Farmers are awesome, but does it matter?

Mick Keogh
Australian Farm Institute

The ‘Australian Year of the Farmer’ (AYOF) was a campaign conducted during 2012 which aimed to celebrate and promote the work of Australian farmers, and to showcase the critical role that agriculture plays in the Australian economy. It was initiated by a small group of individuals concerned about the apparent lack of awareness and appreciation of agriculture by urban residents. AYOF was able to attract high profile ambassadors (including the Governor General), and through fundraising, which included securing significant government and corporate support, was able to mount a roadshow that travelled to nearly 300 different events held across the entire continent. Most of these events were reported to be Royal Agricultural Society Shows in regional centres of Australia, as well as the major shows in the capital cities. There were also a large number of other events held by organisations as part of the ‘Year of the Farmer’ celebrations.

The specific objectives of the AYOF were as follows:

- Establish closer ties between Australia’s rural and urban communities.
- Celebrate the broad range and fine quality of the produce our farmers grow and harvest.
- Share how Australia is leading the world in farming techniques and innovation.
- Highlight the essential role of Australian agriculture to the maintenance of national and global food security.
- Promote the role our farmers play as environmental managers, creating and delivering sustainability through best practice management.
- Recognise farmers for feeding the nation and sustaining our vital agribusinesses.
- Communicate to all Australians the importance of farming and rural communities to our national economy and social fabric.
- Encourage Australians to reflect on the origins of the food they consume every day and perpetuate the call to buy Australian produce.

(continued over page)
Farmers are awesome, but does it matter? (continued)

- Focus on – and prepare for – the future of farming in Australia by creating awareness of career opportunities in agriculture and related areas.

In assessing the year, the AYOF website stated:

The Australian Year of the Farmer has... enabled a wider proliferation of discussion about, and media attention on, the exciting future of agriculture in Australia. The Year has successfully highlighted the abundant opportunities available in the sector for education and careers as well as encouraging a better understanding within metropolitan audiences of the origins of their food and fibre.

The AYOF’s assessment of what the year achieved also included an analysis of media coverage. The AYOF website stated:

Media coverage reaching an estimated total readership in excess of 81.5 million people (in other words many Australians would have seen or heard media about the Year on several occasions) through over 5500 pieces of media positioning across print and broadcast mediums.

Television stations from commercial, online and public broadcasters have supported the Year through the airing of stories on the ABC’s Landline and 7.30 programs, Foxtel’s Sky Business News, a feature on the Australian Year of the Farmer Roadshow on Channel 7’s Great Outdoors segments on Gardening Australia and Better Homes and Gardens, and an educational series based on the objectives of the Year aired on Skills One Digital TV to school students.

To develop, fund and implement such a comprehensive program over an entire year, and to engage the highest levels of both state and Australian governments in the events was a major achievement, and those involved need to be congratulated for their dedication and effort.

In the sober early morning light of 2013, however; when the AYOF has joined the Sydney Olympics, the Australia bicentenary celebrations, various royal and US Presidential visits, and events such as major natural disasters, as a gradually fading memory linked to a specific year; there is merit in considering what the lasting legacy of the AYOF will be, and whether, in cold hard commercial terms, it has delivered the Australian farming sector value for money.

There are a number of different ways of assessing the lasting benefits arising from a promotion such as the AYOF. An economist would develop a model of potential economic benefits (both tangible and intangible) flowing from it and calculate the longer-term value of these, net of the cost of the campaign. A government might analyse the campaign from the perspective of the measured reduction in negative consequences (for example a specific disease), and use that, in combination with known information about the costs of the disease to society, to calculate the net benefits.

A large corporation, such as a mining company, might assess the value of the campaign from the perspective of the added ‘social licence’ or political influence the company is able to gain from the promotion, with this being measured in terms of increased political access, or a reduction in negative mentions in the media, or other similar metrics. A commercial organisation undertaking a promotion associated with a branded product would analyse sales of the product compared to past sales to determine the value of the campaign.

Taking the economists approach first, the analysis would initially involve adding all the direct expenditure associated with the AYOF promotion. There would then need to be some consideration of the counterfactual case – what would have happened if the AYOF did not occur. This would require a degree of judgement – for example would those sponsors of the campaign (including the governments) have spent their funds anyway, and would the presence of the AYOF roadshow at regional agricultural shows have resulted in expenditure that would not otherwise have occurred? The conclusion would probably be that much of the expenditure associated with AYOF may have occurred anyway, meaning that the total expenditure associated with the campaign would need to be discounted substantially, before any consideration was given to possible multipliers associated with the expenditure. The conclusion of this analysis would likely be that the AYOF campaign probably only generated minimal direct economic benefits.

Turning to the intangible benefits – rural people feeling more confident and reassured about the worth of their industry, school students more likely to choose agriculture as a career, urban people having a raised awareness of the role of farmers and agriculture in the economy – there is obviously some economic value in these, although it would be very difficult to estimate, and unlikely to persist into the future. Again, the analysis would probably conclude that the intangible benefits were of only limited net economic gain.

From a government perspective (and assuming for a moment that the total AYOF expenditure was by government), an analysis of the benefits might include consideration of some broader community benefits associated with more positive perceptions of the agriculture sector. This might include increased farmer confidence resulting in stronger investment that could lift farm productivity, profitability, and ultimately regional economic growth. Increased community awareness of agriculture could also result in school leavers being more interested in an agricultural career, boosting the agricultural workforce and reducing shortfalls in the sector.

There is no doubt that some of these benefits were generated by the AYOF, but it is likely that the total value of such benefits was not substantial, relative to the expenditure. It would
also be extremely difficult to allocate the value of these changes to the AYOF, with any certainty. For example, initial reports about enrolment levels in university agricultural courses in 2013 are positive, and it may be that the AYOF campaign was a contributing factor. There are also a multitude of other factors that may have contributed to this change, including the slowdown being experienced by the mining sector (and therefore the reduced attractiveness of a career in that industry), a lowering of the entrance mark required for agriculture-related courses due to an increase in funding for university places, and the return to more normal seasons following the 2002–09 drought. It would be extremely difficult to isolate the impact of the AYOF on this, and the effect is at best likely to be a one-off change, that may not persist in the future.

In analysing expenditure decisions, governments also face the need to consider what else the scarce resources (taxpayers’ dollars) available could be used for, and whether or not a better return might be available to the community from those alternative uses. There are many groups in the community – for example lawyers, doctors or automobile industry workers – who could just as easily claim that their industry or sector is undervalued by the wider community, and governments should assist in promoting their sector. There is also the issue of whether there might be a higher return for the community in spending these funds to build better roads to regional centres, or to provide more doctors to regional communities.

Taking all these questions into consideration, it is likely a government analysis of the AYOF promotion would conclude that the benefits to the wider community were at best marginal and short-lived, and that there are other ways in which funds could be spent to generate greater net community benefits.

In considering the AYOF promotion from the perspective of a large corporation or a company marketing products and services, a Board of Directors would demand either that management identified and reported on a specific metric to justify the promotion (in the case where the corporation was seeking to influence community or political attitudes), or that the merits of the promotion be justified on the basis of increased sales of the company’s products.

While some of the specific objectives of the AYOF promotion listed above can be measured, many cannot. In addition, many of the metrics that would be useful are relative measures, requiring a ‘before and after’ comparison to gauge the extent of the change that has occurred.

For example, the objective of promoting the role farmers play as environmental managers deals with the perception of the wider community about whether farmers are essentially self-interested, or are prepared to do things (such as environmental management) that are in the wider public interest. A related issue was the subject of a recent Essential Media Communications poll, which asked respondents to indicate which sectors of the economy they most trusted to act in the public interest. The responses are displayed in the table below.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total – a lot or some trust</th>
<th>A lot of trust</th>
<th>Some trust</th>
<th>Not much trust</th>
<th>No trust at all</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>72%</td>
<td>20%</td>
<td>52%</td>
<td>18%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Tourism</td>
<td>68%</td>
<td>12%</td>
<td>56%</td>
<td>22%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>56%</td>
<td>8%</td>
<td>48%</td>
<td>30%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Construction and development</td>
<td>48%</td>
<td>5%</td>
<td>43%</td>
<td>33%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Retail</td>
<td>47%</td>
<td>3%</td>
<td>44%</td>
<td>38%</td>
<td>12%</td>
<td>3%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>37%</td>
<td>3%</td>
<td>34%</td>
<td>41%</td>
<td>18%</td>
<td>3%</td>
</tr>
<tr>
<td>Banking</td>
<td>33%</td>
<td>5%</td>
<td>28%</td>
<td>36%</td>
<td>29%</td>
<td>3%</td>
</tr>
<tr>
<td>Mining</td>
<td>32%</td>
<td>3%</td>
<td>29%</td>
<td>35%</td>
<td>25%</td>
<td>8%</td>
</tr>
<tr>
<td>Media</td>
<td>30%</td>
<td>2%</td>
<td>28%</td>
<td>40%</td>
<td>27%</td>
<td>2%</td>
</tr>
<tr>
<td>Power companies</td>
<td>18%</td>
<td>1%</td>
<td>17%</td>
<td>37%</td>
<td>41%</td>
<td>4%</td>
</tr>
</tbody>
</table>


Two problems arise from this conclusion. The first is that, in the absence of a similar poll before the AYOF commenced, it is not possible to identify the extent to which the AYOF influenced this response. The second is that experience with community attitudinal surveys is that the results are extremely difficult to change over a relatively short period of time, so it is likely the agriculture sector was already highly trusted to act in the public interest before the AYOF commenced.

The critical question from the perspective of the agriculture sector is not so much whether the sector is generally trusted to act in the national interest, but whether this high level of trust translates into advantages for the sector when it comes to government policy measures or consumer behaviour. The progress of debate and government decisions on livestock exports and the Murray-Darling Basin Plan does not provide any strong evidence that the high level of regard in which the agriculture sector is held translates into more favourable decisions.

Interestingly, it is apparent from the advertising campaigns of Australia’s major supermarket chains that they are well aware of the high regard in which Australian farmers are held by consumers. Both major retailers feature images of farms and farmers heavily in their advertising campaigns, in effect hijacking the

reputation of farmers to promote their own supermarket brand, while they simultaneously engage in commercial practices that some farmers claim have a severe negative impact on them.

The other way in which a large corporation might assess the value of expenditure on a promotion such as the AYOF is via changes in the sales of a branded product associated with the promotion.

Unfortunately, it is not possible to use this metric in assessing the value of the AYOF, for two reasons. The first is that the AYOF focused on the farmer, rather than the food and fibre produced by farmers. The promotion was not about a specific ‘product’ that consumers could pick up from a retail shelf and pay for at the cash register.

A second and related reason this metric cannot be used is that even if, in response to the AYOF promotion, consumers decided to preferentially seek out products grown by Australian farmers and buy them, they cannot easily do this and they have not been given a reason to do so.

Consumers cannot easily select Australian grown produce because of Australia’s labelling laws, which do not require packaging to provide clear information about where the product was grown. Australian supermarket aisles are stacked full of products labelled ‘Made in Australia from imported and local ingredients’, which surveys reveal lead consumers to believe they are purchasing Australian grown products. This is not the case, as it is often only the packaging and some minor processing steps that are carried out in Australia, with the main ingredients being imported.

Curiously, the Australian Competition and Consumer Commission (ACCC) does not seem to believe such labels are misleading, yet has recently heavily criticised proposed poultry industry labelling standards for free-range eggs because they ‘may mislead consumers’!

Leaving aside the fact that consumers cannot easily identify imported products, the critical issue is whether consumers have been provided with reasons they should seek out and potentially pay more for Australian grown products. Unfortunately, this is generally not the case, meaning that there is an implicit assumption that some sort of nationalistic loyalty will come to the fore in the case of Australian consumers, and the Australian label (where it is present) will be sufficient to attract consumers overseas. This is equivalent to Australian car manufacturers relying on Australian consumers to buy Australian-made cars simply because they are made here, irrespective of their value, performance or appearance.

There are many reasons Australian and overseas consumers should actively seek out and purchase Australian grown products, as listed below. Unfortunately, these are not promoted to consumers in any meaningful way, which means consumers are not given reasons they should select ‘Brand Australia’.

This is a major deficiency for Australian agriculture in both domestic and international markets, and especially if the sector is serious about capturing the new middle-class consumer markets that are rapidly emerging in Asia. These consumers need to be given reasons to seek out Australian products. Safety and quality are obviously paramount, as the response to recent milk substitution issues in China has highlighted, and Australian produce has a very good track record in this regard. Unfortunately, few consumers are aware of this because there is no concerted effort to explain and promote it.

Promoting Australian farmers and the farming lifestyle to Australian consumers has undoubtedly resulted in some benefits for the industry, but unfortunately these are likely to be limited, and short lived. Promoting Australian farm produce to Australian and international consumers, and giving them sound reasons to seek out and buy those products, has the potential to result in long-term benefits. In domestic markets, it has the potential to create a price premium and also to pressure major retailers to preference Australian produce. In international markets, it has the potential to ensure Australia secures a strategically important foothold in the quality end of booming Asian consumer markets.

Neither of these will occur unless the Australian agriculture sector focuses on promoting the benefits of its produce, rather than merits of its farmers.
Ten reasons consumers should actively choose Australian grown food and fibre products

1. **High quality**

Australian agricultural products are regarded as being of the highest quality by fussy consumers in places like Japan, Korea, Singapore, the US and the EU. Australia is one of the few nations that has consistently exported agricultural products to all these nations for many years, and the high quality of Australian produce has helped to retain access to these markets.

2. **Safety**

Australian agricultural products have a very high level of safety for consumers, being free of disease and chemical and biological contaminants. This is regularly highlighted by the results of the National Agricultural Residue Survey and the National Antibiotic Monitoring Program. The fact that only Australia maintained access to both the Japanese and Korean beef markets during the entire period of the Mad Cow Disease incident is just one example of the high levels of biosecurity associated with Australian agricultural products.

3. **Traceability**

Australia has the most advanced national livestock identification system (NLIS) of any nation on earth – a fact that is readily acknowledged by competitor nations such as the US and Brazil. This provides Australia with an unmatched ability to ensure the integrity and safety of meat and other products. Similarly, advanced logistics and supply chains used in the grains, horticulture, sugar and wine industries ensure the integrity of Australian products.

4. **Cost to consumers**

Australian agriculture operates with the lowest levels of taxpayer support of any agriculture sector in the world, according to annual surveys carried out by the OECD. This means Australian taxpayers do not pay any hidden or extra costs for Australian agricultural products, unlike consumers in most developed nations whose taxes subsidise farmer incomes.

5. **Low and declining greenhouse emissions**

According to the Australian Government Department of Climate Change and Energy Efficiency, Australian agriculture is the only sector of the economy to have reduced greenhouse emissions over the last two decades. Were it not for the 30% reduction in emissions from the agriculture sector over this period, Australia would have exceeded its Kyoto Protocol national emission target by a considerable margin, and taxpayers could have experienced a considerable cost if Australia decided to purchase international carbon credits to offset the additional emissions.

6. **Fair treatment of workers**

Australia has the highest wages in the world, and some of the highest standards of workplace health and safety enforced by regulation. Even in cases where overseas labour is used, these workers enjoy the same award rates, and health and welfare benefits of Australians. This is in stark contrast to the agriculture sectors of many overseas nations, which rely on low-paid immigrant labour, or have much lower wage and safety standards than Australia.

7. **Environmentally-friendly**

Australian agricultural businesses operate under some of the strictest environmental controls in the world. Australia’s most recent ‘State of the Environment’ report noted the substantial improvements that have been made to land management in Australia, with the adoption of conservation tillage practices higher in Australia that in any other nation. A recent ABARES report has detailed the very high level of engagement of Australian farmers in biodiversity conservation, and Australian water management policies are acknowledged as world leading by international agencies such as the United Nations and the World Bank.

8. **Supporting Australia’s regions**

According to the Australian Bureau of Statistics, the Australian agriculture sector is a much bigger direct employer of people than the mining sector, and has been and remains the main source of employment in many Australian regions, bringing important income and helping to maintain services and infrastructure in these regions. Purchasing Australian agricultural products directly results in the creation of Australian jobs.

9. **High animal welfare standards**

Australian farm animal welfare standards are some of the highest in the world, with many practices and production systems banned in Australia that are still utilised in overseas locations that export products (such as pigmeats) to Australia. Australia is also the only nation in the world that has major programs aimed at improving animal welfare standards in markets that are destinations for Australian livestock exports. Purchasing Australian livestock products is the best way to ensure high standards of animal welfare.

10. **Supporting family farming**

Australian agriculture overwhelmingly consists of family farming businesses, a contrast to many overseas locations where large-scale factory farming is carried out in intensive production systems that use very high levels of inputs and create significant waste and pollution problems. Purchasing Australian farm products directly supports Australian farming families.
Australian Farm Institute insights

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Changing faces at AFI

This month, we farewell Renelle Jeffrey who is leaving AFI to take up a role with Meat & Livestock Australia, focusing on research and extension activities for the sheep industry. Renelle made a major contribution to the Institute in research projects involving greenhouse emissions in agriculture, and the development of the FarmGAS online calculator. In March, the Institute will welcome Adam Tomlinson to the role of Senior Research Officer. Adam has considerable agriculture sector experience working in a number of overseas locations with Rabobank, and also owns a farm located at Moree, in northern NSW.

2013 Institute events

Conferences

Australian Agricultural Innovation Systems at the Crossroads
Hotel Realm, Canberra
Wednesday, 29 May and Thursday, 30 May 2013
A two-day conference that will critically examine the Australian agricultural research, development and extension (R,D & E) systems, and develop ideas about how these systems should operate into the future.

The Australian Agricultural Roundtable Conference
Sydney Harbour Marriott Hotel
Wednesday, 6 November and Thursday, 7 November 2013
This conference is being held for the tenth consecutive year, bringing together policy-makers, farmers and agribusiness leaders in a unique, interactive forum.

AFI membership

Interest in agriculture and food has never been higher, but it’s hard to keep up with all that is happening... unless you are a member of the Australian Farm Institute.

Food security, international markets, foreign investment in land, the Murray-Darling Basin Plan, livestock exports, coal-seam gas, carbon policy, free-trade agreements, animal welfare, biosecurity, the supermarket duopoly... the list goes on and on. These are all important topics impacting on the future of Australian agriculture, and only the Australian Farm Institute provides timely, objective and up-to-date research reports and publications on all these issues and more.

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Are traditional extension methods still preferred?

The role of private sector crop advisors in communicating research findings to grain growers is currently the subject of research being carried out by the Australian Farm Institute, with funding from the Grains Research and Development Corporation.

Traditionally, agricultural ‘extension’ has been carried out in Australia by public-sector agencies such as state Departments of Agriculture, but this has changed over the past decade and most commercial grain farms are now serviced by a private-sector agronomist, who is the main source of technical information for the grower.

Little detailed information is available about the private sector crop advisory industry in Australia, so one of the components of the research project involved a survey of crop advisors, aiming to gain a better understanding of the work they do, and the information they use.

Results from this survey have been compiled and will be collated into one of several reports arising from the project. One of the questions put to crop advisors concerned their preferred method of delivering advice to their farmer clients. Interestingly, despite all the modern communication technology and smartphone applications that are available, the response from the advisors participating in the survey was that face-to-face discussions with a grain grower on-farm is still the most important method of delivering crop production information. Telephone consultation was ranked as the next most important way of relaying information, followed by email and the internet.

When private sector crop advisors were questioned about the sources of information they utilised in providing advice to growers, the highest ranking source of information was research findings and other information published by the Grains Research and Development Corporation. The next highest ranked information source was researchers or technical specialists within an advisor’s own organisation, followed by information obtained from industry conferences, and from other leading farmers.

The high rating given to information obtained from other leading farmers is an interesting aspect of the survey results. Traditionally, agricultural extension has been thought of as a vertical or ‘top down’ information flow, that starts with the discovery by the researcher, which is then communicated to the farmer by an extension agent (either public or private sector). What this response highlights, however, is that the horizontal transfer of information is also important, with innovation and knowledge gained by leading farmers being transferred to other growers by their commercial advisors.

One of the interesting issues associated with the development of a strong commercial crop advisory service is not so much what services or information these advisors are providing to their clients, but what services and advice they are not.

It was evident from the responses that issues such as natural resource management and whole farm planning are not generally part of the ‘package’ of services provided by private sector crop advisors. How advice about these subjects will be delivered to farmers in the future is a question that will need to be considered when thinking about what grain industry extension systems will look like in the future.
Public-sector agricultural extension: what should it look like in 10 years?

David J Pannell & Sally P Marsh
School of Agricultural and Resource Economics, University of Western Australia

Our focus is on what should happen in the public sector, on the grounds that it is not helpful to ask what ‘should’ happen in the private sector. The private sector will develop in response to commercial opportunities available to them, irrespective of what we might think should happen.

To set the context, here are some predictions about the environment within which extension will operate. Agriculture will continue to change in response to technology, markets and climate. Cutbacks we have seen in funding for public-sector agricultural extension will not be reversed and may continue. The dismantling of extension infrastructure and capacity in the public sector has gone too far for it to be reversed without major new public investments, and we don’t foresee those occurring. Private sector capacity in extension will continue to grow – including extension provided by purchasers of agricultural products (eg dairy, horticulture, sugar), input suppliers (eg fertiliser, feeds) and farm management specialists. There will be continuing increases in the average size of farms, and in the number of corporate farms, with resulting growth in the vertical integration of information services (≈ ‘extension’) into farm businesses. There will continue to be growth in the use of advanced information and communication technologies in agriculture, providing information to farmers in novel ways. Falling numbers of graduates from agricultural programs could create a serious challenge to extension services (public and private) to obtain employees with the required knowledge and skills.

In this context, is there a need for ongoing public investment in agricultural extension? We believe that there is. Public-sector agricultural extension can continue to play important roles that address various market failures.

One key role is to foster two-way information flows between researchers and farmers. Information flow from farmers to researchers is needed to ensure that the research conducted will be beneficial to farmers and likely to be adopted by them. Some researchers already have sufficiently strong relationships with their farmer audience not to need this sort of help from extension agents, but many others don’t. The traditional role of extension agents in promoting uptake of beneficial new research results (technologies, systems and practices) should continue. We do not share the negative view of technology transfer that seems to exist among some theorists of extension. We believe that technology transfer and approaches such as participatory research and farmer-to-farmer learning are not mutually exclusive. Indeed, these latter approaches, as part of a broad portfolio of extension methods, can make valuable contributions to the success of technology transfer in appropriate circumstances. Farmer groups and organisations such as the Grower Group Alliance (www.gga.org.au) have key roles to play in this process.

Given that public budgets for extension are unlikely to grow, and may shrink further, it will be crucial for public extension services to take a more business-like approach to prioritising their activities than they have commonly done in the past. Extension efforts should be focused on issues for which there would be substantial benefits to farmers from changing their practices, especially if those new practices would also generate benefits for the broader community (eg environmental benefits). Extension would not focus on practices that farmers already have good knowledge about and have decided not to adopt, because non-adoption is a clear signal that the practices do not generate large enough private benefits. The heterogeneity of farms and farmers should be recognised when looking at reasons for non-adoption. This more sophisticated approach to planning extension effort will require greater collection and analysis of information.

As important as social media and other modern communication methods will be, public extension should not rely on them exclusively, but should maintain a level of face-to-face communication. Farming is already socially isolating for some farmers, and with declining farmer numbers this may become a more widespread issue. It is likely that farmers will always put a high value on personal contact in extension.

Finally, we note that, in the past 20 years, public sector extension has been prominent in supporting natural resource management (NRM) policy for agriculture. It has been the go-to resource management (NRM) policy for agriculture. It has been the go-to policy response of most government NRM programs. Unfortunately, these programs have often funded extension efforts without asking fundamental questions, such as: are the practices we wish to promote actually adoptable by farmers? A more thoughtful, selective and evidence-based use of extension is needed in this policy context.

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The future of agriculture extension

Mike Stephens
President of the Ag Institute Australia, and Consultant

The art of good extension is to take bits of information and transform and transmit them into knowledge for the collective benefit of the industry. (Anonymous)

There are five important questions to be answered as a subset to broader questions about the future of agricultural extension in Australia:

1. What information results and systems need extending?
2. How will the extension be delivered?
3. How will it be funded?
4. Who will the audience be?
5. Who will drive extension?

But first some history.

The extension concept was developed by the Land Grant Universities in the United States. Those universities were charged with the triple responsibilities of researching, teaching students and ‘extending’ that knowledge to the broader farming community, the term extension only started to gain currency in Australia in the late 1960s. Before then district officers who specialised in sheep and wool, cropping, dairy and other subjects worked at local research stations and district offices. Much of their work was underpinned by government policies of land clearing, water conservation and increased food and fibre production.

In the 1960s district officers gradually morphed into extension officers. Extension services started to come under pressure as the market economy flourished from the 1980s. This was followed by a mantra of privatisation.

Australia needs to keep both the challenge and opportunities of the Asian Century and global population in perspective. Ruthven (2012) asserts that if Australia increased its agricultural production fivefold it would feed 3% of the Asian population. In addition, the ‘extension market’ needs to be segmented because 39% of Australia’s total farm income is earned by 2601 businesses.

What information results systems need extending?

If Australia is going to accept the challenge of providing more food from less land with higher input costs and diminishing resources its primary producers will need better education, more research and more effective extension. That research will need to be directed towards better land and water utilisation, more productive animals, greater labour efficiency and business resilience or agility.

A major change will be moving away from the traditional top-down activity, with information cascading from the top down, to a system where information will flow back up the decision-making pipeline from the bottom. That is the farming community will push information back up the decision-making pipeline from the bottom. This is already happening, in some industries, through participatory research, development and extension, with its own built in extension.

How will extension be carried out?

Traditional dissemination methods such as print media, radio, television, field days, farm walks, newsletters, meetings, conferences, will be complemented by an increased emphasis on electronic forms of communication such as websites, social media, emails and text messages, online videos, e-newsletters and spontaneous digital extension alerts. Self-directed farmer groups will play a major role.

How will it be funded?

Unquestionably in future the major funding will come from a user pays system. There will be exceptions for example the Federal Government Climate Change Adaption Program is underpinned by an outreach program which will continue to be funded by government.

Who will the audience be?

The ‘market’ has a number of different audiences. These include the 3000-odd very large businesses, the productive and profitable middle, the unprofitable and the peri urban, lifestyle or hobby farmer group. Each group has different needs and will utilise extension services in different ways.

Who will drive extension?

The prime movers of extension will continue to be the federal and state governments and their relevant institutions, including the R&D corporations. However the future growth of extension will be market driven and fuelled by entrepreneurial spirit.

The new models

There will be three extension models.

1. The very large businesses will initiate their own extension.
2. Other profitable businesses (including lifestyle and larger hobby farmers) will retain outside consultants on a fee for service basis. These businesses will be served by multi-disciplinary consulting businesses which have a range of specialists and generalists covering all technical human and business aspects of farm business management.
3. The vast majority of producers will still look to R&D corporations to provide content for a bulk extension service. Resources currently wasted on ‘flag waving’ will be re-deployed and more general technical advice may be provided through self directed farmer groups, possibly partly funded by the relevant R&D bodies.

It is unclear how extension personnel will be trained and whether they will require accreditation. There is a place for accreditation schemes such as AgCredited as an industry wide quality assurance program.

It is difficult to imagine any major government funding for an extension service unless, as with the current Federal Government Climate Change Adaptation Program, there is a public good outcome required.

Mike Stephens, who is national President of Ag Institute Australia and a Consultant with Mike Stephens and Associates, acknowledges the influence of Trevor Johnston and Robert Patterson in the preparation of this article.

1. Ruthven, P (2012), Company Director, Australian Institute of Company Directors, August.
Future Australian food supply not so ‘problematic’

With recent news coverage focusing on the heatwave conditions affecting Australia, not unexpectedly, questions of how Australian agriculture will cope with projected climatic conditions and what this means for food supply have arisen.

Recently, on the Network Ten program ‘The Project’, adaption in the agricultural industry to future climate projections was discussed with a representative of the Australian National University’s Climate Adaptation Network. Unfortunately a very bleak and probably unrealistic, picture of the ability of Australia to produce food was painted. Future food production in Australia was considered ‘problematic’. It was suggested that plant based agriculture would not be able to cope with the extremes projected, leading to mass plant death, and implied a lack of food supply. It was also suggested that Australian’s would shift away from meat to, interestingly, a purely vegetation diet based on pulses and legumes. This was because it would be too expensive in terms of land, water and grain to produce meat. It would be cheaper and easier to be vegetarian.

While it is true that more extreme events such as heatwaves are projected, that droughts may intensify and that the frequency of heavy rainfall is likely to increase, these projections are not unique to Australia. Globally, significant effort is underway to develop and design step-wise and transformation adaptation processes and technologies so productive agriculture can continue feeding the world. Food supply may become tighter but the danger of global food supply being compromised is weak.

Within Australia, the Federal Department of Agriculture, Fisheries and Forestry is funding a large range of agricultural adaptation projects through Australia’s Farming Future and its predecessor the Climate Change research program. In addition CSIRO, through the Sustainable Agriculture and Climate Adaption flagship programs, has a large body of work developing products and technologies such as climate ready crops and seasonal forecasting technology to enable productive and adaptive agricultural systems ready for future climates. These present just a snapshot of the research currently underway to enable adaptive agriculture.

It’s highly unlikely that agricultural production will be as ‘problematic’ as suggested by this program. Future climate projections are not going to materialise overnight. Australian farmers are used to adapting to climate variability, it’s a key skill requirement. Plants, farmers and agricultural systems naturally evolve to the climate variability served up to them. Managing water use efficiency is likely to be more challenging in the future and a rate-limiting step in agricultural production. However, with the volume of research underway and new technologies being developed – specifically to use less water, or be more heat, water, salt or acid tolerant – while maintaining productivity there is a future for agricultural production. It may not be easy and change will be required, but the community should be assured that their food supply will not be threatened, at least in the short term.
Food, fertiliser and fish
Agriculture remains a major threat to water quality in Europe, according to a report by the European Union’s (EU) environmental agency. It reports intensive farming practices are contributing ‘significant loads of pollutants’ in surface water. The Agency reports that 48% of streams and lakes in the EU will fail to meet good ecological status by 2015 as required by the 2000 Water Framework Directive.

Excessive nutrients from fertilisers are a leading problem with one consequence being the growth of algae that choking off oxygen to fish and plant life in lakes, streams and bays. The European Commission’s Water Blueprint, released a day later, calls for better enforcement at the national level of EU laws designed to reduce pollution ‘from nutrients and/or other chemicals from agriculture, households and industry.’

But the fight against pollution is destined to run head-on with concern about food security. There is growing pressure globally for farmers to be more productive. Farm, fertiliser and crop protection groups say the smart use of nutrients and pesticides can boost yields while minimising harm to the environment. Industry also says better use of fertilisers pays another dividend – improved productivity reduces the need to clear forests and fellow land for farming.

Intensive farming alongside the development of buffer areas and natural habitats that can protect water bodies, improve soil quality and nurture wildlife practices, is needed to both feed and protect a growing planet. Increases in crop yields in the future will require more than just conventional management practices, pesticides and fertilisers. Ecosystem services, for example natural pest control and pollination will need to be captured to increase crop yields over the long term.

Biofuels still gobbling food
Biomass fuels account for the largest source of new demand for agricultural production and have helped drive price volatility in grain crops like wheat and maize, the UN Food and Agricultural Organization State of Food and Agriculture 2012 report says. The report says biodiesel accounted for 80% of the EU’s vegetable oil production while 37% of the grain crop in the United States (US) went towards ethanol production.

Droughts that hurt production in southern Europe and devastated the US corn output triggered calls for the US and EU to suspend all biofuel mandates. In addition, prolonged dry spells in China, Russia, France, Spain, Portugal and the southern US have affected crop output and lead to frenetic food pricing.

The report advocates a balance between improving farm output, to meet rising food demand and to prevent price shocks, while also ensuring environmental sustainability. The UN agency attributes growing volatility in farm commodity prices to population growth as well as higher per capita incomes, urban migration and the associated changing diets in developing countries, weather-related production shocks, trade policy shocks and rising demand for biofuel feedstocks.

Food prices in 2012 moved downward from the peaks of 2008 and 2011, but rose when cereal crops in the US and parts of Europe failed. The FAO’s December food price index was at its lowest point since June, although dairy prices rose partly due to tighter feed supplies.

US Farm Bill negotiations extended
The US Congress has provided some short-term certainty to US farmers by extending parts of the 2008 Farm Bill until 30 September 2013. The 2008 Farm Bill was due to expire on 30 September 2012 and without a new Farm Bill in place, a raft of rules dating back to 1949 would have been triggered and pushed up milk prices in particular.

The extension renews subsidies for grain, cotton and soybeans but cuts budgets for organic and environmental initiatives. The extension also included provisions to prevent the price of milk skyrocketing. However for those farmers looking longer term, many are frustrated at getting so close to a new five-year program and now being left with uncertainty about what the future agricultural policies may be.

The US Congress has until 30 September 2013 to approve a new five-year plan, however with the US’s fiscal woes, agreeing to a five-year plan and budget will be difficult. The US Farm Bill is the US agricultural law which governs food aid to poor families, rural development, and research funding allocation as well as crop subsidies.

Global food prices remain high
Global food prices will stay at high levels in 2013 and low stocks pose the risk of sharp price increases if crops fail, the United Nations’ food agency (FAO) has predicted.

A surge in food prices over the summer of 2012 fuelled by the worst drought in more than half a century in the US and dry weather in other major exporters raised fears of a new food crisis such as the one seen in 2008. FAO has said food stocks remain low, which with the possibility of a better economic situation in 2013/14 should encourage consumption, assisting the market price to remain up.

Better international coordination was helping prevent countries from using export bans, which was creating a calmer situation compared to 2008, when unexpected national controls worsened the food crisis. Good supply prospects for corn and soybeans in the southern hemisphere would help offset supply tightness in the northern hemisphere reducing the risk of supply shocks.

But the FAO Food Price Index – which measures monthly price changes for a basket of cereals, oilseeds, dairy, meat and sugar – fell for the third month in a row in December to 209, its lowest level since June, led by declines in cereals and oils prices. Soy prices have fallen following forecasts of near-record South American production and this has brought down other grain prices.

For 2012 as a whole, the index averaged 212, down 7% compared to 2011, but still at historically high levels.
**In the news**

The Australian Farm Institute’s popular blog *Ag Forum* provides frequent posts on current agricultural issues. The post ‘Whole Food Markets shows how to add value to agriculture, not drag it down, down,’ (15/01/13) discussed the marketing position of the American retailer Whole Food Markets, comparing its system of graded levels of animal welfare to those used by Australian supermarkets.

Whole Food Markets has recently introduced an animal welfare rating system for its meat products. In contrast to Australian retailers, Whole Food Markets jointly developed the system with its suppliers, advertises the system widely in its stores and explains it to consumers, and has an independent third party involved in the accreditation of its farmer/suppliers. Even more importantly, suppliers are not forced to adopt the standards, but can choose the Step level they wish to be accredited to, and their products are labelled accordingly when displayed on the retail shelf.

Similarly, under the system consumers can choose the level of animal welfare they believe is appropriate, and actually confirm that choice by selecting the product and paying for it. This is a much more realistic and market-oriented approach that the retailer simply dictating what it believes consumers want.

This post elicited a response from Robert Hadler, General Manager of Corporate Affairs at Coles, and an ongoing blog conversion of questions and answers between himself and the Institute. The conversation formed a chain of five comments, back and forth, with Robert Hadler finally signing-off with the statement: ‘I am currently writing an article for the March edition of the *Farm Policy Journal* which will comment on these issues in more detail.’

**Out and about**

Recently the Institute’s Executive Director, Mick Keogh, has spoken at:
- Philanthropy Australia Rural & Regional Affinity Group Forum, Canberra
- GRDC Grains Research Updates, Biloela and Capella, Queensland
- Horticulture Australia Limited Annual Industry Forum, Sydney

Mick Keogh also travelled throughout Washington and the mid-west of the United States, including Indiana, Illinois, Missouri, Oklahoma and Texas.

In November 2012, the Institute held its annual Australian Agriculture Roundtable Conference in Brisbane.