The challenges associated with accelerating agricultural productivity in Australia

Mick Keogh, Australian Farm Institute

The situation that the Australian agriculture sector faces at the moment is a bit like the position of a shopkeeper who owns a small corner store, and who suddenly finds a major new high-rise residential development with thousands of potential customers is being built all around the shop. The shopkeeper can’t expand the shelf space or the size of the shop, so despite the potential extra customers, needs to think about how to maximise the profits available from the existing store.

Australian agriculture faces a similar dilemma with the size of it’s ‘shop’. The area of arable land cropped each year has been relatively static over the last decade at around 25 million hectares. The amount of irrigation water used each year by agriculture peaked at 10.4 million megalitres in 2002-03 and has declined by more than 15% since that time.

There is certainly some potential to develop new areas of land in northern Australia, and some additional irrigation capacity in northern Australia and Tasmania. However, in the overall scheme of things, these developments are unlikely to increase the existing land and water resources available to the agriculture sector by more than a couple of percent.

So despite the huge growth in food demand that is already being generated by the growing Asian middle classes, and the fact that this growth is likely to continue for a long time into the future, the potential for the Australian food ‘shop’ to expand and take advantage of that additional demand is pretty limited.

This is highlighted in Figure 1 (over page), which shows the total value of Australian agricultural exports annually (expressed in SUS terms) compared to the total value of Chinese agricultural imports over the last 50 years. Even if Australian agricultural exports went exclusively to China, Australia has gone from being able to supply more than 100% of Chinese import demand, to less than 25% over the period.

(continued over page)
The challenges associated with accelerating agricultural productivity in Australia (continued)

While this is an overly simplistic comparison, it provides some idea of the relative scale of the supply available from Australia and the demand from China, recognising that China is just one of the potential markets in Asia.

The dilemma that the Australian agriculture sector faces is a bit like the dilemma faced by the allegorical shopkeeper, with one important exception. In the case of Australian agriculture, there are plenty of alternative ‘shops’ internationally that are ready and willing to sell their food to these new customers.

Of course Australian agriculture is not a single entity, as the sector consists of a large number of different businesses, growing and processing a multitude of different food and fibre products that are exported to a huge number of international destinations, many of which are not even in Asia. Each of these businesses has different options available to respond to the surging Asian demand for food and fibre.

There is, however, a common challenge for virtually every business and every sub-sector of agriculture, and that is the challenge of finding ways to increase productivity. Irrespective of whether a product is destined for top end luxury uses or the cheapest bulk commodity market, the need to increase productivity and keep a step ahead of existing or potential competition is absolutely critical.

Agricultural productivity

The concept of ‘productivity’ is often misunderstood, and is sometimes regarded negatively in agriculture, for somewhat misguided reasons.

At its simplest, ‘productivity’ is the ratio of the volume of outputs from a system (be it an industry, a business or a national economy), compared to the volume of inputs. Productivity growth refers to the rate of change of this ratio, over time.

Calculating rates of productivity growth can be a complicated procedure, especially in the case of something like the agriculture sector which involves the use of multiple inputs to produce multiple outputs, and which also involves the use of difficult to measure and cost variables like land, rainfall and seasonal climatic conditions and management skills.

These qualifications noted, ABARES has recently prepared a report examining what is known about productivity growth in Australian agriculture, and the factors that may impact on future rates of productivity growth. One of the clear conclusions arising from that research is that the rate of productivity growth has slowed considerably since about 2000, especially in the grains sub-sector but also more generally across broadacre agriculture (see Figure 2).

The declining rate of agricultural productivity growth has important implications for Australian agriculture’s international competitiveness, given the emergence of major new competition from South America and Eastern Europe in global agricultural markets over the past decade. If Australian agricultural productivity growth is not matching the productivity performance of competitor exporters, then many of the potential new customers in the neighbourhood will increasingly decide to ‘shop elsewhere’.

Internationally comparable agricultural productivity data has been compiled by the United States Department of Agriculture (USDA) using slightly different methodologies to the ABARES data above, but which enables international comparisons to be made of rates of agricultural productivity growth. The USDA data includes all sub-sectors of agriculture, not just the broadacre and dairy sectors. The result of that analysis is summarised in Figure 3.

It highlights that Australian agriculture’s productivity performance has been relatively lacklustre compared to that of some of the major competitors in international agricultural markets. Data for eastern European nations such as the Ukraine are not readily available for an extended period, but what data is available indicates that even those nations, despite their political and economic uncertainty, have experienced considerable agricultural productivity growth over recent years.
Some caution is required in international comparisons, because a nation that starts with a very low level of agricultural productivity and which then successfully implements some reforms will experience a much faster apparent rate of productivity growth than a nation that starts with a highly productive agricultural sector. There is also a need for some caution in the case of a nation like New Zealand, where the apparent productivity performance has been affected by a significant conversion of areas of forest to dairy farms. Those qualifications noted, the above data still provides reasonably strong evidence that there are serious concerns about the current rate of productivity growth of Australian agriculture.

Factors contributing to Australian agricultural productivity growth

The ABARES analysis identifies that Australian agriculture has a productivity ‘problem’, but provides little in the way of guidance about how the problem can be fixed.

One way of starting to think about possible responses is to examine what is known about the factors that have contributed to agricultural productivity growth in the past. Unfortunately, data to enable analysis of the factors contributing to past productivity growth in Australian agriculture are somewhat problematical, due to the incomplete coverage of ABARES data, and the lack of coverage and questionable categorisations utilised by the Australian Bureau of Statistics in compiling agricultural sector statistics.

That qualification noted, ABARES has compiled annual survey data for broadacre farm businesses (excluding horticulture, specialist crops like cotton and sugar, and intensive livestock), and has used that data to produce some estimates of the relative importance of different factors in the past productivity performance of broadacre agriculture in Australia.

Figure 4 shows ABARES’ estimates of the contribution of a range of different factors to average broadacre agricultural productivity growth (equal to approximately 2% per annum) over the past 30 years.

The ‘Other factors’ in Figure 4 include climate, and changes in input costs and output prices. The latter incorporates changes in the Australian economy, such as improvements in transport and telecommunications, which improve national productivity and from which agricultural businesses gain benefits.

The graph identifies that about one-third of agricultural productivity gains are from international research (Foreign R&D), about one-third are from domestic research (Domestic R&D), and that approximately one-third of productivity growth is generated from Australian public research, development and extension (R,D&E).

This could lead to the conclusion that ‘extension’ is relatively unimportant, but there are a number of qualifications that need to be considered.

First, data used to generate the above results only included estimates of ‘public’ extension expenditure over the period from 1955 to 2007 (equal to approximately $200 million per annum in 2007). Because actual data were not available, the estimates used were derived from data on total public R&D expenditure, and some sporadic survey data of the proportion of researchers’ time spent on extension activities (and hence the proportion of public R&D expenditure that could be considered ‘extension’).

Second, towards the latter part of this period (and especially from the mid-1990s onwards), there was a marked decline in the relative importance of public agricultural extension agencies in Australia, and a dramatic increase in the use of private extension or advisory services in sub-sectors such as cropping and intensive livestock. This means that total extension expenditure (public and private sector) is considerably under-estimated in the analysis.

Evidence of the increase in the use of private advisory services is available from the annual broadacre farm survey data compiled by ABARES. Figure 5 (over page) shows average real advisory and veterinary costs (not including accountancy services) per farm in 2012 dollars over the period from 1990 to 2012. The data include all farms including sub-commercial or lifestyle farms. While the growth

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**Figure 3:** Comparison of rates of national agricultural productivity growth.


**Figure 4:** Relative contributions of factors to annual broadacre farm productivity growth in Australia.

**Source:** Sheng et al. (2011).
in average farm size would account for some of this growth in per-farm expenditure, the graph confirms the increasing importance of private-sector advisory (extension) services to Australian farm businesses. This amount does not include bundled advisory services provided at no direct cost to farmers by input suppliers.

Interestingly, while the common perception is that Australian crop farmers have adopted the use of private-sector advisory services to a greater degree than livestock farmers, available ABARES data do not support this, if both advisory and veterinary services are included in the analysis. The data displayed in Figure 6 shows that the average broadacre farm expenditure on advisory services (including both veterinary and other advisors) has more than doubled over the last 20 years, and was equivalent to approximately 0.5% of gross farm revenue in 2012. The figure for beef specialists was higher than for crop farmers, although that result was caused by sharply lower average revenue for beef farms in 2012, and not increased advisor costs.

At 0.5% of total farm revenue, national farm business expenditure on private-sector advisory services is estimated to be approximately $240 million per annum (assuming this figure applies across all sub-sectors of agriculture). This exceeds the estimated value of public-sector extension expenditure referred to earlier, and is also equivalent to the annual R&D levy contributions of farm businesses.

A final point to note is that while the analysis suggests that extension has been relatively unimportant in generating productivity growth, it is worth noting that effective extension services (either public or private sector) are an important lever in ensuring that any innovations originating from any of the other factors (international R&D, domestic R&D and other economy-wide factors) are more rapidly adopted by Australian farm businesses.

In fact, in considering ways to trigger a recovery in productivity growth rates in Australian agriculture, it is worth noting that there is little that Australian farmers or agricultural policy-makers can do to change the amount of international agricultural R&D that is occurring, or the rate of productivity change occurring in the broader Australian economy. Additionally, while there is some potential to change the amount of domestic agricultural R&D that is occurring, current government fiscal policies in Australia mean this is unlikely, at least for the time being.

This leaves extension – specifically improving the effectiveness of agricultural extension – as the main short-term lever available to resuscitate agricultural productivity growth in Australia. In saying this, there is no doubt that over the longer term, investment in agricultural R&D is needed to add to the stock of knowledge available to providers of extension services to farm businesses in an effort to improve farm productivity.

**Improving the effectiveness of agricultural extension**

A starting point in looking at ways to improve agricultural extension services in Australia is to be very clear about the fact that:

- private-sector advisory service providers greatly outnumber public-sector providers
- private-sector advisory services are likely to continue growing in importance in the future while public-sector services are rapidly disappearing
- private-sector advisory services are driven by and responsive to farmer demand, rather than by any particular imperatives identified by government.

Adding to these complications, there are no widely recognised qualification standards, accreditation systems or professional organisations for private-sector advisors (apart from veterinarians), and apart from advisors employed by three larger farm service organisations. Australian farm advisors tend to work as individuals or in small groups, rather than in larger cooperatives or corporate structures.

**Figure 5:** Average per-farm expenditure on private-sector advisory and veterinary services by broadacre farm businesses.

**Figure 6:** Broadacre farm expenditure on advisory and veterinary services as a percentage of total farm revenue.
The challenge for research providers in Australia (including rural research and development corporations, private-sector corporations, universities and government research agencies) is that there are no well-structured information supply chains that can be used to reliably communicate the outcomes of research to farmers, through their advisors.

Whereas in the past each of the state governments had an extension agency with personnel who interacted directly with farmers, this has not been the case for most of the past decade, and with some minor exceptions will not be the case in the future. State government agricultural agencies in most states do maintain networks that include farmers and their advisors to a greater or lesser degree, although the available state government resources are rapidly shrinking, and being centralised.

This creates a particular challenge for researchers in the major universities and the CSIRO who do not have a readily available network of farm advisors or farmers involved in the development of research programs or in the communication of research outcomes. This is exacerbated by the fact that many of these researchers achieve career advancement through international research publications, and not as a consequence of time spent interacting with farm advisors and farmers.

Rural research and development corporations have addressed this challenge in a range of different ways. Research agencies in sectors that have a small geographic footprint (such as sugar, cotton and winegrapes) can more easily organise networks of advisors and farmers, and can incorporate industry engagement as part of research program development. This is not as easy for more geographically diverse sectors such as broadacre livestock, cropping and horticulture. A number of research agencies in these sectors (such as the Grains Research and Development Corporation) have for many years staged a series of conferences that specifically target advisors, and produce a wide range of publications targeted at different audiences, including some specifically for advisors. This is not as simple in the broadacre livestock industries, which have a much greater proportion of small-scale farm businesses that are not as likely to have regular contact with advisors. Many research agencies also encourage the formation of farmer groups, which provide networks of motivated advisors and farmers (although they do not involve a large proportion of farmers).

While the above initiatives appear to be addressing the challenge of improving the effectiveness of extension services, there is a strong argument to the effect that research funders need to place a higher priority on researchers being engaged with networks of farmers and advisors as a foundation stone of research programs, rather than just as a way of communicating research outcomes.

It has also been observed that farmer groups increasingly provide good networks at a regional or local level, but often lack the expertise necessary to run robust, objective research trials. Requiring researchers, as a mandatory part of their research activities, to spend time helping farmer groups would undoubtedly benefit both researchers and farmer groups, and help to create stronger networks.

The development of electronic information platforms that provide access to easily searchable databases of research outcomes would also help to create a stronger information supply chain between researchers and farm advisors, although the severe constraints imposed on rural and remote internet access by Australia’s telecommunications system needs to be clearly recognised. Unfortunately, it is a fact of life that every state government research agency, research and development corporation or federal government agency seems intent on developing their own internet presence, which leaves farmers and their advisors with a confusing array of different information sources that are inefficient to search from a user’s perspective.

The Australian private-sector farm advisory industry (including farm business consultants, crop advisors and livestock advisors) also needs to seriously consider the issue of professional accreditation systems and standards. Developing and promoting a professional accreditation system (such as the Certified Crop Advisors scheme in the United States) enhances the professional reputation of advisors, provides greater confidence to the community, policy-makers and farmers, and can also result in a more structured and reliable information supply chain, through professional development requirements. A key challenge in establishing such schemes is ensuring they provide significant service benefits to advisors, rather than just being bureaucratic compliance requirements.

Private-sector research organisations (such as multinational agrichemical and bioscience companies) need to seriously consider how they can best interact with what is essentially an unstructured information supply chain. The development of agreed national protocols for some of the simpler research trials conducted by the private sector would enable farmers to have greater confidence in the outcomes of such research, and should improve the flow of information to farmers and their advisors.

Finally, governments need to clearly recognise that, when it comes to public good issues such as natural resource management and biosecurity, they can no longer expect that information about these will be efficiently conveyed to landholders by their agencies. Such programs will need to incorporate a greater proportion of total funding to contract private advisors to communicate with farmers. Failing to do this will simply result in these programs being ignored by farmers.

References


Will agriculture attract suitable future capital?

Does Australian agriculture risk missing out on the opportunities created by rising food demand in Asia because of current funding models? The funding models available to Australian farmers and agribusinesses have remained largely the same for the last 100 years. Essentially, farmers use their accumulated capital (principally land) as security to obtain finance from banks to meet the funding requirements of their businesses. Reliance on this traditional funding model may no longer be adequate, however, given the increasing capital demands of the sector, and the changing financial sector regulatory environment in Australia in the wake of the global financial crisis.

The Australian Farm Institute (AFI) is undertaking a research project which involves reviewing the capital funding options and business structures utilised in the Australian farm sector, with the aim of determining whether there are areas for improvement and recommending any changes that may be needed. The research project will also include case study analysis of capital funding options and business structures in the agricultural sectors of New Zealand, the United States and Argentina.

Participants in the agricultural sector generally make capital investment decisions which have a 10 to 15 year time horizon, and which entail risk factors that are considerably greater and different to those experienced by businesses in other sectors of the economy. Major risk factors include the weather and international commodity prices, and there are limits on the extent to which these risks can be insured against. These factors generally make the agricultural sector a difficult investment environment, which necessitates what has been referred to as ‘flexible and patient capital’.

A review of the funding requirements for capital items such as fixed assets including land, equipment and infrastructure and working capital items such as energy, seed stocks and agrichemicals will be an important part of this project. Examples of the types of funding options that will be reviewed in this project include; cash-flow management, bank lending, equity funding, cooperative services, venture capital, commodity trade and finance, risk management solutions, supply chain contracts, leasing, hire purchasing, chattel mortgages, share farming and government initiatives. Examples of the types of business structures that will be reviewed in this project include; sole traders, partnerships, companies and trusts.

The initial review will collate information on capital items, funding options and types of business structures so that financial strategies can be matched with the likely requirements of the sector in the future. The performance measures of these financial strategies will then be reviewed, including risk return on equity for different capital investments and the range of equity ratios for managing different capital items.

The research project will also review information on other limitations to obtaining capital funding, such as industry deregulation and increasing competition in the international marketplace. The adequacy of the funding options and business structures available to the Australian agricultural sector to support capital investment under these market conditions will then be evaluated.

The AFI mid-year conference entitled ‘Funding Agriculture’s Future’ will also provide valuable support to this research project (see details below).

Ultimately, it is anticipated that the research will be completed in late 2014.

FUNDING AGRICULTURE’S FUTURE

CONFERENCE: Hotel Realm, Canberra, 3 & 4 June 2014

Australian agriculture is at an exciting point in its history, with the potential for rapid expansion, driven by the emergence of middle-class Asian food consumers with a taste for safe, high quality food. However, realising this potential will require significant capital investment to lift farm productivity, and also to overcome ageing public infrastructure and a post-farm food processing sector that has experienced an extended period of underinvestment.

The Australian Farm Institute’s ‘Funding Agriculture’s Future’ conference aims to bring together experts from the agriculture sector both in Australia and Internationally to discuss the future investment needs of the sector, and to consider potential models that may be available to achieve the required investment and growth.

Register today on the Institute’s website www.farminstitute.org.au
Export trade performance of agricultural products – the good and not so good news

Australian Farm Institute (AFI) research currently underway provides some insights into the changing patterns of Australia’s agricultural trade, highlighting that while Australia’s export market share has grown for some commodities over the past 50 years, the market share enjoyed by other commodities has decreased.

AFI has recently commenced a research project entitled ‘Strategic Markets and Trade Outlook for Australian Agriculture’. This research project is supported by funding from the J.G. Boswell Company of California, and involves the development of a comprehensive database of Australian agricultural trade data, as well as data about agricultural trade developments in the major export markets in which Australian agriculture competes.

Much of the data gathering and some of the data analysis associated with this project has been completed. The data gathered to date includes information that enables a comparison to be made of the export trade performance of different Australian agricultural commodities. Some Australian agricultural commodities have performed reasonably well by increasing market share in export markets over the last 50 years, while other agricultural products have lost market share.

Australia remains a leading exporter of greasy wool, being the source of 50% of total world exports. Australia’s market share of greasy wool exports has, however, declined significantly from the 60–70% levels which were the norm during the 1990s. This corresponds to falling numbers of sheep shorn across Australia each year and the disposal of the wool stockpile that existed at the time of market deregulation.

Some of the success stories illustrated in the analysis include sheep meat exports and some livestock feed and industrial grain commodities such as barley. The volume of sheep meat exports from New Zealand (the largest sheep meat exporter) have remained relatively static over the last 50 years, whereas Australia’s sheep meat exports have grown by over 250%. A shift towards running dairy cows instead of sheep in New Zealand has limited the potential for that nation to meet increasing world sheep meat demand, whereas lower prices for wool have encouraged Australian sheep farmers to focus more on breeding sheep for meat production.

Australian barley exports have increased significantly over the last 50 years. Australia is now one of the largest barley exporters globally with much of the growth in demand for barley stemming from large Asian countries such as China. The drivers behind this demand include both feed grain use for intensive livestock feed industries, and industrial uses for processing products such as malt and ethanol.

Wheat and wine exports have also been highlighted in the preliminary data analysis for a number of reasons. Australian wheat exports have been increasing at a similar pace to world exports, and as such Australia has maintained consistent market share as the world’s third largest wheat exporter. However, competition from developing regions such as Eastern Europe is increasingly threatening this position. The wine industry is an example where competition from developing export regions such as South America has impacted Australian wine exports. Australian wine exports accounted for nearly 10% of world export volume between 2005 and 2009, but the industry has since faced increased competition in export markets.

Apples and pears are examples of Australian agricultural commodities that have experienced a major decline in world export market share over the last 50 years. In the 1960s, Australian apple and pear exports accounted for nearly 10% of world exports. Since that time, global competition in these markets has intensified, and the Australian industry has increasingly focused on domestic market share rather than findings ways to satisfy both domestic and export market opportunities.

Sources: UN comtrade, Australian Bureau of Statistics, AFI analysis.
Understanding Country of Origin Labelling (CoOL)

Jackie Healing
General Manager: Quality, Responsible Sourcing and Technology, Coles supermarkets

Coles’ research shows that our customers are increasingly concerned about where their food comes from and want clear and concise labelling to help them understand this. This research shows that our customers are more likely to trust food which is grown or made in Australia.

Quite simply, consumers consider food is fresher and safer if it is produced locally and statistics indicate that 70% of Australians want to buy locally-made food.

To meet this need at the supermarket, Coles has an Australia-first policy whereby we seek to buy Australian produce first and foremost whenever it is available in sufficient quantities, at great quality and at a fair and reasonable price.

As a result, around 96% of all of our fresh fruit and vegetables are Australian grown and 100% of our fresh meat from the meat department, fresh milk and eggs are Australian, but ensuring the local food is available is just one way we can give customers choice. Another important way we can help customers to make informed decisions about what they buy is through labelling.

It is clear that consumers are dissatisfied with the current labelling laws, particularly as they relate to ‘Made in Australia’ claims associated with packaged and processed foods, and seek a labelling regime which provides greater clarity.

Coles strongly supports clear and unambiguous food labelling so our customers can make those informed choices about the food they place in their shopping basket. In fact, we have gone above and beyond the Country of Origin legislative requirements contained in the Food Standards Code by including additional country of origin information on product packaging and at point of sale.

For example, Coles currently includes Country of Origin labelling on all fresh food in our delicatessens, despite the Food Standards Code only requiring Country of Origin labelling on certain mandatory products.

We have also supported the Food Standards Australia New Zealand proposal to extend Food Standards Code to other products such as lamb, chicken, beef and veal.

To help our customers understand the country of origin of the fresh food we sell, we have made our fresh sourcing information publicly and readily available on the Coles.com.au website (see http://produce.coles.com.au/Where-It-Comes-From.aspx).

However, our research tells us that some consumers find the current food labelling laws unclear and confusing, particularly the ‘Made in Australia’ claim for food products.

A common misconception is that ‘Made in Australia’ implies the product is grown in Australia. This isn’t the case.

The criteria for the ‘Australian made’ label, requires the product to be ‘substantially transformed in Australia at least 50% of the cost of production has been incurred in Australia.’ According to this definition, substantially transformed can include curing or crumbing so imported ham for example, that is cured in Australia, qualifies for the ‘Made in Australia’ label.

By contrast, to be applicable for ‘Product of Australia’ label, ‘all of the product’s significant ingredients come from Australia, and all or nearly all of the manufacturing or processing is also carried out in Australia.’

To address consumer concerns, Coles supports a higher threshold for the ‘Made in Australia’ label. We also support the removal of ‘cured’ and ‘crumbed’ from the definition of ‘substantially transformed’ so the label is more aligned to customer expectations.

In making any legislative changes, however, it’s also important that a reasonable timeframe for transition is built in and that they do not unnecessarily burden Australian food manufacturers who already face high production costs and significant regulatory compliance costs.

At the end of the day, any changes to food labelling need to support Australian manufacturers – rather than simply add to their costs – while at the same time help consumers make an informed choice at the supermarket.

Jackie Healing studied Food Science at Reading University in the United Kingdom (UK). She spent 20 years working at Sainsburys (UK) where she managed various retail quality and product development streams in the UK, United States and Asia. Culminating in her role as head of Quality and Product Development, leading a team of 60 technologists and product developers, in the major growth categories of fresh foods.

In 2006 she was recruited by Coles supermarkets to lead their Quality Program for their private label ranges. She has successfully implemented farm to fork QA and responsible sourcing programs across all food and non-food categories, including: the development of health and clean ingredient product ranges, the establishment of a leading ethical sourcing platform in developing countries, a review of on-pack labelling and health messages and establishing industry leading programs in animal welfare and sustainable seafood. Jackie is President of the Sustainable Agriculture Initiative – Australia and a member of the Advisory Panel for Australian Pork’s QA program – APIQ.
Australian labelling laws: too confused and complex

Dr Sharman Stone
Federal Member for Murray, Liberal Party of Australia

Do people really care about where their food comes from? It seems we do and increasingly. Country of Origin labels (CoOL) prompt consumer values related to food safety, quality, freshness and an interest in supporting local farmers, industry and jobs.

The Department of Industry, noting growing Australian consumer interest has tried to hold the ground asserting: ‘The CoOL framework is not intended to support Australian producers… Also the CoOL framework is not intended to be a proxy for food safety.’

However, the recent response to the ‘Buy SPC Ardmona Sunday’ campaign saw a twitter site receive more than 20.4 million impressions over three weeks and sales leapt over 60%, clearly not driven by price, but by consumers wanting to support home grown.

United States (US) feed-lotters and meatpackers, and Canadian and Mexican cattle suppliers are at war with US beef producers who are winning the right to have eligible product carry the label ‘Born, raised and slaughtered in the USA’. The Mexican and Canadian interests took their case to the WTO arguing that their product was being accorded less favourable treatment status, and the Codex framework supported them. The US Department of Agriculture responded with even more descriptive labels arguing the need for truth in messaging and the rights of customers to know.

Australian consumers are also beginning to demand truth in food labelling, whether related to nutrition or the source, despite the plaintive cries of extra cost and inconvenience which has helped bureaucrats, importers and some manufacturers hold the line for decades. What is lawful in Australia leaves the consumer uninformed, confused and increasingly angry.

According to the Australian Competition and Consumer Act 2012, section 255, schedule 2 to make: ‘A representation as to the country of origin of the goods’ (eg Australia), (a) the goods have to have been substantially transformed in that country (meaning), (b) 50% or more of the total cost of producing and manufacturing the goods is attributable to production or manufacturing in that country (eg Australia). ‘Total cost’ can include overheads, labour and any other inputs. ‘Substantial transformation’ can mean adding water to Brazilian juice concentrate, crumb coating Thai fish fingers, or curing Danish ham.

According to the ACC Act, you can also claim that goods were grown in Australia, when in fact they were, or (d) when ‘50% or more of that total weight of the goods is comprised of ingredients or components that were grown and processed’ (in Australia). However, law complying food sellers may still get into trouble because our legislation also requires their labels to be ‘authentic’ and not ‘misleading’.

The ACCC has therefore suggested businesses use ‘safe havens’ like: ‘made from local and imported ingredients’ where for example, at least half of the ingredients are local (which is not terribly edifying.) Many importers are ‘safe’ anyway, FSANZ lists all of the foods that are exempt from CoOL. A recent Select Senate Inquiry called this list ‘illogical and unacceptable’. I agree.

Our CoOL regime is also made non-transparent and complex by multiple jurisdictions, overlapping regulations, exemptions and the NZ-Aus CER interplay, all overshadowed by the 50 year old Codex Alimentarius. This 1963 WTO framework allows that if food from one country is processed in a second which changes its nature then the second country is regarded as the country of origin for the purpose of the standard.

This is no longer acceptable to many Australian consumers and producers nor to beef eaters in the US.

New Zealand (NZ) does not mandate CoOL but its regulators require that any labels used are accurate. There is growing controversy about some imported mixed origin food being labelled ‘made in NZ’. A submission to the recent Senate Inquiry described the complexities when pursuing truth in CoOL:

[A] seafood product was being caught in the Atlantic Ocean, frozen at sea on a Korean vessel, landed in China for first stage processing, imported into New Zealand, repacked as a product of New Zealand and then shipped to Australia to be thawed, reprocessed and crumbed here. The product was sold in Australia as ‘Product of Australia’ competing against Australian-caught fish from the local fishery on an equal basis.

Australian enterprises, including pig meat producers, honey, dairy, fruit and vegetables, fish and bakery businesses cannot maximise the value of their investment in humane, sustainable and clean production as long as our current CoOL regime persists.

All Australian sold foods should have unambiguous and truthful country of origin labelling. ‘Substantial transformation’ should no longer be used to hide the source of key ingredients. It’s not all that hard, it is not all that expensive and nothing less will do.

Dr Sharman Stone’s PhD analysed international food trade strategy. Her Master’s in Rural Sociology predated work in the Rural Water Corporation and Department of Agriculture. Before entering parliament in 1996 as the Member for Murray, she was Manager for International Development at Melbourne University. She has written extensively on Race Relations and Rural Development. Sharman held various portfolios as Parliamentary Secretary, Minister or Shadow Minister from 1998 to 2010.
Should Australian wool growers have had a word with Thai rice farmers? Politics and markets can be a dangerous mix, as Thai rice farmers have just discovered.

Some years ago, the incoming Government of Thailand secured strong support from rice farmers in Thailand by promising to lift the prices Thailand’s farmers received for their rice. The government subsequently implemented a rice marketing scheme based on a minimum floor price, coupled with export limits, which had the aim of maintaining a high domestic rice price. Several years later, the Thai Government owes more than $3 billion to rice producers, has an enormous stockpile of rice, has lost international markets, and some government members are now being sued for corruption. Thailand went from being the top world rice exporter to third, severely damaging its trade relations along the way. On top of this, farmers’ political support for the current Prime Minister is very uncertain, as many of them have lost large amounts of money.

The current situation faced by the Thai rice industry and government closely resembles the situation faced by the Australian Government and the wool industry at the time of the collapse of the Australian Wool Reserve Price Scheme. The restrictions that Thailand placed on rice exports did not increase international prices, because rice farmers in Vietnam and India simply increased their production — in the same way that man-made fibre producers and the cotton industry grabbed market share when Australia over-priced greasy wool.

It took a few years for the Australian wool industry and the Australian Government to accept their mistakes, and it took even longer to sell the wool stockpile, the marketing of which had longer-term impacts on the wool industry. Australian wool producers lost trust in government schemes and market interventions, and tend to regard any form of collective action, from R&D to advocacy, as dubious or contentious.

Canada phases out sow stalls – eight years after Australia

Canada plans to phase out the use of sow stalls through the adoption of a new Code of Practice for the Care and Handling of Pigs. The new Code requires that all new pig barns constructed after 1 July 2014 must provide group housing for sows, and that existing piggeries will be required to phase out conventional sow stall systems by 2024. In 2012, Canada was the world’s fifth largest exporter of pork meat and pork food products, and the third largest supplier to Australia, with Canadian imports worth US$98 million in the US$480 million market.

The Australian pork industry committed in 2010 to phase out the use of sow stalls by 2017, which is some seven years earlier than will be the case in Canada. Despite this commitment, in 2012 the major retailer Coles announced it will stop selling Australian branded pork, ham and bacon produced in piggeries using sow stalls by January 2013. As a result Australian pork producers now have to compete with overseas pig producers that have a substantial cost advantage.

The effect of the ban by a retailer at an earlier date than the deadline decided by the industry, has created a difficult situation. Firstly, Australian consumers have been given the impression that the Australian industry does not take animal welfare issues seriously, despite being a world leader. Secondly, consumers can still decide to purchase cheap imported pork products produced in systems that do not comply with Australian standards, and many of these products are labelled in ways that make them look like Australian products.

The ACT bans factory farms – despite not having any!

On 25 February 2014, the Australian Capital Territory (ACT) Government passed an amendment to the ACT Animal Welfare Act 1992. As a result, it is now an offence to have a commercial egg farm in the ACT where the laying hens are kept in a ‘battery cage’; or to have a pig farm where sows are kept in a ‘sow stall’; and it is also an offense to remove or trim the beak of a fowl in a commercial farm. The ACT Government claims it is setting a best-practice precedent for the rest of Australia. In fact, given the fact that the ACT actually has no factory farms, this legislation looks to be as tokenistic as the bans on nuclear power some local government authorities loudly proclaimed during the 1980s.

The ban on specific practices by the ACT Government is actually a highly simplistic response to issues that governments have recognised are actually much more complex. For example, the EU started phasing out the use of ‘battery cages’ for laying hens in 1999, with a compliance period of 12 years. On 1 January 2012, when the ban was finally introduced, 25% of EU egg production was still non-compliant and the EU egg industry faced increasing imports of caged eggs from bordering countries. In relation to pig production systems, the Australian pork industry has already started the transition to sow-stall free pig farms, and should have finished the transition in 2017, but faces increasing competition from imported pork produced under cheaper systems. In the case of debeaking and beak trimming, it is important to remember that the reason for beak trimming is reducing the risk of injurious pecking that can, if unchecked, lead to significant feather and skin damage (cannibalism), with attendant pain and suffering, leading sometimes to death (occasionally with mortality in excess of 20%).

The Australian Government has been working with industry over the last five years to establish consistent national animal welfare standards, based on wide consultation and science. In contrast, the ACT Government has chosen politics and grandstanding over science with no actual impact on animal welfare.
The myth of the ageing farmer

In the flood of recent economic analysis detailing the opportunities that the Asian Century will provide for Australian agriculture, one common issue identified as a potential limiting factor has been the average age of Australian farmers. A regular comment has been that because Australian farmers are on average much older than workers in other sectors and will be looking to retire soon, this will limit the ability of the farm sector to respond to increased Asian demand. A common example is shown in the box above from a recent report by Deloitte, although the issue features in many similar analyses by other organisations.

The major problem with this analysis is that by comparing the age of farmers with the average age of all other workers, a very distorted picture emerges of farmers.

The reality is that the average broadacre farm now has a capital value in excess of $4 million, and most farm businesses are now owner operated and employ minimal labour. Even to be able to source sufficient finance to acquire a farm business requires significant assets, which automatically biases the age of farmers towards an older demographic. Comparing the age of this group with the average age of all workers (which includes all workers older than 15 years of age) is hardly a valid comparison.

A more valid analysis is to compare the average age of farmers with the average age of Chief Executive Officers (CEOs) and General Managers (GMs) in the Australian workforce, given the relative level of responsibility of each of these groups. This comparison is displayed in Figure 2, which is from a forthcoming AFI report of research conducted in the grains industry.

The graph highlights that the average age of Australian crop farmers is actually slightly younger than the average age of CEOs and GMs in the Australian workforce, and that the farmer population has a younger age profile than the population of CEOs or GMs. If there is a looming ageing ‘crisis’ in the farm sector, then there is equally a looming ageing crisis in the economy as a whole.

Overly simplistic analyses such as the example above create the risk that policy-makers will focus on the wrong issues when it comes to decisions about what policies might best help the Australian farm sector respond to the opportunities that have emerged in Asia.
In the news

The Institute released its latest research, *Opportunities to improve the effectiveness of Australian farmers’ advocacy groups – a comparative approach*, at a seminar in Canberra on 3 March 2014. The report’s release garnered a great deal of media coverage, including ‘Why farm advocacy is failing’ by Matthew Cawood in *The Land* (6/3/2014), ‘Advocacy groups urged to change’ in the *Southern Weekly* (10/3/14), and ‘Farm advocacy groups not “value for money”’, Lucy Barbour on ABC Rural (4/3/2014) quotes the Institute:

Head of the Australian Farm Institute, Mick Keogh, says respondents were also concerned that organisations weren’t ‘engaging’ enough. ‘Farmers accept that it’s good to have stronger advocacy organisations, but they also want to see individual benefits,’ he said.

Out and about

Recently the Institute’s Executive Director, Mick Keogh, has spoken at:

- Meat & Livestock Australia – Peak Industry Councils Dinner, Sydney
- Southern Tablelands Farming Systems Launch, Crookwell, NSW
- Syngenta Australia and New Zealand Conference, Hunter Valley, NSW
- Grain Industry Association of WA 2014 Agribusiness Crop Updates, Burswood, WA
- ABARES Outlook Conference, Canberra (Chaired the ‘Responding to Society’ session)
- DibbsBarker 2014 Partner Conference, Brisbane
- NSW Farmers’ Association Agricultural Competitiveness Forum, Tamworth, NSW
- Future Farmers and the Carbon Farming Futures Project Webinar (for Sefton & Associates)
- GRDC Farm Business Update for Advisers, Bendigo, Victoria
- Natural Resources Commission’s Review of Weeds in NSW Public Consultation Meetings – Armidale, Dubbo, Cowra, Wagga Wagga, Nowra; NSW

The Institute’s Senior Research Officer, Adam Tomlinson, has recently spoken at:

- Carbon Farming Face-to-Face Training Program, Adelaide. This event presented products and tools to extension advisors, and highlighted the technical capabilities of the FarmGAS Calculator.
- North Central CMA’s 2014 Future Farming Expo, Maryborough, Victoria. This event aimed to inspire farm sector innovation through presentations on marketing strategies and opportunities for agricultural products.

FARM300 and Project 2020 advisor workshops

There are currently opportunities through Extension and Outreach funded projects for advisors in the livestock sector to increase their knowledge and skills in climate variability, greenhouse gas emissions, business profitability and sustainability. A series of workshops for advisors is being delivered in partnership by Farm300 (MLA) and Project 2020 (RIST). The key topics being covered at the workshops include:

- Opportunities for livestock producers to participate in the CFI.
- Latest livestock methane research, including best practice management case studies and the impacts these have on profit and emissions.
- Overview of tools and calculators for assessing livestock GHG emissions (including FarmGAS).

The impacts of climatic variability on farm productivity and profit and strategies for managing this.

The workshop dates, locations and venues are as follows:

<table>
<thead>
<tr>
<th>Dates</th>
<th>Location</th>
<th>Venue</th>
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<tbody>
<tr>
<td>20 and 21 May</td>
<td>Launceston, Tasmania</td>
<td>Tramsheds, Inveresk</td>
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<td>22 and 23 May</td>
<td>Hamilton, Victoria</td>
<td>Comfort Inn Orange Burn, Hamilton</td>
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<tr>
<td>26 and 27 May</td>
<td>Adelaide, SA</td>
<td>Rydges South Park, Adelaide</td>
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<td>28 and 29 May</td>
<td>Perth, WA</td>
<td>The Pagoda Resort &amp; Spa, Como</td>
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<td>3 and 4 June</td>
<td>Tamworth, NSW</td>
<td>The Ibis Styles, West Tamworth</td>
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<td>5 and 6 June</td>
<td>Wagga Wagga, NSW</td>
<td>The Lawson, Wagga Wagga</td>
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<td>10 June</td>
<td>Rockhampton, Queensland</td>
<td>Centrepoint Motor Inn, Rockhampton</td>
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