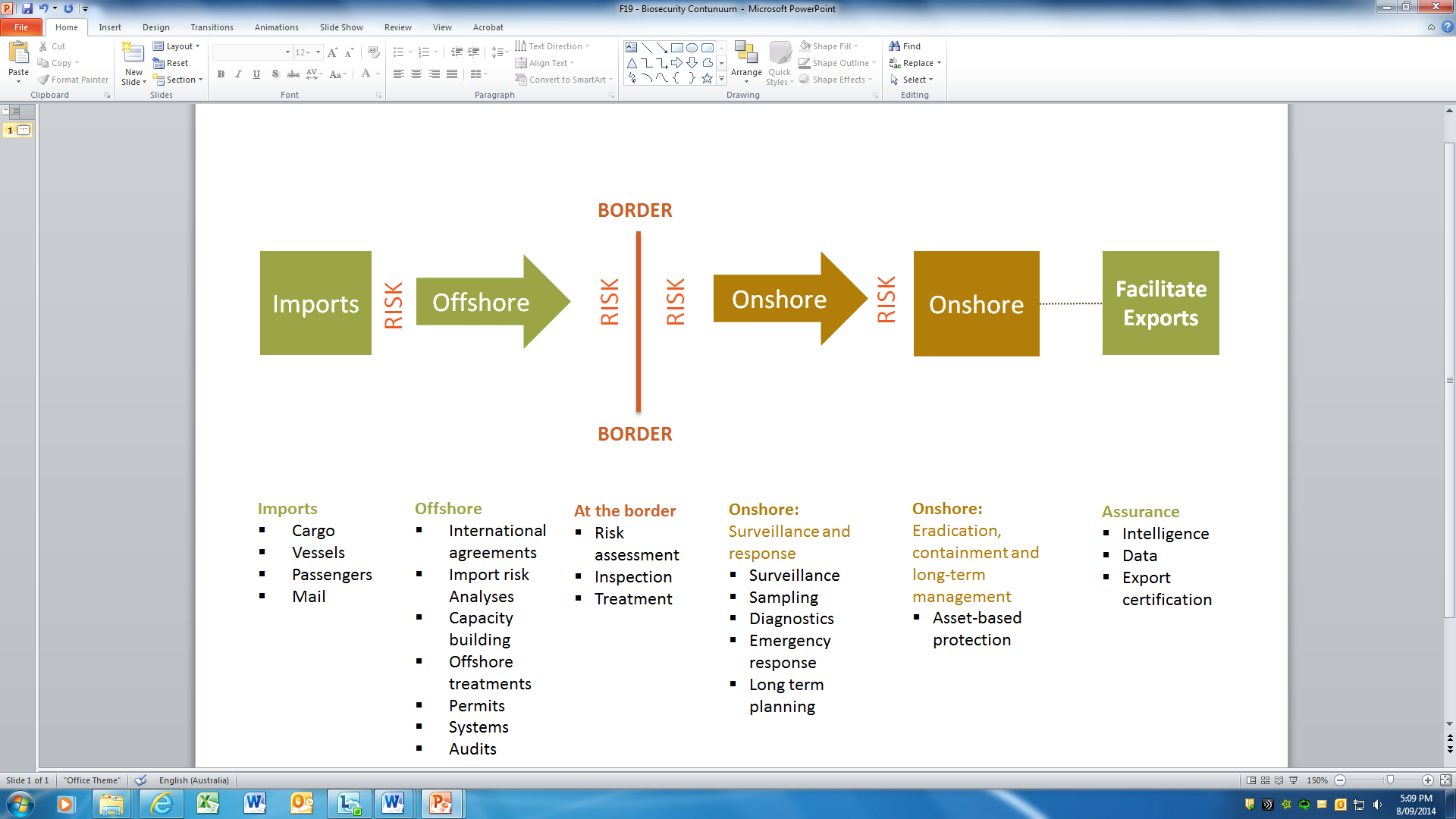
## Outline of the issue

Australia’s geographical isolation means our country is free from many harmful pests and diseases that exist in other parts of the world. Strong biosecurity keeps production costs down and facilitates export market access. It allows quality, safe imports that provide producers with cost-effective inputs and consumers with better choices and prices (Beale et al. 2008; Eslake 2011). More broadly, good biosecurity underpins the health of our people, environment and economy.

The economic benefits generated by Australia’s biosecurity status are considerable. For example, an outbreak of foot-and-mouth disease could cost the Australian livestock industries and governments an estimated $50 billion over 10 years (Buetre et al. 2013). Good biosecurity also protects Australia’s environmental assets.

Biosecurity services seek to manage pests and diseases that could pose a threat to animal, plant or human health across a continuum, where there is an emphasis on prevention, preparedness and early intervention. This includes activities offshore to reduce risks before they reach the border, at the border to deal with risks and onshore to minimise the impact of incursions and facilitate trade (Figure 23).

Figure 23 Biosecurity continuum



Biosecurity risk is managed to a very high standard. It would be impossible to achieve zero risk, even if all border movement of goods and people were stopped, due to natural processes (such as the wind, migrating birds and ocean currents). Under the risk-based approach, high-risk pests, diseases and their pathways are identified through intelligence gathering and analysis, supported by science. Efforts are focused on high-risk targets, reducing the regulatory burden and allowing faster clearance rates.

As biosecurity actions are delivered along the continuum, the roles of (and investment by) governments and stakeholders change. There is a stronger role for governments in the earlier stages of preventing a serious pest or disease from entering and establishing, as this provides a significantly higher investment return compared to the costs of managing a problem once established in the long term. This in turn avoids the cost of managing a pest or disease, which in the event it becomes established is generally borne by those directly affected (DEPI 2012). Controlling red imported fire ants collectively cost the Australian, State and Territory governments $411 million between 2001 and 2012 (Hafi et al. 2013).

Operating Australia’s biosecurity system involves collaboration and cooperation between the Australian Government, State and Territory governments, industry participants, the wider community and international trading partners. While the Australian Government is responsible for managing plant and animal biosecurity risks offshore and at the national border, State and Territory governments are mainly responsible for managing pest and disease incursions onshore.

Agreements such as the Intergovernmental Agreement on Biosecurity have been developed over time to help clarify the respective responsibilities of governments. This agreement identifies the roles and responsibilities of governments and outlines the priority areas for collaboration in order to minimise the impacts of pests and diseases on the economy, environment and community (COAG 2012). Fruit fly management is a good example of responsibility sharing. The Commonwealth is working with the States, Territories and industry to develop a national fruit fly strategy to better coordinate efforts in this area. The strategy’s success will depend on all parties actively contributing to its development and implementation.

Biosecurity risks are on the rise due to increased passenger and cargo movement and the spread of exotic pests and diseases. By 2030, Australian airports are expected to handle three times as many international passengers, or around 67 million passengers (BITRE 2012). Australian ports are expected to handle almost five times the volume of containerised imports (BITRE 2010a, 2010b; Hamal 2011). As a result, the Plant Biosecurity CRC (submission IP575) estimates that over the next 15 years there will be: more than 300 responses to exotic plant pests, more than 40 trade incidents and at least five occurrences of loss of area freedom, resulting in export challenges.

Australia’s biosecurity is faced with an increasingly complex global environment characterised by projected growth in tourism, passenger and cargo movements, as well as the potential for agri‑terrorism. Australia must apply a risk-based approach to assessing, prioritising and resourcing our biosecurity activities. Consistent with Australia’s risk-based approach, strategic surveillance, data gathering and analysis are needed to generate the intelligence needed to make informed decisions about what (and whom) to monitor, and then to target as part of Australia’s biosecurity activities. Intelligence enables the evaluation of relative risks so that resources can be deployed against the most likely threats.

International trading partners are calling for greater biosecurity assurance for agricultural and food exports[[30]](#footnote-30). At the same time, many stakeholders are concerned about the rising regulatory cost burden associated with exporting, including export certification[[31]](#footnote-31). However, stakeholders also recognise that certification by Australian authorities that overseas market requirements have been met provides a benefit in the form of a government stamp, which is essential for accessing overseas markets.

Many stakeholders sought a reduction of regulatory burden governing the export of Australian agricultural products to lower industry costs. Agricultural exports are governed by a regulatory framework comprising 10 acts (including the *Export Control Act 1982* and the *Australian Meat and Live-stock Industry Act 1997)* and more than 40 pieces of delegated legislation. According to stakeholders, this legislative framework includes inconsistent, complex and duplicative provisions. With a view to building a contemporary export control system, it is proposed that the Government review the legislative framework that governs exports.

It is important that Government agencies work effectively together to avoid unnecessary costs on business, while ensuring their critical roles are fulfilled. It is important that this is done in a way that does not compromise Australia’s biosecurity protections and quarantine capabilities, since that could compromise our competitive advantage and trade status, along with our agricultural and environmental integrity.

## Biosecurity: What the Government is already doing

The Australian Government is committed to maintaining a science-based biosecurity system that is focused on allocating biosecurity resources based on the level of risk, which facilitates the safe movement of animals, plants, people and cargo to and from Australia, and which conforms to Australia’s international obligations. Specifically, the Government is strengthening Australia’s risk‑based biosecurity system across the continuum, including by:

**Updating the *Quarantine Act*:** The Government has announced plans to replace the *Quarantine Act 1908* with a new Biosecurity Act to underpin a more modern and responsive biosecurity system.

**Examining the import risk analysis process:** The Government announced in July 2014 an examination of the import risk analysis (IRA) process. IRAs help identify and classify potential biosecurity risks, helping to manage import risks. Import risk analyses help to ensure Australia maintains our favourable pest and disease status, gains access to new markets, and continues productive trade relationships. While there are currently robust processes in place, stakeholders suggested there may be opportunities to improve them.

**Increasing funding:** The Government is investing $20 million to strengthen Australia’s biosecurity arrangements by providing additional resources to address pest and disease incursions.

**Support for small exporters:** The Government is cutting red tape for exporters by providing $15 million over four years for small exporters, including rebates to cover 50 per cent of export establishment registration costs in 2014–15. Remaining funding will be used to review fees and charges, as well as for projects that enhance market access for SMEs.

**International action:** The Government is pressing for transparent and science-based approaches to biosecurity in all countries to facilitate market access, including via the World Trade Organization and in FTAs; noting that the Government does not, and will not, negotiate on biosecurity measures in trade agreements.

**National Fruit Fly Strategy:** The Government has committed $80,000 for the coordination of a National Fruit Fly Strategy, an issue raised by a number of stakeholders in horticulture[[32]](#footnote-32).

**Biosecurity RD&E:** The Government supports research to provide the evidence necessary to ensure our produce is welcome in export markets, and to predict risks, including through the Plant Biosecurity CRC, the Centre of Excellence for Biosecurity Risk Analysis, the Rural Industries Research and Development Corporation and the CSIRO Biosecurity Flagship.

**New post-entry quarantine facility:** The Government has commenced work on a new single-site quarantine facility in Mickleham, Victoria.

## Biosecurity: What stakeholders proposed the Government should consider

**Policy idea 22—Improving legislation**

The biosecurity legislative framework should be clear, transparent and simple. The current proposed Biosecurity Bill 2014 will go some way in achieving this; however, many stakeholders felt that there was a need for updates to the other parts of the biosecurity legislative framework[[33]](#footnote-33). By examining the broader, complex biosecurity legislative framework, including the *Export Control Act 1982* and the *Australian Meat and Live-stock Industry Act 1997*, the Government could help build a modern export control system. This is a system that would meet industry needs and help overcome barriers to trade by assuring trading partners of the integrity of our products. Farmers could benefit from reduced red tape, lower export costs and more effective regulatory outcomes.

**Policy idea 23—Improving the biosecurity system**Australia’s biosecurity system protects our native flora and fauna and underpins our agricultural exports. To ensure that it remains robust and resilient to new and emerging pests and diseases in an increasingly complex global environment characterised by projected growth in movements, stakeholders suggested the need for:

**a. Increased information and intelligence gathering tools, supported by increased investment on high risk areas and priority pests and diseases***—*Australia must apply a risk-based approach to assessing, prioritising and resourcing our biosecurity activities as it is not sustainable to continually augment funding when government budgets are highly constrained and costs are shared with industry. A risk-based approach to delivering biosecurity services requires strategic surveillance, data gathering, and analysis to generate the intelligence to predict, identify and manage biosecurity threats and risks. Better information can help governments and industry prevent, prepare for and minimise the impacts of an incursion. One option suggested by stakeholders is for the Government to provide additional resources to improve the coordination of monitoring and surveillance initiatives, to better inform decisions about what (and whom) to monitor, and then to target, as part of Australia’s biosecurity activities. A strengthened intelligence and research capability may also assist in the provision of evidence of our pest-free status to support export market access for farmers.

**b.** **Enhanced onshore monitoring, including by developing reporting tools and establishing a public Biosecurity Information System to share information***—*The community is often the first to identify pest and disease incursions. Linking the community through the development of communication tools could boost the nation’s overall onshore monitoring capability. Examples include a ‘Community Biosecurity App’ for smart phones (such as the Pestpoint app recently developed by the Plant Biosecurity CRC). Stakeholders[[34]](#footnote-34) suggested developing a sustainable business model for the ongoing maintenance of a public Biosecurity Information System to collate disparate datasets and share information in areas of national importance.

**c.** **Collaborating with industry associations to extend traceability systems to better facilitate responses to outbreaks and expand market access***—*Some export markets will increasingly require the traceability of products from property of production through to the consumer. The Government is interested in options for collaborating with industry associations to extend traceability systems to enable improved responses to potential outbreaks and to promote as a system of disease control in the facilitation of sensitive market access.

# Accessing international markets

Australia’s performance in overseas food and fibre markets, and particularly our ability to meet the needs and preferences of individual consumers in those markets, will be vital to the future profitability and competitiveness of our agriculture sector.

To improve our performance, more needs to be done to ensure that agricultural exporters have access to a large range of overseas markets and that export barriers fall. Stakeholders felt that this should be achieved through a combination of bilateral trade agreements and negotiations to reduce technical and regulatory barriers in overseas markets. Stakeholders also wanted more information on how to access markets and about the business culture and consumer needs in other countries. Many stakeholders were also concerned about the lack of a coordinated national approach to international promotion of Australian agricultural produce.

## What stakeholders said:

*‘The single greatest gain that Australian agriculture can make is from improved market access. This is particularly the case given the role that Australia can play to meet the demand needs of Asia.’* **Australian Lot Feeders’ Association, submission IP453**

*‘A continued focus on providing a more even playing field for Australian producers and assisting Australian business to become export ready is essential.’* **Greater Shepparton City Council, submission IP308**

## Outline of the issue

Our farmers face increasingly stiff competition in world agriculture markets. The European Union, United States, Brazil, China and Argentina are the world’s top agricultural exporters by value (WTO 2012). However, other exporters in the developing world are increasing their share of global agricultural trade. By value, Indonesia, Thailand, Malaysia and India are now among the top 10 agricultural exporters globally—in contrast, Australia is just outside the top 10 (WTO 2012).

Key emerging Asian markets are increasing domestic production levels, and this is also proving an important source of competition. Agricultural production grew at double digit rates in China and Indonesia in the five years to 2011. This was well above developed country and world production growth rates (FAOSTAT 2014). On the other hand, rising production in these markets presents opportunities for exporters of Australian agricultural services and technologies.

Australia is not likely to become in literal terms the ‘food bowl of Asia’, but Australia can continue to contribute to the food needs of the region, including through being a niche supplier of premium agricultural products. The large and growing population of middle and upper income earners in Asia means that this niche is a large-scale opportunity compared with the size of our agriculture sector. Our products will need to continue to be differentiated by safety, environmental, quality and health standards—because our competitors are also targeting these characteristics. This will require a greater focus on products tailored to consumers’ needs[[35]](#footnote-35).

### Trade reform and agreements

Agriculture is one of the most distorted areas of international trade. Globally, tariffs for agricultural goods are more than three times higher than for non-agricultural goods, with some as high as 800 per cent (WTO 2013). While publicly funded support for agricultural producers in OECD nations is in gradual decline, trade‑distorting support remains high among many trading partners and is on the rise in some of our fastest growing markets (OECD 2013).

In contrast, Australia remains one of the least protected agricultural producers in the world (OECD 2013; WTO 2013). This reflects Australia’s longstanding position that our domestic economy has, and continues to, benefit from trade liberalisation and economic reform (PC 2010) and that we need to demonstrate leadership to encourage other countries to liberalise and reform (PC 2010; DFAT 2014a; CIE 2009; Varghese 2014).

The Australian Government will continue to press for global agricultural trade liberalisation in the World Trade Organization and to improve the global rules of the game for trade. The greatest economic benefits of trade liberalisation accrue from multilateral negotiations, according to the Productivity Commission (submission IP534). However, progress is likely to remain slow.

Globally, free trade agreements (FTAs) have increased threefold in the past two decades, and FTAs in our region have grown almost threefold in the past decade alone (Figure 24) (WTO 2014a; ADB 2014). Stakeholders are concerned that other countries have negotiated bilateral trade agreements with our most important trading partners, and are worried that we will lose our competitive edge, or that we may even be locked out of these markets[[36]](#footnote-36). Conversely, as the Winemakers’ Federation of Australia (submission IP552) suggests, by negotiating agreements with key trading partners we can gain an edge over our competitors.

At the same time, some stakeholders felt that our negotiators need to make sure that ‘agriculture as a sector is not traded off against other sectors to secure a deal’[[37]](#footnote-37). In negotiations, the Government carefully assesses the likely benefits to the Australian economy against the likelihood of achieving liberalisation to try to get the best possible deal for Australia.

Other stakeholders, such as the National Farmers’ Federation (submission IP536), suggest that farmers face barriers in capitalising on FTAs, which may affect uptake of preferential provisions. Barriers include a lack of information on market risks and opportunities (raised by the National Farmers’ Federation submission IP536) and behind the border barriers such as compliance with rules of origin and delays and administrative costs (Wong & Wirjo 2013; Productivity Commission submission IP534). The Australian diplomatic network, as well as Austrade, has an important role in helping business benefit from FTA provisions.

Figure 24 Trade agreements in force notified to the World Trade Organization, selected countries

Note: Includes agreements notified under the General Agreement on Tariffs and Trade (GATT) prior to 1995.

Source: WTO 2014a

Some stakeholders suggested adopting punitive trade countermeasures where we cannot get adequate market access from trade negotiations. This would be inconsistent with successive Governments’ approaches to trade liberalisation, could risk retaliation from markets that our exporters rely on and may also be inconsistent with Australia’s international trade obligations.

### Technical and regulatory barriers to trade

For many agricultural products, reducing tariff and quota barriers is only part of the story in achieving market access. While tariffs remain an impediment to agricultural trade, they are being reduced gradually due to efforts in the WTO and through free trade agreements. Non-tariff barriers on the other hand are on the rise, including in some of our fastest growing markets. These barriers include sanitary and phytosanitary (SPS) measures, technical and regulatory barriers (Figure 25).

Many stakeholders, including the Australian Dairy Industry Council and Dairy Australia (submission IP676), were concerned about the rise in technical and regulatory barriers. For example, a report prepared for Meat & Livestock Australia estimates that 261 technical market access barriers are costing the red meat industry more than $1.25 billion in lost export capacity (Harris et al.2013).

While some of these barriers are legitimate, there may be instances where measures are excessive and restrict trade or protect domestic production. In many circumstances, these measures are implemented rapidly and with little explanation. Addressing these barriers requires constant monitoring of export market developments, close relationships with overseas industry and governments, and dynamic responses. Our diplomatic network of agriculture and trade specialists, with its on-the-ground presence, is one of our best tools for addressing these barriers.

Technical negotiations between governments are often needed to open and maintain access for specific commodities in a particular country. However, it is not possible for the Government to immediately secure access for all products in all markets. Stakeholders such as the Grains Industry Market Access Forum (submission IP566) suggest mechanisms are needed to prioritise our efforts to where there is the greatest economic and commercial return.

Figure 25 Non-tariff measures in the agriculture sector, selected countries

Note: Initiated measures as notified to the WTO May 2014.

Source: WTO 2014b

International standards play an important role in protecting animal, plant and human health without unduly restricting trade. Standards are developed through organisations including the International Plant Protection Convention, the World Organisation for Animal Health, and the Codex Alimentarius Commission. This effort is further supported by Australia’s engagement in other international forums such as the Asia-Pacific Economic Cooperation (APEC) forum.

### Export market development and maintenance

Some producers are already realising the opportunities arising from strong global demand for food and fibre. New technologies, such as those enabling sales over the internet, are presenting new opportunities for connecting producers and buyers. However, many farmers have been left wondering what the so-called ‘Asian Century’ really means for them, and how they can benefit from these opportunities.

Entering a new market or increasing supply in an existing market requires a good understanding of the market, including risks and opportunities. Australian businesses, including in the agriculture sector, have identified a lack of information as their key barrier to doing business in Asia and other emerging markets (University of Sydney 2014). Others have also suggested that community and business perceptions of parts of Asia do not align with reality, and that this is affecting Australia’s trade performance (AIBC 2012). Specific information gaps include: local culture, business practices, language, consumer requirements and local regulation (University of Sydney 2014).

Community expectations of governments are high: nine in 10 Australians think the Government should be doing more to help Australian businesses in Asia (Oliver 2013). Some stakeholders have suggested a greater role for the Export Market Development Grants (EMDG) Programme and trade enhancement services like Austrade (see for example, Box 3) and for an expansion of the diplomatic network of trade and agriculture officers to help navigate the regulatory and business environment in high-growth markets[[38]](#footnote-38).

In the longer term, strengthening our relationships with key trading partners will be important for maintaining market access as suggested by Rabobank (submission IP576). Better links at the government, business and community levels will help build understanding of our key markets. Agricultural development cooperation also plays an important role in building relationships and trade capacity among developing country trade partners.

Many stakeholders sought a coordinated national approach to international promotion of Australian agricultural produce[[39]](#footnote-39). Fragmented brand messaging and trade missions are confusing buyers and failing to build Australia’s image as a supplier of premium products, differentiated by positive attributes such as clean, green and safe. This disadvantages Australia in the face of competitor countries that are improving their global branding, marketing and distribution.

Stakeholders said there was a need for a clear brand that can be used across industries, States and Territories, regions and individual producers. This should not simply be a ‘country of origin’ market label, but should give a consistent set of messages. They also felt that this was a long-term project requiring significant commitment from industry and Government[[40]](#footnote-40). Interestingly, as part of Andrew Forrest’s ASA 100 initiative (the Australia–Sino 100 Year Agricultural and Food Safety Partnership) a possible umbrella or endorsing brand for Australian agricultural and food products is being explored for export markets.

Box 3 Australian table grapes to overseas markets

Table grapes are Australia’s most valuable fresh fruit export crop, valued at $227 million in 2013–14 (ABARES 2014b). Over time the industry has strived to become more export oriented, to diversify their markets and add value to their crop. While an estimated 47 per cent (55,700 tonnes) of Australian grape production (fresh and dried grapes) was exported in 2007–08, this had increased to around 63 per cent (75,900 tonnes) in 2012–13\* (ABARES pers. comms 2014).

This expansion has required efforts by industry and government to increase markets available for exports. Market access achievements for table grapes included improved access to the Philippines (2013), Indonesia (2011) and Taiwan (2006) and new access in Japan (2014), the Republic of Korea (2013) and China (2010). Although Australia makes up only 0.7 per cent of world production, Australia’s table grape producers now have access to around 35 markets.

As an example of this progress, the first ever shipment of Australian table grapes reached Japan in April 2014, following eight years of market access negotiations. This was a significant milestone in the collective approach by government and industry, which commenced in 2006 when the horticulture industry nominated table grapes as a market access priority. Industry estimates suggest that the Japanese market could be worth up to $40 million over the next five years. The recently concluded Japan–Australia Economic Partnership Agreement (JAEPA) will further expand this opportunity, with tariffs on table grapes expected to be eliminated from 17 per cent for Japanese summer season fruit and 7.8 per cent for counter-seasonal fruit over the next seven to 10 years.

Note: \* Estimates based on fresh weight equivalent and excludes grapes exported as juice. Source: Department of Agriculture; Austrade

### Food security

Australia has a high level of food security due to our income level and trade surplus in food. Australia is ranked the 15th most food secure country on the assessment of 109 nations by the Economist Intelligence Unit (2014). Pockets of food insecurity for some individuals and communities in Australia remain due to low income or remoteness.

Food security is defined as *‘when all people at all times have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life’* (FAO et al. 2013).

Australia contributes to global food security and nutrition in several ways. Australia produces enough food to feed approximately 60 million people—more than twice our population size (PMSEIC 2010; Keogh 2014). Australia’s exports of agricultural goods and services also play a role in increasing food quality and availability globally. Australia’s contribution to domestic and international food security is best served through strong domestic and global economic growth, a strong international trading system and through a profitable and competitive Australian agriculture sector.

Australia contributes to a strong international trading system by promoting the development and maintenance of a rules-based multilateral system for agricultural trade (through active membership of the WTO). Australia also plays a role through membership of relevant international organisations, such as the Food and Agriculture Organization of the United Nations (FAO), the Codex Alimentarius Commission, the International Plant Protection Convention, and the World Organisation for Animal Health (OIE).

Australian aid activities contribute to global and regional food security. The Government will provide $5 billion per year in international aid in 2014–15 and 2015–16. The Government has introduced a new development policy framework, which will see our aid programme better promote economic growth and reduce poverty in recipient countries, which are key drivers for improving food security. Agriculture, fisheries and water are a priority area under the new framework. Aid for trade and private sector development are key elements of the new framework. In this context, Australia’s aid investments, including agricultural research and development through the Australian Centre for International Agricultural Research (ACIAR), will continue to help to lift agricultural productivity. Australia also continues to support multilateral aid efforts related to agricultural development in developing countries through the World Bank and Asian Development Bank.

Farmers in recipient countries benefit from agricultural development assistance. Cooperation activities promote economic development and income growth, which increases developing countries’ capacity to trade. Cooperation also helps build relationships between Australia and developing country partners. International RD&E funded by development cooperation assistance not only builds agricultural productivity in recipient countries, but also within Australia, according to the Crawford Fund (submission IP401).

Some stakeholders suggested using surplus Australian produce to supplement international food aid. The Government provides food assistance via financial support to the UN World Food Programme, enabling it to procure and deliver food assistance efficiently, effectively and in the most timely way possible to those in need. The Government will continue to work with Australian industry to assist potential suppliers to access procurement opportunities within the UN system.

## Accessing international markets: What the Government is already doing

### Trade reform and agreements

**WTO:** Building on the success of the WTO Uruguay Round, the Government continues to press for global agricultural trade liberalisation in the World Trade Organization to improve the global rules of the game for trade.

**FTAs:** The Government is prioritising the conclusion of high-quality FTAs with key trading partners. Agreements have recently been concluded with Japan and South Korea and negotiations are continuing with other key partners such as China, Indonesia, India and regionally via the Trans‑Pacific Partnership (Table 6).

Table 6 Australia’s Free Trade Agreements

| **Under negotiation** | **Concluded** | **In force** |
| --- | --- | --- |
| China  Gulf Cooperation Council\*  India  Indonesia  Pacific  Regional Comprehensive Economic Partnership  Trans-Pacific Partnership | Republic of Korea  Japan | ASEAN-Australia-New Zealand  Chile  New Zealand  United States  Malaysia  Singapore  Thailand |

Notes: \* Gulf Cooperation Council (GCC) Foreign Ministers have approved a conditional resumption of their free trade negotiations, after the GCC had suspended talks with its various negotiating partners in 2009. Australia has made strong representations to the GCC for the early resumption of FTA negotiations.

**Consulting industry:** The Government is focused on involving industry in trade negotiations, recognising that industry input is essential in ensuring agreements deliver real commercial outcomes for the agriculture sector, a view shared by many stakeholders[[41]](#footnote-41).

**Export services:** The Government helps exporters understand outcomes of FTAs (including via Austrade services) so they can take advantage of opportunities these bring[[42]](#footnote-42).

### Technical and regulatory barriers to trade

**Technical market access:** The Government conducts bilateral technical market access negotiations to ensure agricultural exporters reap the benefits of hard-won market access.

**Restoring livestock export markets:** The Government is opening or re-opening markets for live exports in the Middle East—including Bahrain, Iran and Egypt—and in Asia—Cambodia—by developing new health protocols and setting up Exporter Supply Chain Assurance System (ESCAS) compliant supply chains.

**International agreements:** The Government presses for the elimination of barriers within multilateral, regional and bilateral trade agreements—including working to develop international standards which protect animal, plant and human health so that Australian exports are not disadvantaged in world markets.

**WTO action:** The Government takes action against unreasonable barriers to trade within multilateral and regional organisations. In doing so, we consider all options, including using the WTO dispute settlement system, to address unfair and inconsistent barriers to trade.

### Export market development and maintenance

**Market development assistance:** The Government provides information and a range of market entry services for business via Austrade and the Export Finance and Insurance Corporation (EFIC), including by:

* **providing a $50 million boost to the EMDG** **programme** to help small exporters develop export markets; and
* **providing a $200 million boost to EFIC** to support small and medium-size businesses to successfully grow their exports.

**Trusted Trader Programme:** For trusted export and import businesses the Government will develop, in close consultation with industry, a programme to provide more flexible and efficient border clearance processes that allow trusted exporters and importers to get their goods to market faster.

**Overseas presence:** The Government builds relationships with overseas governments via government-to-government contact, high-level trade missions, Australia’s diplomatic network of agriculture and trade specialists, and through the more than 35 bilateral officials’ meetings relating to agriculture.

**Support for small exporters:** The Government is cutting red tape for exporters by providing $15 million over four years for small exporters, including rebates to cover 50 per cent of export registration costs in 2014–15. Remaining funding will be used to review fees and charges, as well as for projects that enhance market access for small and medium enterprises.

**New Colombo Plan:** The Government is implementing initiatives such as the New Colombo Plan to build relationships and enhance awareness within Australia of Asian countries’ cultures and economies.

### Food security

**Development assistance:** The Government provides international development assistance for agriculture in developing countries, such as joint RD&E and technical capacity building, which helps promote economic development and reduces poverty. Higher income and jobs in developing countries improve livelihoods as well as access to healthcare, education and a wider range of agricultural goods and services. Australia supports growth in the agriculture sector of developing countries, including by:

* supporting international agricultural RD&E collaboration—through the Australian Centre for International Agricultural Research and the international CGIAR network (Consultative Group on International Agricultural Research);
* membership of international organisations such as the FAO, the Codex Alimentarius Commission, the International Plant Protection Convention, and the OIE; and
* bilateral aid projects related to agriculture—for example, the Seeds of Life programme, which aims to restore the agricultural seed base in Timor-Leste.

**Genetic resources:** The Government supports the conservation, sustainable use and exchange of plant genetic resources for food and agriculture via the International Treaty on Plant Genetic Resources for Food and Agriculture and national gene-banks, allowing the development of new and better adapted crop varieties, contributing to food security.

**Social welfare:** The Government supports domestic food security by reducing the cost of living (including through a repeal of the carbon tax) and increasing employment participation.

**Energy security:** The Government will consider Energy Security,which may impact on Australia’s food production, in the context of the Energy White Paper. An Energy Green Paper was released on 23 September 2014.

## Accessing international markets: What stakeholders proposed the Government should consider

**Policy idea 24—Strengthening Australia’s overseas market efforts**

Maintaining international competitiveness requires an understanding of, and engagement with, our overseas customers and competitors. Stakeholders have called for improvements to the Government’s capacity to assist farmers to access international markets through:

1. **Undertaking further trade research**—Stakeholders such as Rabobank (submission IP567) and the Business Council of Australia (submission IP397) believe that, to remain competitive, industry and Governments need to better understand both our customers and competitors**.** Regular reports could be prepared on the activities of our major competitor countries in targeted Australian export commodities; and on consumer and market trends in current and emerging high value markets, including China, Indonesia, Japan, the Republic of Korea, the Middle East and Southeast Asia. Additional resources could also be devoted to modelling the benefits of potential trade liberalisation. Such research would complement the development of country market access strategies and could help farmers make the best choice about what products to sell, and how and where to sell them.

The Government could also consider funding ACIAR to conduct a joint regional agricultural RD&E project, with a focus on improving food security in the region. As suggested by Kym Anderson (submission IP167), this could help improve food security and develop strong agriculture sectors in other countries in the region. This could have the spillover effect of helping strengthen the international food trading system and also addressing the trend towards greater self-sufficiency policies among some countries.

1. **Improving exporter services and our understanding of overseas markets**—There may be scope to improve exporter services, for example by better coordinating services with industry associations and State and Territory governments, by better promoting services, or by placing a greater focus on the agriculture sector in provision of these services.
2. **Providing more exporter readiness training**—Given the export process is more complex for the agriculture sector than for many other sectors, agriculture could derive significant benefit from provision of export and international readiness training.
3. **Accelerating the development of technical, market access country and commodity strategies to prioritise market access efforts**—Stakeholders suggested such strategies could help better prioritise and target Australia’s efforts in technical market access, relationship-building and agricultural cooperation[[43]](#footnote-43). They could also help focus the attention of our trading partners on our most important technical market access requests. This could lead to opening up new markets for our exports in a more timely way. Country strategies could be developed for markets such as China, Japan, Indonesia, the Middle East, the Republic of Korea and in Southeast Asia, and potentially other emerging markets. Initial discussions have been held with industry participants on technical market access efforts for China and within the horticulture sector. However, there is a risk that these efforts may not necessarily speed up the time taken for other countries to process our requests, and that some stakeholders will be disappointed by the priorities chosen. Effective consultation and communication would be important.
4. **Developing national promotion efforts (such as through a national brand)**—A large number of stakeholders believe that we need a more coordinated national approach to promoting Australia’s agriculture and food brand internationally, which builds on Australia’s positive attributes, such as our clean, green and safe reputation, and our quality as an agricultural producing country. This could help convert our agricultural potential into export growth and achieve the price premiums that drive farm profitability. The Government has chosen to terminate the previous Government’s Leveraging Australia’s Brand for Food programme, but remains interested in options and stakeholder views in this area. Stakeholders have suggested this could be implemented through an evidence-based brand position that could be used across industry sectors, States and Territories, regions and producers. This would need to be driven primarily by industry, given that industry buy-in would be crucial to the success of such an initiative. For example, stakeholders have recently proposed an initiative to develop and launch a national food brand for Australia, to be led by industry.
5. **Increasing Australian Government positions overseas, and considering options for industry**‑**funded positions to underpin increased focus on agricultural market access**—A number of stakeholders suggested that increasing Australia’s on-the-ground presence in important export markets could improve access to those markets and so enhance export returns for farmers. These officers could identify and work to overcome trade restrictions, such as quarantine measures, with regulators in key markets. They could develop the relationships and intelligence we need to maintain and improve market access for exporters, but also provide market intelligence back to government and industry on potential opportunities, barriers and trends.

According to the Lowy Institute, Australia has the smallest diplomatic footprint of all G20 nations. Australia is estimated to have fewer diplomatic missions and diplomats overseas than all but a few far smaller OECD countries (Lowy Institute 2009; Oliver & Shearer 2011). The United States and United Kingdom have more than double the number of missions abroad compared with Australia, and Canada also has substantially more missions.

However, while there may be a case for more resources, it is costly to place Australian officials in overseas markets and alternatives need to also be considered (including use of locally engaged staff). Another option is to facilitate industry-funded overseas positions (for example industry-funded positions within Austrade, or positions within industry associations) to provide greater resources for dealing with market access problems as they emerge. These positions could deal with short-term sector-specific issues, leaving other officials with more time to deal with industry-wide issues or problems facing smaller, less well-resourced segments of the industry.  
  
A less costly option may be for the Government to maintain a cadre of Australia-based technical specialists for deployment to enable a quick response to critical market incidents overseas.

1. **Increasing engagement bilaterally, and in multilateral forums, to promote use of international standards in food regulation**—The Government could enhance our engagement in international standard setting forums such as the Codex Alimentarius Commission to promote greater consistency in food regulation among importing countries. The Government could also examine options, including committing aid funding, to support capacity building and cooperation with developing country partners on food safety and regulatory systems.

**Policy idea 25—Improving Australia’s export and import systems**

The Department of Agriculture provides a range of export and import certification systems and databases that enable exporters to comply with different countries’ import requirements, and domestic importers to comply with Australia’s biosecurity requirements. A review of these systems with a view to improving functionality and reducing compliance cost is seen as crucial by many stakeholders to their own cost-competitiveness. The Government’s review of biosecurity cost recovery arrangements could also explicitly consider export certification systems. Improving these systems through new ICT investments would enable existing exporters, as well as potential exporters exploring overseas requirements, to improve understanding of different countries’ import requirements, helping them with their access to international markets. This could include providing access to the Manual of Importing Country Requirements database (MICOR) for companies that are not yet exporting to help them research potential market opportunities.

# 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 agriculture 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.

**Released 9 December 2013**

# Appendix B: Issues paper consultation process

## The Government sought grassroots input from farmers and rural communities

### Introduction

On 6 February 2014 the Hon. Barnaby Joyce, Minister for Agriculture, released the Agricultural Competitiveness issues paper for public comment. Submissions were sought by 17 April 2014.

The issues paper attracted considerable interest from a range of parties including farmers, businesses throughout the supply chain, research organisations, government agencies and industry groups.

### Public consultations

During the nine-week issues paper consultation period, over 950 people were directly consulted. Meetings were held in 34 regional and metropolitan locations. Two types of meetings were held in most regional centres:

1. **Roundtable meetings**—small groups of key stakeholders invited based on recommendations by industry representative groups, research organisations and local members of Parliament.
2. **One-on-one meetings**—open to any interested member of the public. Dates were advertised in local news, on the White Paper website, and by local members of Parliament and industry groups.

Attendees at both the roundtable and one-on-one meetings included farmers, agribusiness individuals, supply chain companies, local members of Parliament, and non-government organisations and community groups.

The taskforce also met with a wide range of businesses, financial institutions, research institutions (including universities and rural Research and Development Corporations), supply chain companies, State government agencies, and industry representative groups (including the Agricultural Industry Advisory Council); and presented at events such as the National ABARES Outlook 2014 conference (which had more than 800 attendees over two days) and the National Farmers’ Federation Members’ Council.

### Written submissions

The Government received around 700 submissions on the issues paper, which have helped inform the development of the Green Paper. The majority of these (78 per cent) are publicly available on the website at http://agriculturalcompetitiveness.dpmc.gov.au; remaining submissions were provided in confidence. All submissions were read by the taskforce and informed the development of the Green Paper.

# Appendix C: Characteristics of top performing farms

Top performing farms produced more than half of the sector’s output—for the three years ending 2011-12, the top 25 per cent of farms accounted for 54 per cent of the broadacre value of output compared with 8 per cent for the bottom 25 per cent of farms (ABARES 2013b).

Top performing farms tended to be larger (although some medium and a few smaller scale farms perform well). Between 2007–08 and 2011–12 top performing broadacre farms were on average around 2.1 times larger than middle performing farms in terms of scale of operation and 2.9 times larger in terms of total cash receipts (ABARES 2013b). Generally, larger farms generate higher receipts and have lowers costs relative to the amount invested. Larger farms may be better able to capture productivity gains (Nossal et al. 2008). While small farms are under-represented in the top performing farm group and over-represented in the bottom performing group, they are nevertheless present in significant numbers (ABARES pers. comm. 2014).

Interestingly, neither top nor bottom performing farmers saw owning more land or expanding the business as important in being successful in farming (Bone et al.2003). However, more efficient and profitable farmers tended to be expanding farm area, and less profitable operators tended to be selling land (Hooper et al. 2002).

Top performing farms invested more—for the three years ending 2011–12, they accounted for 64 per cent of net capital additions on broadacre farms compared with 2 per cent for the bottom 25 per cent (ABARES 2013b). This rate of investment suggests that top performing farms are more likely to grow and generate productivity gains, maintaining or improving farm cash incomes, and continuing to increase their share of total output (ABARES 2013b).

Top performing farms are more highly geared, with significantly lower farm business equity ratios. Top performing broadacre farms had an average equity ratio of 83 per cent, compared with 88 per cent for all broadacre farms, in the three years ending 2011–12 (ABARES 2013b). Similarly, top performing vegetable farms had a slightly lower equity ratio of 83 per cent than for all vegetable farms (88 per cent) in 2011–12 (Valle, Caboche & Lubulwa 2014).

Despite being more highly geared, top performing farms spent the smallest proportion of their farm receipts on interest payments, indicating a greater ability to service debt. Top performing broadacre farms had farm business debt of around $1 million, and spent 8 per cent of receipts on interest repayments in the three years to 2011–12 (ABARES 2013b). In comparison, middle and bottom performing broadacre farms had a smaller farm business debt ($0.4 million and $0.2 million, respectively), but spent a larger share of farm receipts servicing interest repayments (9 per cent and 11 per cent) over the same period (ABARES 2013b). The same pattern was observed for vegetable farms in 2011–12 (Valle, Caboche & Lubulwa 2014).

Top performing farms derived a larger proportion of their total income from the farm business (ABARES 2014c). Total family income of the operator manager household averaged $179,000 for top performing farms, compared with $40,000 for middle performing farms and a loss of $10,000 for bottom performing farms over the three years to 2009–10 (ABARES pers. comm. 2014). Around 54 per cent of top performing farms had off-farm income less than $20,000 compared with 39 per cent of poor performing farms in the three years ending in 2009–10 (ABARES pers. comm. 2014). This pattern could reflect that low performing farms seek extra sources of income in off-farm activities, or may reflect a greater time and effort spent off-farm than on-farm (Kinura & Le Thi 2013).

Top performing farms are more frequently found in grain growing relative to livestock production (ABARES 2014f). A relatively high proportion of beef and sheep industry farms are found in the bottom or middle performing farms (ABARES pers. comm. 2014). Strong and expanding farms increased crop dominance of their farming system (Kingswell et al. 2013). This may reflect higher rates of productivity for grain producing farms than for livestock farms (Gray et al. 2011), which has allowed producers switching from livestock to grains to work the land more intensely. The downside of increased cropping however is the increase in profit volatility, which can increase risk exposure (Kingwell et al. 2013).

On average, operators of top performing broadacre farms are slightly better educated than on other farms. Over the three years ending 2009–10, around 50 per cent of the operators of top performing broadacre farmers and their spouses were tertiary educated, compared with 45 per cent of bottom performing farms (ABARES pers. comm. 2014). This trend is consistent with findings internationally (Kimura & Le Thi 2013). A higher proportion of top performing Australian vegetable growers were also found to have attended conferences and obtained specialist training in 2010–11, while a slightly higher proportion of the bottom 25 per cent attended workshops (Thompson & Zhang 2012). Operators of better performing farms in the beef industry have also been found to spend more than twice as many days in training each year than bottom performing famers (Riley et al. 2002).

Across seven OECD countries, including Australia, younger age was found to be a relevant factor in high performance (Kimura & Le Thi 2013). In Australia, on average, top performing broadacre farmers were younger (54 years) than bottom performing broadacre farmers (59 years) over the three years ending in 2009–10 (ABARES pers. comm. 2014). While vegetable growers’ average age is younger than broadacre farmers, there is little difference in the average age across different rates of return in 2010–11 (Thompson & Zhang 2012).

A number of managerial attitudes, values and priorities have been identified across top performing farmers in Australia, including long-term planning focused on wealth creation, commercial focus, proactivity and resilience, innovation focus, greater use of consultants and hired labour and a more positive attitude to training (Bone et al. 2003; Kingwell et al. 2013; ABARES pers. comm. 2014; Thompson & Zhang 2012).

# Appendix D: Acronyms

|  |  |
| --- | --- |
| ABARES | Australian Bureau of Agricultural and Resource Economics and Sciences |
| ABS | Australian Bureau of Statistics |
| ACCC | Australian Competition and Consumer Commission |
| ACIAR | Australian Centre for International Agricultural Research |
| ACT | Australian Capital Territory |
| ADB | Asian Development Bank |
| AgVet | Agricultural and Veterinary Chemicals |
| AIC | Assistance for Isolated Children |
| APEC | Asia–Pacific Economic Cooperation |
| APVMA | Australian Pesticides and Veterinary Medicines Authority |
| ARTC | Australian Rail Track Corporation |
| ASEAN | Association of South–East Asian Nations |
| ATO | Australian Taxation Office |
| AWPA | Australian Workforce and Productivity Agency |
| BITRE | Bureau of Infrastructure, Transport and Regional Economics |
| CCA | *Consumer and Competition Act 2010* (Cth) |
| CGIAR | Consultative Group on International Agricultural Research |
| CNL | Co-operatives National Law |
| COAG | Council of Australian Governments |
| CoOL | Country of Origin Labelling |
| CPI | Consumer price index |
| CRC | Cooperative Research Centres |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation |
| DAFF | Department of Agriculture, Forestry and Fisheries—renamed Department of Agriculture in 2013 |
| DAMA | Designated Area Migration Agreement |
| DFAT | Department of Foreign Affairs and Trade |
| EC | Exceptional Circumstances |
| EFIC | Export Finance and Insurance Corporation |
| EMDG | Export Market Development Grants |
| EPBC | Environmental Protection and Biodiversity Conservation |
| ESCAS | Exporter Supply Chain Assurance System |
| FAO | Food and Agriculture Organization of the United Nations |
| FIRB | Foreign Investment Review Board |
| FMD | Farm management deposit |
| FTA | Free trade agreement |
| GATT | General Agreement on Tariffs and Trade |
| GCC | Gulf Cooperation Council |
| GM | Genetic modification |
| GST | Goods and services tax |
| GVA | Gross value added |
| ICT | Information and communications technology |
| IGA | Intergovernmental Agreement |
| IRA | Import risk analysis |
| JAEPA | Japan–Australia Economic Partnership Agreement |
| LTSS | Long-term satellite services |
| MDB | Murray–Darling Basin |
| MICOR | Manual of Importing Country Requirements database |
| NBN | National Broadband Network |
| NCP | National Competition Policy |
| NDRRA | Natural Disaster Relief and Recovery Arrangements |
| NFF | National Farmers’ Federation |
| NRAC | National Rural Advisory Council |
| NRM | Natural Resource Management |
| NSW | New South Wales |
| NWI | National Water Initiative |
| OECD | Organisation for Economic Co-operation and Development |
| OIE | World Organisation for Animal Health |
| PAYGO | Pay As You Go |
| PC | Productivity Commission |
| PM&C | Department of the Prime Minister and Cabinet |
| QLD | Queensland |
| R&D | Research and development |
| RBA | Reserve Bank of Australia |
| RD&E | Research, development and extension |
| RDA | Regional Development Australia |
| RDCs | Research and Development Corporations |
| RFCS | Rural Financial Counselling Service |
| RIRDC | Rural Industries Research and Development Corporation |
| SA | South Australia |
| SPS | Sanitary and phytosanitary |
| SRWUIP | Sustainable Rural Water Use and Infrastructure Programme |
| SWP | Seasonal Worker Program |
| TIA | Tasmanian Institute of Agriculture |
| TIC | Transport and Infrastructure Council |
| UN | United Nations |
| US | United States of America |
| USDA ERS | United States Department of Agriculture Economic Research Service |
| WA | Western Australia |
| VET | Vocational education and training |
| WET | Wine Equalisation Tax |
| WHM | Working Holiday Maker visa programme, visa subclass 417 |
| WHS | Work health and safety laws |
| WTO | World Trade Organization |

# References

ACIL Allen Consulting 2014, *Better Value for Growers – A Future for HAL: Independent Review of HAL and the Horticulture Levy System*, Report to Horticulture Australia Limited, Canberra, available at: [www.acilallen.com.au/cms\_files/ACILAllen\_HAL.pdf](http://www.acilallen.com.au/cms_files/ACILAllen_HAL.pdf), accessed 23 June 2014.

Access Economics 2009, *Decision Regulation Impact Statement for a Model Occupational Health and Safety Act*, report to Safe Work Australia, 9 December.

AEC group 2010, *Towards a better understanding of current and future human resource needs of Australian agriculture*, research report, Australian Farm Institute, Surry Hills.

Agrifood Skills Australia 2014, *2014 Environmental Scan of the AgriFood Industry,* AgriFood Skills Australia and the Department of Industry, Canberra.

Asian Development Bank (ADB) 2014, *Asia Regional Integration Center: Free Trade Agreements – FTA by Status*, available at: http://aric.adb.org/fta, accessed 23 June 2014.

Australian Bankers Association (ABA) 2014, *Submission to Senate Inquiry into the Reserve Bank Amendment, (Australian Reconstruction and Development Board Bill) 2013*, available at: [www.rba.gov.au/publications/submissions/inquiry-rba-amend-aus-rec-dev-brd-bill-2013/pdf/inquiry-rba-amend-aus-rec-dev-brd-bill-2013.pdf](http://www.rba.gov.au/publications/submissions/inquiry-rba-amend-aus-rec-dev-brd-bill-2013/pdf/inquiry-rba-amend-aus-rec-dev-brd-bill-2013.pdf).

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

——2013b, *Agricultural commodities December Quarter 2013*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

——2013c, *Agricultural commodities September quarter 2013*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

——2013d*, Australian farm survey results 2010-11 to 2012-13*, Australian Bureau of Agricultural Resource Economics and Sciences, Canberra.

——2014a, *Agricultural commodities June quarter 2014,* Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

——2014b *Agricultural commodities September quarter 2014,* Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

——2014c, *Agricultural commodities March quarter 2014*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

——2014d, Unpublished data from the Australian Agricultural and Grazing Industries Survey, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

——2014e, *Australian farm survey results 2011–12 to 2013–14*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

ABS 2000, *International trade, Australia*, Information Consultancy Subscription Service, cat. no. 5465.0, Australian Bureau of Statistics, Canberra.

——2012a, ‘Year of the Farmer’, *Year Book Australia 2012*, cat. no. 1301.0, Australian Bureau of Statistics, Canberra.

——2012b, *Australian Social Trends, Dec 2012*, cat. no. 4102.0, Australian Bureau of Statistics, Canberra.

——2013a, *Australian Demographic Statistics*, cat. no. 3101, Australian Bureau of Statistics, Canberra.

——2013b *Population Projections, Australia, 2012 (base) to 2101*, cat. no. 3222.0, Australian Bureau of Statistics, Canberra.

——2013c, *Water Account*, *Australia, 2011–12*, cat. no. 4610.0, Australian Bureau of Statistics, Canberra.

——2013d, *Census of Population and Housing 2011*, Australian Bureau of Statistics, Canberra.

——2013e, *Counts of Australian Businesses—special data request*, cat. no. 8165.0, Australian Bureau of Statistics, Canberra.

——2013f, *Education and Work, Australia, May 2013*, cat. no. 6227.001.201305, Australian Bureau of Statistics, Canberra, Table 11.

——2013g, *Gross Value of Irrigated Agricultural Production*, 2011–12, cat. no. 4610.0.55.008, Australian Bureau of Statistics, Canberra.

——2014a, *Year Book Australia*, cat. no. 1301.0, Australian Bureau of Statistics, Canberra.

——2014b, *Agricultural Commodities, Australia*, cat. no. 7121.0, Australian Bureau of Statistics, Canberra.

——2014c, *Land Management and Farming in Australia*, 2012–13, cat.no.4627.0, Australian Bureau of Statistics, Canberra.

——2014d, ‘Employed persons by Industry (ANZSIC group), State and Territory, Status in employment and Sex, August 1991 onwards*‘, Labour Force, Australia, Detailed, Quarterly, Aug 2014*, cat. no 6291.0.55.003, Australian Bureau of Statistics, Canberra.

——2014e, *Australian Industry, 2012–13, Manufacturing industry by ANZSIC Class,* cat.no. 8155.0.003.201213, Australian Bureau of Statistics, Canberra.

——2014f, *Selected Characteristics of Australian Businesses 2012–13, Business Finance*, cat. no. 8167, Australian Bureau of Statistics, Canberra.

——2014g, ‘CPI: All Groups, Index Numbers and Percentage Changes‘, *Consumer Price Index, Australia*, cat. no. 6401.0, Australian Bureau of Statistics, Canberra.

——2014h, *Agricultural Land and Water Ownership, June 2013*, cat. no. 7127.0, ABS, Canberra.

—— Population Clock, available at: [www.abs.gov.au/AUSSTATS/abs@.nsf/Web+Pages/Population+Clock](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Web+Pages/Population+Clock), accessed 29 July 2014.

ACCC 2008, *Report of the ACCC inquiry into the competitiveness of retail prices for standard groceries*, Australian Competition and Consumer Commission, Canberra.

——2014a, *Unconscionable conduct*, Australian Competition and Consumer Commission, Canberra, available at: www.accc.gov.au/business/anti-competitive-behaviour/unconscionable-conduct, accessed 30 July 2014.

——2014b, *ACCC takes action against Coles for alleged unconscionable conduct towards its suppliers*, media release 6 May 2014, Australian Competition and Consumer Commission, Canberra, available at: www.accc.gov.au/media-release/accc-takes-action-against-coles-for-alleged-unconscionable-conduct-towards-its-suppliers, accessed 30 July 2014.

——2014c, *Country of origin claims and the Australian Consumer Law*, Australian Competition and Consumer Commission, Canberra, available at: www.accc.gov.au/system/files/Country%20of%20origin%20and%20the%20Australian%20Consumer%20Law.pdf.

The Australian Government the Treasury 2014, *Tax expenditures Statement 2013*, Commonwealth of Australia, Canberra, available at: [www.treasury.gov.au/~/media/Treasury/Publications%20and%20Media/Publications/2014/TES%202013/Documents/PDF/TES-13-Consolidated.ashx](http://www.treasury.gov.au/~/media/Treasury/Publications%20and%20Media/Publications/2014/TES%202013/Documents/PDF/TES-13-Consolidated.ashx), accessed 24 June 2014.

Australia-Indonesia Business Council (AIBC) 2012, *Submission to the Australia in the Asian Century White Paper*, Sydney.

Australian Institute of Management 2003, *Key Findings – Management Development Practice in Australia,* Management Research Series No 1/2003, Australian Institute of Management, St Kilda.

Australian Schools Directory 2014, available at: [www.australianschoolsdirectory.com.au./agricultural-schools.php](http://www.australianschoolsdirectory.com.au./agricultural-schools.php), accessed 24 June 2014.

ATO 2014, Taxation Statistics 2011–12, Australian Taxation Office, Canberra.

—— 2013, Taxation Statistics 2010–11, Australian Taxation Office, Canberra.

—— 2012, Taxation Statistics 2009–10, Australian Taxation Office, Canberra.

—— 2011, Taxation Statistics 2008–09, Australian Taxation Office, Canberra.

AWPA 2013, *Food and Beverage Workforce Study October 2013*, Australian Workforce and Productivity Agency, Canberra.

Bailey M 2014 ‘Wagner family builds major airport in 18 months… and now they want to build the $1.7 bn road to it too*’*, *Business Review Weekly*, Article updated online 12 February, available at: [www.brw.com.au/p/entrepreneurs/wagner\_family\_builds\_major\_airport\_LbYcL1TJzz43felFKGuzYM](http://www.brw.com.au/p/entrepreneurs/wagner_family_builds_major_airport_LbYcL1TJzz43felFKGuzYM), accessed 30 July 2014.

Banks G 2000, ‘Productive R&D Assistance’, Productivity Commission Chairman’s Speech, Institute Public Economics Forum, Melbourne.

Barr N 2014, *New entrants to Australian agricultural industries – Where are the young farmers?*, Rural Industries Research and Development Corporation, Canberra.

Beale R, Fairbrother J, Inglis, A & Trebeck D 2008, *One Biosecurity: A Working Partnership,* Independent Review of Australia’s Quarantine and Biosecurity Arrangements, Report to the Australian Government, Commonwealth of Australia, Canberra.

Bondietti K 2008, ‘Inconsistencies in the Treatment of Foreign Investment in Australia’s Trade Agreements’, *Australia’s Open Investment Future*, Paper 5, Australian APEC Study Centre Monash University, Melbourne.

Bone Z, Henry E, Hunt E and Sefton C 2003, *Attitudes and family farm business performance*, International farm management congress 10-15th August, Perth, available at: [ageconsearch.umn.edu/bitstream/24338/1/cp03bo01.pdf](http://ageconsearch.umn.edu/bitstream/24338/1/cp03bo01.pdf), accessed 23 June 2014.

Bonney L, Clark R, Collins R & Fearne A 2007, ‘From serendipity to sustainable competitive advantage: insights from Houston’s Farm and their journey of co-innovation’, *Supply Chain Management: An International Journal*, vol. 12, no. 6, pp 395*–*399.

Brandis G and Scullion N 2014, Native Title Ministers’ meeting—communiqué, media release, available at: [www.attorneygeneral.gov.au/Mediareleases/Pages/2014/ThirdQuarter/15August2014-NativeTitleMinistersMeetingCommunique.aspx](http://www.attorneygeneral.gov.au/Mediareleases/Pages/2014/ThirdQuarter/15August2014-NativeTitleMinistersMeetingCommunique.aspx), accessed 2 September 2014.

Buetre B, Wicks S, Kruger H, Millist N, Yainshet A, Garner G, Duncan A, Abdalla A, Trestrail C, Hatt M, Thompson LJ and Symes M 2013, *Potential socioeconomic impacts of an outbreak of foot‐and‐mouth disease in Australia*, ABARES research report, Canberra.

BITRE 2010a*, Australian maritime activity to 2029–30*, Bureau of Infrastructure, Transport and Regional Economics, Canberra.

——2010b, *Aircraft movements through capital city airports to 2029-30. Report 117*, Bureau of Infrastructure, Transport and Regional Economics, Canberra.

——2012 *Air passenger movements through capital and non-capital city airports to 2030–31,* Report 133, Bureau of Infrastructure, Transport and Regional Economics, Canberra.

——2014a, *The evolution of Australian towns*, Bureau of Infrastructure, Transport and Regional Economics, Canberra, available at: [www.bitre.gov.au/publications/2014/report\_136.aspx](http://www.bitre.gov.au/publications/2014/report_136.aspx), accessed 30 September 2014.

——2014b, *Freightline 1 – Australian freight transport overview*, Bureau of Infrastructure, Transport and Regional Economics, Canberra, available at: [www.bitre.gov.au/publications/2014/files/Freightline\_01.pdf](http://www.bitre.gov.au/publications/2014/files/Freightline_01.pdf), accessed 23 June 2014.

Centre for International Economics (CIE) 2009, *Benefits of trade and trade liberalisation,* Centre for International Economics, Report prepared for Department of Foreign Affairs and Trade, Canberra and Sydney.

The Coalition 2012, *The Coalition’s Policy Discussion Paper on Foreign Investment in Australian Agricultural Land and Agribusiness*, Canberra, available at: <http://shared.liberal.org.au/Share/Foreign_investment_discussion_paper.pdf>, accessed 29 July 2014.

The Coalition 2013, *The Coalition’s Policy for Resources and Energy,* September 2013, available from: [www.nationals.org.au/Portals/0/00\_Election\_00/Coalition%202013%20Election%20Policy%20–%20Energy%20and%20Resources%20–%20Final.pdf](http://www.nationals.org.au/Portals/0/00_Election_00/Coalition%202013%20Election%20Policy%20–%20Energy%20and%20Resources%20–%20Final.pdf), accessed 30 July 2014.

Cockfield G & Botterill LC 2007, ‘Deregulating Australia’s Wheat Trade: from the Australian Wheat Board to AWB Limited’, *Public Policy*, vol. 2, no. 1, pp 44–57.

Cocklin C, Dibden J & Mautner N 2006, ‘From market to multifunctionality? Land stewardship in Australia’, *The Geographical Journal*, Royal Geographic Society, vol. 172 no. 3, pp 197–205.

Council of Australian Governments (COAG) 2012, *Intergovernmental Agreement on Biosecurity*, available at: [www.coag.gov.au/node/47](http://www.coag.gov.au/node/47), accessed 23 June 2014.

——2014a, COAG Communique 2 May, Council of Australian Governments, Canberra.

——2014b, COAG Communique 10 October, Council of Australian Governments, Canberra.

Deans C & Stewart C, 2012, ‘Banks’ Funding Costs and Lending Rates’, *Reserve Bank of Australia Bulletin* March Quarter 2012, available at: [www.rba.gov.au/publications/bulletin/2012/mar/5.html](http://www.rba.gov.au/publications/bulletin/2012/mar/5.html) accessed 30 September 2014.

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

Department of Environment and Primary Industries (DEPI) 2012, *Invasive Plants and Animals Policy Framework*, DEPI, Victoria, available at: [www.depi.vic.gov.au/agriculture-and-food/pests-diseases-and-weeds/protecting-victoria-from-pest-animals-and-weeds/invasive-plants-and-animals/invasive-plants-and-animals-policy-framework](http://www.depi.vic.gov.au/agriculture-and-food/pests-diseases-and-weeds/protecting-victoria-from-pest-animals-and-weeds/invasive-plants-and-animals/invasive-plants-and-animals-policy-framework), accessed 23 July 2014.

DFAT 2014a, *Agriculture and the WTO,* Department of Foreign Affairs and Trade, available at: [www.dfat.gov.au/trade/negotiations/trade\_in\_agriculture.html](http://www.dfat.gov.au/trade/negotiations/trade_in_agriculture.html), accessed 23 June 2014.

——2014b, *Economic diplomacy*, Department of Foreign Affairs and Trade, available at: [www.dfat.gov.au/trade/economic-diplomacy/](http://www.dfat.gov.au/trade/economic-diplomacy/), accessed 23 June 2014.

Department of Industry 2014, *CRC Directory July 2014 – 15: Cooperative Research Centres Program,* Commonwealth of Australia, available at: [www.business.gov.au/grants-and-assistance/Collaboration/CRC/crcs/Documents/crc-directory.pdf](http://www.business.gov.au/grants-and-assistance/Collaboration/CRC/crcs/Documents/crc-directory.pdf), accessed 2 September 2014.

Drought Policy Review Task Force 1989, *Managing for drought: Interim Report July 1989*, Appendix 3 Terms of Reference, Australian Government Publishing Service, Canberra.

Economist Intelligence Unit 2014, *Global Food Security Index*, available at: http://foodsecurityindex.eiu.com, accessed 19 June 2014.

English B & Greenwood C 2012, ‘Beef Supply Chain Costs’, *Future Beef,* available at: <http://futurebeef.com.au/topics/markets-and-marketing/beef-supply-chain-costs/>, accessed 23 June 2014.

Eslake S 2011, ‘Transparency in trade policy’,Panel Discussion, *The Future of Trade Policy*, 40th Conference of Economists, Australian National University, Canberra, available at: <http://grattan.edu.au/static/files/assets/e18563ed/096_transparency_and_trade_policy_july_2011.pdf>.

FAO 2005, *The importance of soil organic matter: key to drought-resistant soil and sustained food and production*, Food and Agriculture Organization of the United Nations Soils Bulletin 80, Rome.

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, Rome.

FAOSTAT 2014, *Value of Agricultural Production Data,* Food and Agriculture Organization of the United Nations, Rome, available at: [http://faostat3.fao.org/faostat-gateway/go/to/download/Q/\*/E](http://faostat3.fao.org/faostat-gateway/go/to/download/Q/*/E), accessed 30 September 2014.

FIRB 2014, *Foreign Investment Review Board Annual Report 2012-13*, Foreign Investment Review Board, Canberra, available at: [www.firb.gov.au/content/Publications/AnnualReports/2012-2013/05\_Chapter\_2.asp](http://www.firb.gov.au/content/Publications/AnnualReports/2012-2013/05_Chapter_2.asp), accessed 29 July 2014.

Goucher G 2011, *Transport Costs for Australian Agriculture*, Research Report, Australian Farm Institute, Surry Hills.

GrainCorp 2014, ‘$200 million investment in country grain storage network to deliver improved supply chain performance’, News Release published 5 June, available at: [www.graincorp.com.au/investors-and-media/media/releases](http://www.graincorp.com.au/investors-and-media/media/releases), accessed 23 June 2014.

Grains Research and Development Corporation (GRDC) 2007, *Ground Cover Issue No. 64 – No-Till Supplement* 7 August 2007, available at: [www.grdc.com.au/Media-Centre/Ground-Cover/Ground-Cover-Issue-64](http://www.grdc.com.au/Media-Centre/Ground-Cover/Ground-Cover-Issue-64), accessed 30 July 2014.

Gray E, Sheng Y, Nossal K, Oss-Emer M & Davidson A 2011, ‘Improving productivity—the incentives for change’, *Agricultural commodities March quarter 2011*, ABARES, Canberra.

Gray EM, Oss-Emer M and Sheng Y 2014, *Australian agricultural productivity growth: past reforms and future opportunities*, ABARES research report 14.2, Canberra.

Gong W, Sinden J, Braysher M and Jones R 2009, *The economic impacts of vertebrate pests in Australia*, Invasive Animals Cooperative Research Centre, Canberra, available at: [www.feral.org.au/wp-content/uploads/2010/03/IACRC\_EconomicImpactsReport.pdf](file://internal/dfs/group/Agriculture%20Competitiveness%20Taskforce/Green%20Paper/13%20-%20Post%20cabinet/www.feral.org.au/wp-content/uploads/2010/03/IACRC_EconomicImpactsReport.pdf).

Green R, Agarwal R, Van Reenen J, Bloom N, Mathews J, Boedker C, Sampson D, Gollan P, Toner P, Tan H, Randhawa, K & Brown P 2009, *Management Matters in Australia: Just how productive are we?,* Department of Innovation, Industry, Science & Research, Sydney.

Grice AC, Watson I & Stone P 2013, *Mosaic Irrigation for the Northern Australia Beef Industry: an Assessment of Sustainability and Potential*,Synthesis Report prepared for the Office of Northern Australia, CSIRO, Brisbane.

Hafi A, Spring D, Croft L, Kompas T & Morey K 2013, Cost-effectiveness of biosecurity response options to red imported fire ants in South East Queensland, ABARES report to client prepared for the National Biosecurity Committee, Canberra.

Hamal K 2011, ‘International air freight movements through Australian airports to 2030’*, Australian Transport Research Forum Proceedings,* 28-30 September 2011, Adelaide.

Harris D, Harvey M & Shaw I 2013, *Comparative evaluation of technical barriers to trade for Australian red meat Report: prepared for Meat & Livestock Australia Ltd (MLA) and the Australian Meat Industry Council (AMIC)*, D. N. Harris and Associates, Melbourne.

Hay D & Howes S 2012, ‘Australia’s Pacific Seasonal Worker Pilot Scheme: why has take up been so low’, *Development Policy Centre Discussion Paper No.17,* Crawford School of Public Policy, The Australian National University, Canberra.

Hennessy K, Fawcett R, Kirono, D, Mpelasoka F, Jones D, Bathois J, Stafford Smith M, Mitchell C & Plummer N 2008, *An assessment of the impact of climate change on the nature and frequency of exceptional climatic events*, Bureau of Meteorology and CSIRO, Canberra.

Henzell T 2007, *Australian Agriculture: Its History and Challenges*, CSIRO Publishing, Victoria.

Holmes Sackett 2014, *A snapshot of the red tape costs on farm in Australia*, Report to the National Farmers’ Federation, Wagga Wagga, 27 February 2014.

Hooper S, Martin P, Love G & Fisher BS, 2002, ‘Farm size and productivity- where are the trends taking us?’, *Australian commodities*, Australian Bureau of Agricultural and Resource Economics, Canberra.

Industry Canada 2014, Co-operatives Policy website, available at: [www.ic.gc.ca/eic/site/693.nsf/eng/h\_00037.html](http://www.ic.gc.ca/eic/site/693.nsf/eng/h_00037.html), accessed 19 June 2014.

Keogh M & Potard G 2010, *Private Sector Investment in Agricultural Research and Development (R&D) in Australia*, Research Report, Australian Farm Institute, Surry Hills.

Keogh M, Granger R & Middleton S 2011, *Drought Pilot Review Panel: a review of the pilot of drought reform measures in Western Australia*, Canberra.

Keogh M 2012, *Including Risk in Enterprise Decisions in Australia’s Riskiest Businesses*, Farm Policy Journal, vol.9, no. 1, Autumn Quarter 2012 pp 11–20.

Keogh M & Tomlinson A 2013, *Does proximity to Asia breed complacency for agricultural trade?*, Australian Farm Institute Feature Article, available at: [www.farminstitute.org.au/newsletter/2013/May\_2013/May\_2013\_featurearticle.html](http://www.farminstitute.org.au/newsletter/2013/May_2013/May_2013_featurearticle.html), accessed 23 September 2014.

Keogh M 2014, ‘Australia exports enough food for 61,536,975 people - give or take a few!’*,* AgChat Article, Australian Farm Institute, available at: [www.farminstitute.org.au/\_blog/Ag\_Forum/post/australia-exports-enough-food/](http://www.farminstitute.org.au/_blog/Ag_Forum/post/australia-exports-enough-food/), accessed 23 September 2014.

Kharas H 2010, *The Emerging Middle Class in Developing Countries*, Working Paper No. 285, OECD Development Centre, Organisation for Economic Co-operation and Development, Paris.

Kimura S & Le Thi C 2013, *Cross Country Analysis of Farm Economic Performance*, OECD food agriculture and fisheries papers, No. 60, Organisation for Economic Cooperation and Development, Paris, available at: [www.oecd-ilibrary.org/agriculture-and-food/cross-country-analysis-of-farm-economic-performance\_5k46ds9ljxkj-en](http://www.oecd-ilibrary.org/agriculture-and-food/cross-country-analysis-of-farm-economic-performance_5k46ds9ljxkj-en).

Kingwell R 2013, *Issues and options for farm financing in Australia*, Farm Policy Journal, Vol. 10, No. 3, Spring Quarter 2013, Australian Farm Institute, Surrey Hills.

Kingwell R, Anderton l, Islam N Xayavong N, Feldman D & Speijers J 2013, ‘A decadal assessment of farm performance: any learnings?’, paper presented at 2013 Agribusiness Crop Updates, 25th - 26th February, Perth, available at: [www.giwa.org.au/\_literature\_123719/Kingwell,\_Ross\_et\_al\_-\_Presented\_Paper](http://www.giwa.org.au/_literature_123719/Kingwell,_Ross_et_al_-_Presented_Paper).

Landcare Australia 2014, *About Land Care Australia*, available at www.landcareonline.com.au/?page\_id=2, accessed 19 June 2014.

Linehan V, Thorpe S, Gunning-Trant C, Heyhoe E, Harle K, Hormis M & Harris-Adams K 2013, *Global food production and prices to 2050: scenario analysis under policy assumptions*, ABARES conference paper 13.6, Canberra.

Lowy Institute 2009, *Australia’s Diplomatic Deficit: Reinvesting in our instruments of international polic*y, Blue Ribbon Panel Report, Sydney, available at: www.lowyinstitute.org/files/pubfiles/BlueRibbonPanelReport\_WEB.pdf.

McConnon T & Bell L 2014, ‘Indigenous pastoral stations look to merge’, *ABC Rural*, 26 May, available at www.abc.net.au/news/2014-05-26/indigenous-stations-merger/5478056, accessed 23 June 2014.

McKinsey Australia 2014, *Compete to Prosper: Improving Australia’s Global* C*ompetitiveness*, report commissioned by the Business Council of Australia, Melbourne.

McLachlan ND 1967, ‘Macquarie, Lachlan (1762-1824)’, *Australian Dictionary of Biography*, National Centre of Biography, Australian National University, Canberra, available at: <http://adb.anu.edu.au/biography/macquarie-lachlan-2419/text3211>, accessed 29 July 2014.

Mitchell S 2014, ‘How supermarket suppliers can thrive under the duopoly: former Kellogg’s CEO’, *BRW Online*, published 7 April 2014, available at: [www.brw.com.au/p/business/mid-market/how\_supermarket\_suppliers\_can\_thrive\_DYa0nlalc2iQUjLHoSKUEI](http://www.brw.com.au/p/business/mid-market/how_supermarket_suppliers_can_thrive_DYa0nlalc2iQUjLHoSKUEI), accessed 30 July 2014.

Moir B 2011, *Foreign Investment and Australian Agriculture*, Rural Industries Research and Development Corporation, Canberra.

Moore R 2014, ‘Mr Rob Moore – Submission 32’, *Industry structures and systems governing levies on grass-fed cattle*, Senate Standing Committee on Rural and Regional Affairs and Transport, available at: [www.aph.gov.au/Parliamentary\_Business/Committees/Senate/Rural\_and\_Regional\_Affairs\_and\_Transport/Beef\_levies/Submissions](http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Beef_levies/Submissions), accessed 7 August 2014.

Mullen JD & Crean J 2007, *Productivity Growth in Australian Agriculture: Trends, Sources, Performance*, Research Report,Australian Farm Institute, Surry Hills.

Murphy S 2014, *Competitive Farming,* Landline, broadcast 15 June, transcript available at: [www.abc.net.au/landline/content/2014/s4025476.htm](http://www.abc.net.au/landline/content/2014/s4025476.htm).

Nairn ME, Allen PG, Inglis AR and Tanner C 1996*, Australian quarantine: a shared responsibility*, Department of Primary Industries and Energy, Canberra.

National Farmers’ Federation 2013, *Blueprint for Australian Agriculture*, Canberra, available at: [www.nff.org.au/blueprint.html](http://www.nff.org.au/blueprint.html), accessed 29 July 2014.

National Rural Advisory Council (NRAC) 2013, *Report on the workforce planning capabilities of agricultural employers*, Department of Agriculture, Fisheries and Forestry, Canberra.

Natural Resource Management Ministerial Council (NRMMC) 2007, *Australian Weeds Strategy – A national strategy for weeds management in Australia*, NRMMC, Australian Government Department of Environment and Water Resources, Canberra.

Nossal K, Sheng Y & Zhao S 2008, *Productivity in the beef cattle and slaughter lamb industries*, ABARE research report 08.13 for Meat & Livestock Australia, Canberra.

NSW Migration Heritage Centre 2010, ‘1810 Miniature Portraits of Lachlan and Elizabeth Macquarie’, *Objects through Time*, NSW Migration Heritage Centre, Powerhouse Museum, Haymarket, available at: [www.migrationheritage.nsw.gov.au/exhibition/objectsthroughtime/lachlan-macquarie-portraits/](http://www.migrationheritage.nsw.gov.au/exhibition/objectsthroughtime/lachlan-macquarie-portraits/), accessed on 29 July 2014.

OECD 2013, *Agriculture Policy Monitoring and Evaluation 2013*, Organisation for Economic Co‑operation and Development, Paris, available at: [www.oecd.org/tad/agricultural-policies/monitoring-and-evaluation.htm](http://www.oecd.org/tad/agricultural-policies/monitoring-and-evaluation.htm), accessed 23 June 2014.

Oliver A 2013, ‘Australia and the World: Public Opinion and Foreign Policy’, *The Lowy Institute Poll 2013*, Sydney, available at: [www.lowyinstitute.org/files/lowypoll2013\_web\_1.pdf](http://www.lowyinstitute.org/files/lowypoll2013_web_1.pdf), accessed 23 June 2014.

Oliver A, 2014, *The Lowy Institute Poll 2014*, Lowy Institute, Sydney. available at: <http://www.lowyinstitute.org/publications/lowy-institute-poll-2014>, accessed 30 September 2014.

Oliver A & Shearer A 2011, *Diplomatic Disrepair: rebuilding Australia’s international policy infrastructure,* Lowy Institute, Sydney.

Parliament of the Commonwealth of Australia 2007, *Skills: Rural Australia’s Need*, Inquiry into rural skills training and research, House of Representatives Standing Committee on Agriculture, Fisheries and Forestry, Canberra.

Philipson S 2011, ‘Sources of innovation: Revisited’, in: *Proceedings of the International Scientific conference:* ‘Economic & Social Challenges 2011-Globalization and Sustainable Development’, Tirana, Albania, 9–10 December 2011.

Pollard J 2000, ‘A hundred years of agriculture’, *2000 Year Book Australia*, Australian Bureau of Statistics, cat. no. 1301.0, Canberra.

Port Jackson Partners 2012, *Greener Pastures: The Global Soft Commodity Opportunity for Australia and New Zealand,* Sydney, October, available at: <http://media.corporate-ir.net/media_files/IROL/24/248677/ANZ_insight_3_Greener_Pastures.pdf>

PMSEIC 2010, *Australia and Food Security in a Changing World,* Prime Minister’s Science, Engineering and Innovation Council, Canberra.

Pratley J 2013, *Review into Agricultural Education and Training in New South Wales*, New South Wales Government, Sydney.

Productivity Commission (PC) 2000, *Single-desk marketing: assessing the economic arguments*, PC staff research paper, AusInfo, Canberra.

——2004, *Impacts of Native Vegetation and Biodiversity Regulations*, Report no. 29, Productivity Commission Melbourne.

——2005, *Trends in Australian Agriculture*, Research Paper, Productivity Commission, Canberra.

——2009, *Government Drought Support*, Report No. 46, Final Inquiry Report, Productivity Commission, Melbourne.

——2010, *Bilateral and Regional Trade Agreements*, Research Report, Productivity Commission, Canberra.

——2011, *Rural Research and Development Corporations*, Report No. 52, Final Inquiry Report, Productivity Commission, Canberra.

——2013, *Regulator Engagement with Small Business*, Research Report, Productivity Commission, Canberra.

——2014a, *Relative Costs of Doing Business in Australia: Dairy Product Manufacturing,* Research Report, Productivity Commission, Canberra.

——2014b, *Trade Assistance Review 2012-13*, Productivity Commission, Canberra.

Reid JF 2011, ‘The Impact of Mechanization on Agriculture’, *The Bridge*, Vol. 43, No. 3, National Academy of Engineering, Washington, available at: [www.nae.edu/File.aspx?id=52553](http://www.nae.edu/File.aspx?id=52553), accessed 28 July 2014.

Reserve Bank of Australia (RBA) 2014a, *Interest rates and yields – money market*, Statistical Table F1.1, Reserve Bank of Australia, Sydney.

——2014b, *Indicator lending rates*, Statistical Table F5, Reserve Bank of Australia.

—— 2014c, *Inflation Target*, Reserve Bank of Australia, available at: <http://www.rba.gov.au/inflation/inflation-target.html>, accessed on 30 September 2014.

——2014d, *Exchange Rates - Monthly - July 1969 to December 2009*, Statistical Table F11, Reserve Bank of Australia.

——2014e, *Economic and Financial Statistics*, historical data, table F2, available at: [www.rba.gov.au/statistics/historical-data.html](http://www.rba.gov.au/statistics/historical-data.html), accessed 30 September 2014.

——2014f, *Rural debt by lender*, Statistical Table D9, Reserve Bank of Australia.

——2014g*, Bank lending to businesses - Total credit outstanding by size and by sector*, Reserve Bank of Australia, available at: www.rba.gov.au/statistics/tables/xls/d07dhist.xls, accessed 19 June 2014.

——2014h, *Submission to the Inquiry into the Reserve Bank Amendment*, Australian Reconstruction and Development Board.

Retailer & Supplier Roundtable Ltd 2014, *Paddock to Plate: Reform of regulations to enhance competitiveness, increase productivity and decrease the cost of doing business*, Retailer & Supplier Roundtable Ltd, available at: <http://austlogistics.com.au/wp-content/uploads/2014/09/RSR-Final-Report-Paddock-to-Plate-Regulatory-H.pdf>.

Riley D, Gleeson T, Martin P, Hooper S & Shafron W 2002, *Australian Beef Industry 2002, Report of the Australian Agricultural and Grazing Industries Survey of Beef Producers*, ABARE Research Report 02.4, Canberra, available at: <http://data.daff.gov.au/data/warehouse/pe_abarebrs99000827/PC12377.pdf>.

Rural Research and Development Council (CRRDC) 2011, *National Strategic Rural Research and Development Investment Plan,* Department of Agriculture, Fisheries and Forestry, Canberra.

Sanyal K 2014, *Foreign Investment in Australian Agriculture*, Parliamentary Library Research Paper Series 2013-14, Department of Parliamentary Services, Canberra, available at: www.aph.gov.au/About\_Parliament/Parliamentary\_Departments/Parliamentary\_Library/pubs/rp/rp1314/ForeignInvest.

Savills 2012, *International farmland focus 2012-Going with the grain*, Savills Rural Research, London, available at: <http://pdf.euro.savills.co.uk/global-research/international-farmland-focus.pdf>.

Sheales T & McDonald D, ‘Trade reform and issues for Australian Beef’, *Beef Expo 2003,* ABARE Conference Paper 03.14, Australian Bureau of Agricultural and Resource Economics, Coffs Harbour, available at: <http://data.daff.gov.au/brs/data/warehouse/pe_abarebrs99000984/PC12576.pdf>.

Sheng Y, Gray EM, Mullen JD & Davidson A 2011, *Public investment in agricultural R&D and extension: an analysis of the static and dynamic effects on Australian broadacre productivity*, ABARES, Canberra.

Stanley R 2014, ‘New enabling technology for fruit & veg processing’, presentation to the Tasmanian Fruit and Vegetable Taskforce*,* Devonport, 11 July 2014.

Standing Council on Energy and Resources (SCER) 2013, *Multiple Land Use Framework*, available at http://www.scer.gov.au/files/2013/12/Endorsed-MLUF.pdf.

Thompson T & Zhang K 2012, *Australian vegetable growing farms: an economic survey 2010-11 and 2011-12*, ABARES, Canberra, December, available at: <http://data.daff.gov.au/data/warehouse/9aab/9aabf/2012/avfesd9abri20121127/AustVegGrwFrmEcoSurvey_1.0.0.pdf>.

Thompson T & Martin P 2014, *Australian beef: financial performance of beef cattle producing farms, 2011‒12 to 2013‒14*, ABARES research report prepared for Meat & Livestock Australia, Canberra.

Transport and Infrastructure Council (TIC)2013, Communique, Canberra, 10 May.

——2014a, Communique, Alice Springs, 9 May.

——2014b, Communique, Alice Springs, 23 May.

Tulloh C & Pearce D 2011, *Transport Infrastructure for Australia’s Agricultural Needs*, Rural Industries Research and Development Corporation, Canberra, available at: <https://rirdc.infoservices.com.au/items/11-096>, accessed 23 June 2014.

United States Bureau of Labor Statistics 2012, *International Labor Comparisons, International Comparisons of Hourly Compensation Costs in Manufacturing Industries, by Industry, 2008-2012*, available at: [www.bls.gov/fls/ichccindustry.htm#10](file://internal/dfs/group/Agriculture%20Competitiveness%20Taskforce/Green%20Paper/8-%20Draft%20following%20joyce%20comments/www.bls.gov/fls/ichccindustry.htm#10), accessed 23 June 2014.

United States Department of Agriculture (USDA) Economic Research Service (ERS), *Updating the ERS Farm Typology*, USDA ERS Economic Information Bulletin No. 10 April 2013.

University of Sydney 2014, *Australia’s International Business Survey 2014*, commissioned by the Export Council of Australia, the Export Finance and Insurance Corporation and Austrade, available at: <http://sydney.edu.au/business/__data/assets/pdf_file/0015/201651/AIBS_2014_Report.pdf>, accessed 23 June 2014.

Valle H, Caboche T & Lubulwa M 2014, *Australian vegetable growing farms: An economic survey, 2011–12 and 2012–13*, ABARES Research report 14.1 prepared for Horticulture Australia Limited, Canberra.

Varghese P 2014, *Trade and Domestic Reforms: The Australian Experience.* CUTS International 30th Anniversary Lecture, available at: [www.dfat.gov.au/media/speeches/department/140203-cuts.html](file://internal/dfs/group/Agriculture%20Competitiveness%20Taskforce/Green%20Paper/8-%20Draft%20following%20joyce%20comments/www.dfat.gov.au/media/speeches/department/140203-cuts.html), accessed 23 June 2014.

Western Australian Government 2014, *Ord River Irrigation Expansion Project*, Department of State Development, available at: [www.dsd.wa.gov.au/8989.aspx](file://internal/dfs/group/Agriculture%20Competitiveness%20Taskforce/Green%20Paper/8-%20Draft%20following%20joyce%20comments/www.dsd.wa.gov.au/8989.aspx), accessed 20 June 2014.

Wong M-H and Wirjo A 2013, *Findings from the ASEAN-BAC Business Survey,* Lee Kuan Yew School of Public Policy, National University of Singapore, ASEAN-BAC 2013, available at: <http://lkyspp.nus.edu.sg/wp-content/uploads/2013/11/2013-ASEAN-BAC-Survey-Report-1.pdf>, accessed 23 June 2014.

World Bank 2014, *Data by country*, Washington, available at: <http://data.worldbank.org/country/indonesia>, accessed 29 July 2014.

WTO 2012, *International trade statistics 2012*, World Trade Organization, Geneva, available at: [www.wto.org/english/res\_e/statis\_e/its2012\_e/its12\_toc\_e.htm](http://www.wto.org/english/res_e/statis_e/its2012_e/its12_toc_e.htm).

—— 2013, *World Tariff Profiles*, World Trade Organization, Geneva.

——2014a, *Regional Trade Agreements: Facts and Figures,* World Trade Organization, available at: [www.wto.org/english/tratop\_e/region\_e/regfac\_e.htm](http://www.wto.org/english/tratop_e/region_e/regfac_e.htm), accessed 23 June 2014.

——2014b, *Integrated Intelligence Portal- I-TIP Goods: Integrated analysis and retrieval of notified non-tariff measure,* World Trade Organization, available at: <http://i-tip.wto.org/goods/default.aspx?language=en>, accessed May 2014.

Wright IJ, Reich PB and Westoby M 2001, ‘Strategy shifts in leaf physiology, structure and nutrient content between species of high- and low-rainfall and high- and low-nutrient habitats’, *Functional Ecology*, vol. 15 no. 4, pp 423–434.

1. Destinations examined included both domestic (Sydney/Melbourne) and export (Japan, Egypt, Indonesia, China, Singapore, United Kingdom) markets. [↑](#footnote-ref-1)
2. Product case studies included: wheat, cattle/beef, cotton, wool, table grapes, apples, bananas and wine. [↑](#footnote-ref-2)
3. See for example Gulf Savannah Development submission IP227, Queensland Government submission IP690, Shire of Wiluna submission IP275 and Wimmera Development Association submission IP395. [↑](#footnote-ref-3)
4. See for example the Queensland Government submission IP690, Western Australian Government submission IP476, Wimmera Development Association submission IP395. [↑](#footnote-ref-4)
5. See for example Andrew Broad MP submission IP236, GrainCorp Limited submission IP682, Wimmera Development Association submission IP395. [↑](#footnote-ref-5)
6. See for example GrainCorp Limited submission IP682. [↑](#footnote-ref-6)
7. See for example the NSW Business Chamber submission IP665, Cotton Australia submission IP393. [↑](#footnote-ref-7)
8. See for example the Australian Table Grape Association submission IP72 and Shane & Maree Kennedy submission IP123. [↑](#footnote-ref-8)
9. See for example Ausveg submission IP532 and National Farmers’ Federation submission IP536. [↑](#footnote-ref-9)
10. See for example NSW Northern Rivers Combined Cooperatives submission IP139, Matthew Smith submission IP148, Business Council of Co-operatives and Mutuals submission IP593. [↑](#footnote-ref-10)
11. See for example AUSVEG submission IP532, Harvest Feast submission IP542 and the National Farmers’ Federation submission IP536. [↑](#footnote-ref-11)
12. See for example Queensland Dairyfarmers’ submission IP685, AUSVEG submission IP532, Nufarm submission IP374, Horticulture Taskforce submission IP551, Croplife submission IP432. [↑](#footnote-ref-12)
13. See for example South Australian Dairyfarmers Association submission IP331, Australian Grain Exporters Association submission IP361, CropLife Australia submission IP432, Productivity Commission submission IP534 and Australian Oilseeds Federation submission IP647. [↑](#footnote-ref-13)
14. The formal entities in the court proceedings are Coles Supermarkets Australia Pty Ltd and Grocery Holdings Pty Ltd. [↑](#footnote-ref-14)
15. See for example Shane and Maree Kennedy submission IP123, Jo-Anne Bloomfield submission IP280, Nicola Bussell submission IP514. [↑](#footnote-ref-15)
16. ABARES defines a farm as an agricultural establishment with an estimated value of agricultural output exceeding $40,000 per year. [↑](#footnote-ref-16)
17. The ABS definition includes farm businesses with a turnover of less than $40,000. [↑](#footnote-ref-17)
18. See for example Peter Burke submission IP247, DIG Far North Coast Dairy Industry Group Incorporated submission IP390 and CBH Group submission IP557. [↑](#footnote-ref-18)
19. See for example Simon De Garis submission IP173, Nufarm Ltd submission IP374, Regional Development Australia - Tasmania submission IP363, Cotton Australia submission IP393 and Food and Fibre Supply Chain Institute submission IP378. [↑](#footnote-ref-19)
20. See for example AUSVEG submission IP532, Regional Development Australia – Tasmania submission IP363, Macarthur Future Food Forum submission IP589 and Future Farmers Network submission IP512. [↑](#footnote-ref-20)
21. See for example Australian Livestock & Property Agents Association Ltd submission IP166, National Farmers’ Federation submission IP536 and Australian Council of Deans of Agriculture submission IP538. [↑](#footnote-ref-21)
22. See for example Longerenong Agricultural College submission IP249, Blair and Josie Angus submission IP253 and Yaraka Isisford Branch, Isolated Children’s Parents’ Association submission IP343. [↑](#footnote-ref-22)
23. See for example KAGOME Australia submission IP261, Ag Institute Australia submission IP459, Primary Industries Skills Council submission IP628 and Australian Dairy Industry Council and Dairy Australia submission IP676. [↑](#footnote-ref-23)
24. See for example AJ and PA McBride Pty Ltd submission IP268 and Isolated Children’s Parents’ Association (Qld) Inc. submission IP559. [↑](#footnote-ref-24)
25. See for example AJ and PA McBride PL submission IP268, Australian Women in Agriculture submission IP318, Chestnuts Australia Inc, Hazelnut Growers of Australia Inc, Pistachio Growers’ Association Inc submission IP403, Australian Academy of Technological Sciences and Engineering submission IP443, Ag Institute Australia submission IP459, AUSVEG submission IP532, Canegrowers submission IP581, Australian Dairy Industry Council and Dairy Australia submission IP676 and Cattle Council of Australia submission IP692. [↑](#footnote-ref-25)
26. See for example Warren Hunt submission IP54, Tasmanian Irrigation Pty Ltd submission IP332 and Australian Academy of Technological Sciences and Engineering submission IP443. [↑](#footnote-ref-26)
27. See for example Laucke Flour Mills submission IP350 and Costa submission IP426. [↑](#footnote-ref-27)
28. See for example Dr Margaret Hardy submission IP165, Agricultural Levies Institute of Australia submission IP292 and RSPCA Australia submission IP635. [↑](#footnote-ref-28)
29. See for example Shire of Wiluna submission IP275, Cherry Growers Australia submission IP406 and Cattle Council of Australia submission IP692. [↑](#footnote-ref-29)
30. See for example Rural Industries Research and Development Corporation submission IP288, Australian Pork Limited submission IP411, Department of Environment and Primary Industries Victoria submission IP436 and Cherry Growers’ Australia submission IP406. [↑](#footnote-ref-30)
31. See for example Australian Livestock Exporters’ Council submission IP617, Department of Environment and Primary Industries and Victoria submission IP436 and Citrus Australia Submissions IP490. [↑](#footnote-ref-31)
32. See for example Growcom submission IP437, Department of Environment and Primary Industries Victoria submission IP436. [↑](#footnote-ref-32)
33. See for example AgForce Queensland submission IP643, National Farmers’ Federation submission IP536, Growcom submission IP437, Cattle Council of Australia submission IP692 and Horticulture Taskforce submission IP551. [↑](#footnote-ref-33)
34. See for example Animal Health Australia submission IP591 [↑](#footnote-ref-34)
35. See for example Business Council of Australia submission IP397, Rabobank submission IP567 and Growcom submission IP437. [↑](#footnote-ref-35)
36. See for example Rural Industries Research and Development Corporation submission IP288, roundtable consultations. [↑](#footnote-ref-36)
37. See for example Australian Pork Limited submission IP411, Peter Hunt submission IP212 and Catherine J Kelly submission IP219. [↑](#footnote-ref-37)
38. See for example Australian Dairy Industry Council and Dairy Australia submission IP676, AgForce submission IP643, National Farmers’ Federation submission IP536. [↑](#footnote-ref-38)
39. See for example WoolProducers Australia submission IP410, Growcom submission IP437, Winemakers’ Federation of Australia submission IP552, Department of Environment and Primary Industries Victoria submission IP436, Western Australian Government submission IP476, Primary Industries and Regions SA submission IP535, Mondelez International submission IP540. [↑](#footnote-ref-39)
40. See for example AUSVEG submission IP532 and National Farmers’ Federation submission IP536. [↑](#footnote-ref-40)
41. See for example Growcom submission IP437, Business Council of Australia submission IP397, Dairy Industry Council and Dairy Australia submission IP676. [↑](#footnote-ref-41)
42. See for example Primary Industries and Regions SA submission IP535 and National Farmers’ Federation submission IP536. [↑](#footnote-ref-42)
43. See for example Cherry Growers Australia Inc submission IP406 and National Farmers’ Federation submission IP536. [↑](#footnote-ref-43)