From where? Home truths about what you’re really eating

Clementine Julian
Australian Farm Institute

‘Confused’ is the adjective now commonly used to describe consumers who wish to select Australian food products at supermarkets. Information on product labels has little if anything to do with where a food product was actually grown. And those ‘Aussie-farmer friendly’ major retailers – so keen to advertise and promote how much they help Australian farmers – seem to be at the forefront when it comes to creating confusion about the national origins of food products.

As a simple example, most would assume that if a label on some pork or ham in a supermarket says, ‘Made in Australia,’ then the product came from an Australian pig, which was reared under Australian animal welfare rules and safety standards, and processed through an Australian abattoir subject to strict food safety, disease and workplace safety regulations. They might take some comfort from the fact that in purchasing a product that was ‘Made in Australia’ they were helping to support Australian jobs and contributing to the wellbeing of Australian working families.

Despite good intentions, the consumer would unfortunately be wrong. Under Australian food labelling laws, pork, ham or any other form of processed meat from a pig can be imported from overseas, and only needs to be subject to minimal processing in order to be eligible to be legally sold with the ‘Made in Australia’ label under Australia’s current country of origin labelling laws.

The recent Senate inquiry into the food processing sector emphasises the fact that current country of origin labels on produce are often misleading. Supporting this finding, numerous research papers and consumer surveys have confirmed how confused Australians are about what food labels actually mean.

Australia’s current food-labelling regulations

Current Australian food labelling regulations state that all packaged food sold in Australia must have a phrase and contributing to the wellbeing of Australian working families.
or statement on the package which identifies where food was made or produced, or the label must contain the location where the produce was manufactured or packaged for sale. In 2006, a regulation was enacted that also made country of origin labelling mandatory for some fresh produce (seafood, pork, fruit and vegetables), but even with this regulation in place, there are still major loopholes in the system.

The regulatory framework that makes up Australian food labelling laws includes:

- The Australia New Zealand Food Standards Code
- Codex Alimentarius (Codex)
- The Australian Competition and Consumer Act 2010 (CCA)

There is a considerable degree of interaction between these. For example, the Food Standards Code requires that certain foods display their country of origin and, if applicable, manufacture. The CCA, on the other hand, provides guidance about the terminology to be used in making claims about the country of origin or manufacture of goods, including produce.

**Australian New Zealand Food Standards Code**

This code states that food products must identify the country of origin of ingredients and the country where the product was processed for retail sale. This particular code was developed as part of the Codex Alimentarius (Codex) which is a collection of production and food safety standards specified by the United Nations Food and Agriculture Organization and the World Trade Organization.

**The Competition and Consumer Act 2010 (CCA)**

The CCA aims to protect consumers and businesses from unfair practices and misleading conduct. It includes requirements that labels applied to food products are not misleading.

The requirements associated with specific claims made on labels are detailed below in Table 1.

One major concern that was discussed during the recent Senate inquiry is the issue of ‘substantial transformation’. For a product to be labelled ‘Made in Australia’ it is required to have undergone substantial transformation in Australia. This is interpreted to mean that a product can be labelled ‘Made in Australia’ if 50% or more of its production costs have been incurred within Australia. Due to Australia’s high production costs, exchange rate and standards of living, even minimal processing or repackaging of imported products in Australia can make them eligible under these laws to be labelled ‘Made in Australia’.

A range of different processes are able to be included in the consideration of whether or not an imported product has undergone ‘substantial transformation,’ including; freezing, canning, preservation processes, mixing or blending of ingredients, juicing, homogenisation, seasoning, marinating, curing, roasting, toasting and coating. As one witnesses at the recent Senate inquiry stated, ‘we challenge any man to know the difference between “Product of Australia” and “Made in Australia”’. Australian Pork Limited (APL) has expressed strong concerns about this matter in a statement saying, ‘Products made from imported pig meat are permitted to use the “Made in Australia” label if the product has been substantially transformed in Australia.’ APL has undertaken internal research on this matter and found that consumers really do believe

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<th>Representation</th>
<th>Requirements to be met</th>
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<td>1. A representation as to the country of origin of goods</td>
<td>(a) the goods have been substantially transformed in that country; and (b) 50% or more of the total cost of producing or manufacturing the goods is attributable to production or manufacturing processes that occurred in that country; and (c) the representation is not that goods are the produce of a particular country or made by way of a logo specified in the regulations.</td>
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<td>2. A representation that goods are the produce of a particular country</td>
<td>(a) the country was the country of origin of each significant ingredient or significant component of the goods; and (b) all, or virtually all, processes involved in the production or manufacture happened in that country.</td>
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<td>3. A representation as to the country of origin of goods by means of a logo specified in the regulations</td>
<td>(a) the goods have been substantially transformed in the country represented by the logo as the country of origin of the goods; and (b) the prescribed percentage of the cost of producing or manufacturing the goods is attributable to production or manufacturing processes that happened in that country.</td>
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<td>4. A representation that goods were grown in a particular country</td>
<td>(a) the country is the country that could, but for the fact that a representation has been made of the kind referred to in item 1 or 2 of this table, be represented, in accordance with this Part, as the country of origin of the goods, or the country of which the goods are the produce; and (b) each significant ingredient or significant component of the goods was grown in that country; and (c) all, or virtually all, processes involved in the production or manufacture happened in that country.</td>
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<tr>
<td>5. A representation that ingredients or components of goods were grown in a particular country</td>
<td>(a) the country is the country that could, but for the fact that a representation has been made of the kind referred to in item 1 or 2 of this table, be represented, in accordance with this Part, as the country of origin of the goods, or the country of which the goods are the produce; and (b) each ingredient or component that is claimed to be grown in that country was grown only in that country; and (c) each ingredient or component that is claimed to be grown in that country was processed only in that country; and (d) 50% or more of the total weight of the goods is comprised of ingredients or components that were grown and processed only in that country.</td>
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**Table 1**: Section 225, Schedule 2 of the *Competition and Consumer Act 2010*. 
the claim, ‘Made in Australia’ means that pigs were actually born and raised in Australia.

A Roy Morgan Poll in 2007 found that 89% of Australian’s felt that it was either important or very important that fresh food was of Australian origin, and 82% expressed similar views about processed food. While consumer actions at the checkout do not always reflect survey responses, this preference for locally produced food is well understood by marketers, and hence is something they like to take advantage of – even to the extent of misleading consumers about the true origins of the food they are consuming.

This issue has also been highlighted in the recent Blewett Review, Labelling Logic: Review of Food Labelling Law and Policy, which addresses country of origin labelling in Australia. The review found that Australian consumers are genuinely confused by the overabundance of terms used to label the origin of food. This has led to the current Senate inquiry and recent Greens bill, The Competition and Consumer Amendment (Australian Food Labelling) Bill 2012.

What is happening overseas?

Contention about food labelling is not confined to Australia. The issue is also much debated internationally, as the following brief reviews of the food labelling issues in the United States (US) and Europe highlight.

United States

The US has similar country of origin food labelling laws to Australia. Under the Farm Security and Rural Investment Act 2002 (Farm Bill 2002) country of origin labelling must be provided for fresh beef, pork and lamb. In September 2008, the US extended current labelling provisions to muscle cuts and ground beef, veal, lamb, pork, goat, chicken, farm raised and wild fish, shellfish, fresh and frozen fruits, vegetables, peanuts, pecans, macadamia nuts and ginseng. As is the case in Australia, the issue of ‘substantial transformation’ is an important concept.

For meat in particular there are a number of different ways that it can be labelled. These are as follows;

- **Product of the US:** if the animal was born, raised and slaughtered in the US.
- **Product of the US, Country X and Country Y:** if the animal was born, raised and slaughtered in the US but then commingled with products from other nations.
- **Product of the US, Country X and Country Y:** if the animal was born and raised in another country and then slaughtered in the US.
- **Product of Country X and the US:** if the animal was imported into the US for immediate slaughter.
- **Product of Country X:** if imported product was processed in another country and then imported for sale in the US.

Domestic and imported perishable agricultural commodities such as peanuts, pecans, macadamia nuts and ginseng, may all use state, regional, or locality labelling instead of country of origin labelling. The state, region or locality label used for these commodities can be abbreviated in accordance with US Postal Service abbreviations, whether domestically harvested or imported.

There has also been discussion about mandatory country of origin labelling in the US. Many consumers and producers see it as an advantage to local producers, as consumers want fresh produce that is locally grown and want to support domestic self-sufficiency. In addition, given past incidents of Bovine Spongiform Encephalopathy (BSE), there is now increased consumer interest in the origin of meat, in particular. In contrast, those who oppose mandatory labelling believe there is not enough evidence to support its adoption, and see it as a thinly disguised trade barrier against imports.

There are also numerous costs associated with changes to country of origin labelling. Those opposing labelling in the US estimate that change could cost the food sector, $3.9 billion in the first year, if mandatory labelling provisions were to be implemented. Those favouring labelling laws say that these estimates are extremely exaggerated.

European Union

Mandatory country of origin food labelling applies in the European Union (EU) for a range of products, including beef and beef products, honey, fruit, vegetables, fish, olive oil and also for any product having a misleading name. An example of this could be a product called ‘English Cheese’ which is made in France.

The European Commission (EC) has established mandatory labelling laws, which EU member states are required to follow. Some examples are as follows;

- **Origin X:** Beef products must have their country of origin on the label. (*Note: labelling takes this form when all processes have happened in the same country.*)
‘Process’ X: Beef products also must show how and where they were prepared.

Caught in X: Fish and shellfish products should state what part of the ocean they were caught in.

Country X: Fruit and vegetable products should show where they originated and also where they were processed.

Mix of EU, Mix of Non EU or Mix of EU and Non EU Fruit and Vegetables: If the product is a mixture of fruit and vegetables, country of origin labelling should follow this format.

In 2000 mandatory labelling was introduced for beef and veal due to health concerns that stemmed from Europe’s second BSE outbreak. Currently all meat products must have a health mark or an ID mark which states the country of origin. Beef and veal products that are not sold loosely at retail level, are subject to more stringent, country of origin labelling laws, which include;

- a reference number or code linking the meat to the animal or group of animals it came from
- the Member state or non EC country of birth
- the Member state or non EC country of rearing
- the Member state or non EC country of slaughter
- the Member state or non EC country of cutting
- the approval numbers of the slaughterhouse and cutting plant(s).

As of December 2014 new food labelling laws will apply to meats such as swine, goat and poultry. New provisions for minced meat will apply as of January 2014. The EC also hopes to draft a report on the possibility of providing mandatory country of origin labelling for meats that are not as yet included, milk and milk used in dairy products, unprocessed foods, single ingredient products and also ingredients used that represent more than 50% of a food.

Currently, there are also rules for regional products which are applied under the EU Protected Food Name Scheme. These are;

Protected Designation of Origin (PDO): covers agricultural products and food which are processed and produced in a given geographical region.

Protected Geographical Indication (PGI): covers agricultural products and food that are closely linked to a particular geographical region, and where at least one of the stages of production has taken place in that region.

Similar to Australia and the US, there are estimated to be significant costs involved in changing country of origin labelling. It is estimated that it is going to cost £7000 per product, in addition to the cost of training staff if food labelling laws were to change and become more stringent. Some consumers in the EU feel that if mandatory labelling is introduced for all meat and dairy, extra costs would be created for manufacturers without delivering additional food safety benefits to consumers.

Recommendations

Many recommendations have been considered by nations around the world as possible solutions to current food labelling problems. However, the issue is a complex one and a one size fits all approach appears unlikely to work. Consumer preferences are constantly changing, and are different for various demographics and age groups. Some consumers have been shown to be more concerned about where food is actually processed and manufactured, whereas others are more concerned about the origin of ingredients.

The recent Senate inquiry into the food processing sector made a number of recommendations which are listed below. Each of these infers that current legislation on food labelling needs to be more transparent and provide better information for consumers.
Recommendation 7
The committee recommends that the government expand the application of food labelling requirements to require all primary food products for retail sale to display their country of origin, in accordance with Recommendation 40 of the Blewett Review.

Recommendation 8
The committee recommends that the government reform country of origin labelling requirements for food so that these requirements are clearer, more transparent and focus on the consumer’s understanding.

Recommendation 12
The committee recommends that the government move mandatory country of origin labelling requirements for food to a specific consumer product information standard under the Competition and Consumer Act 2010, consistent with Recommendation 41 of the Blewett Review.

Recommendations 12 and 7 are based on two recommendations stated below which are from the Blewett Review (2011). Both recommendations suggest that current legislation does not cover mandatory requirements for all primary produce and also that it does not look after the interests of the consumer.

Recommendation 40
That Australia’s existing mandatory country of origin labelling requirements for food be maintained and be extended to cover all primary food products for retail sale.

Recommendation 41
Those mandatory requirements for country of origin labelling on all food products are provided for in a specific consumer product information standard for food under the Competition and Consumer Act 2010 rather than in the Food Safety Code.

Application of technology
Another recommendation arising from the recent Senate inquiry was Recommendation 11, which suggested the use of smart phone technology and barcodes on food labels.

Recommendation 11
The committee recommends that industry and government investigate the potential use of smart phone and barcode technology to provide additional information about the country of origin of food products.

Percentage and shading systems
The recent Senate inquiry also mentioned two options which have been suggested and seen as possible solutions by both the public and government, a percentage system or a shading system.

It is suggested that a percentage system could be applied where either the percentages relating to the country of origin of the top five ingredients used are listed for a product or a statement as simple as ‘Made in Australia from 70% imported and 30% Australian content’ could be used. This system does not mislead consumers about where a product is produced – yet may create problems about the recognition of local manufacturers who have processed the product.

The implementation of a shading system has also been suggested by industry and consumers, which is a simple visual representation that displays the percentage of ingredients used. An example of this would be the word ‘Australian’ and then shading out a letter for each 10% of imported ingredients used, here being 30% of imported ingredients used. This system is not as explanatory as a percentage system, but is a visual system that is simple and not deceptive.

The Senate inquiry suggested that many questions surround the implementation of both systems, such as: what about recognition for labour and manufacturing sectors, and the costs of implementing such systems? Theoretically, both systems seem to be possible and solutions to current food labelling issues but the practicality of employing either could potentially confuse consumers even more and have large costs.

Conclusion
Internationally, questions plague consumers, businesses and governments about the solution to current food labelling debates. There will always be discrepancies on the matter, either from a consumer’s perspective or from that of businesses within the food industry. The question that remains is: what is going to be the most cost effective solution for the greater good?

The answer ultimately must ensure the consumer is given a clear understanding of the origin of the food they are consuming, something not provided by the current system.

References
Calculating greenhouse gas reductions

With the introduction of the Carbon Farming Initiative (CFI), have you considered what quantity of greenhouse gases a typical mixed-farming enterprise generates, or which farming enterprises generate the most and have the highest abatement potential? Obviously the answer to these questions will be different for each property and mix of enterprises.

The Australian Farm Institute with funding from MLA and DAFF has developed an online calculator to help answer these questions. The FarmGAS Scenario Tool allows a user to calculate the greenhouse gas emissions from a whole farm or from single enterprises.

The calculator is based on the greenhouse ‘accounting methods’ used by the Australian Government to calculate greenhouse gas emissions at the national level. From your own production data FarmGAS will calculate the emissions from your farm using these ‘accounting methods’. This produces a default or ‘National Greenhouse Gas Inventory (NGGI) compliant’ result.

However, there are some limitations with this approach. The national accounting methodology (NGGI) uses national and state average production figures for most calculations. For example, it assumes that 23% of wheat stubble is burnt and that 23.771% of fertiliser applied to dryland crops is nitrogen. For a NSW beef cattle farm, the NGGI assumes that, during spring the dry matter digestibility of pasture intake (DMD) is 55%; heifer calves weigh 75 kg and are growing at 0.5 kg/head/day. Of course, this may not represent what is actually happening on your property.

To overcome these limitations, FarmGAS allows the user to modify the production and emission amounts to suit their farm. For example, a user can adjust the areas of pasture and crop stubble burnt and the quantities of fertiliser applied. They can enter more representative amounts describing their livestock. For example, on a beef farm during spring the heifer calves might average 100 kg and grow at 0.9 kg/head/day, and the DMD might be 65%. These modifications produce a revised (more ‘farm-specific’) result.

So if a revised result is more farm specific, why does the FarmGAS calculator provide a default result? The answer lies in the introduction of the CFI. A default FarmGAS result can provide an estimate of abatement achieved that is consistent with national accounting method but uses your farm or enterprise area rather than the national or state average. The default result option is the simplest way to obtain an estimate of your greenhouse gas reductions without having to provide any more details than enterprise area, herd/flock structure or cropping type. This reduces the effort in reporting to the CFI Administrator on your project progress. The next step would be to provide, even more specific farm-level information and obtain a revised result.

The default calculation could be used in CFI methodologies that are going to be used by many producers across an industry. It may be far simpler to use a standard default calculation when many producers are using the same methodology and avoid the need for individual producers taking additional measurements to achieve an abatement result. The revised calculation may be more suitable for specific project methodologies that are only applicable to a few producers or a specific and well-defined area.

How else could FarmGAS be useful in implementing a CFI project? One of the principles of CFI projects is that there is no emissions ‘leakage’. This means for your project area (typically a farm), implementing a CFI project such as an environmental tree planting cannot result in an increase in emissions in another area, for example, an increase in the livestock stocking rate. FarmGAS allows a producer, advisor or researcher to calculate the effect of a CFI project on enterprises as well as the whole farm, and can help assessments of whether CFI principles such as leakage, can be met.

Although FarmGAS is flexible for assessing different production and emission scenarios, it is important to note that it is not a biophysical model. FarmGAS uses ‘static’ equations that do not include the physiology of plant and animal systems and their often complex interactions. For example, changes in pasture quality and the related effects on livestock growth factors have to be carefully considered before changing amounts to produce the FarmGAS revised results. Results will therefore differ between FarmGAS and biophysical models.

Reports allow users to download and save their results for auditing and compliance purposes or to just track trends over time. A Scenario Tool comparison report also allows comparison between scenarios and could be used to test which abatement strategy is most suited to the circumstances, or undertake what-if options. Finally, a gross margin tool allows the economics of each scenario to be assessed so a whole farm picture of economic and greenhouse gas results can be obtained.

FarmGAS can be accessed from www.farminstitute.org.au
Science and environmental policy: models without data are empty, but data without models are blind

In your last *Farm Institute Insights* newsletter, you wrote a piece arguing that there is an ‘increasing reliance of policy-makers on modelling, rather than actual science, in making decisions in response to complex environmental challenges’, and that this is an undesirable state of affairs.

Modelling is not a replacement for science: it is a part of science. All scientific progress is built from the interplay between theory and data (as Albert Einstein knew well). In environmental science, models are where theory lives, and so they are a vital way of ensuring that scientific progress continues.

Mathematical modelling has become more prevalent over the last 10–15 years in policy advice about environmental issues. You’re right to point out the risks involved in this trend, but I believe that it is wrong to think that there is any viable alternative. The solution is not to abandon modelling, but to do our best to ensure that environmental models – and datasets – are built well and reinforce one another.

**There is no alternative**

As you pointed out in your article, governments must face increasingly complex issues: salinity, water management, coal seam gas, climate change. Models have to be used to understand these ‘wicked’ problems, for at least three reasons:

- Interactions are always important. Take the example of coal seam gas, where the economic trade-offs are driven by a complicated mixture of hydrological, ecological and agronomic changes. Data from different disciplines need to be drawn together to understand the multiple dimensions of these problems, and models are the only viable approach.
- Data are always insufficient. To pick one example of many: you criticised the Sustainable Rivers Audit for working with model-derived ‘reference conditions’ in the catchments of the Murray-Darling Basin. What, though, was the alternative? Any approach driven by the patchy available data would have been open to – justified – criticism for assessing the different catchments inconsistently.
- Policy-makers always ask ‘what if?’ Datasets can tell us about the past and present; if we’re lucky, they can forecast ‘business as usual’ a short way into the future. Once questions are asked about alternative futures, though, modelling becomes essential.

Environmental modelling is a rapidly evolving field and the Australian Dryland Salinity Assessment was done in 2000, or about eight iterations of Moore’s Law ago.

**Every scientist has a model**

It is a commonplace of scientific practice that researchers base their work on ‘mental models’ of how the world functions. These mental models influence the questions that are asked, the data that are collected – or not collected – and the ways in which results are analysed. The choice for policy-makers, therefore, is not between ‘science’ and ‘models’, but between models that are written down explicitly and models that remain in the heads of the people using them.

I strongly disagree that ‘it is... more difficult to scrutinise the results of modelling’ than the results of ‘actual science.’ Exactly the opposite is true. A formal model lays out its assumptions and opens them to critique; the assumptions of an informal ‘mental model’ are seldom made so clear.

**Policy processes don’t deal well with uncertainty**

You argued that ‘models... are subject to modification or assumptions that may bias results in a particular direction’, but your own examples tell a rather different story. In both the Australian Dryland Salinity Assessment process and in the Sustainable Rivers Audit, the scientists who did the research took pains to point out the limits of their models and the resulting uncertainties. As Prof David Pannell has already pointed out, the process of simplification that happened in the ADSA as the scientific results were synthesised tells us more about the ways that policy advisers and politicians approach risk and uncertainty than it does about the use or misuse of modelling.

**Quality assurance in environmental policy-making**

I agree with you and David Pannell that the models used in environmental policy advice should be open to scrutiny: that is why the main Australian models for hydrology and agricultural production make their science publically available.

As the experience of the climate scientists shows, however, it can take years to establish public confidence in research results when the problem is a ‘wicked’ one. Trying to address water, salinity, coal seam gas, etc one-at-a-time prevents this confidence from being built. What is needed is a strategic approach in which:

- data collection in the landscape is informed by – and challenges – models of the underlying physical and biological processes
- both the models and the data are open to scrutiny and to creative reuse by government, researchers and the wider public
- uncertainties in the science are assessed carefully and communicated clearly by scientists, and faced squarely by policy-makers.

Building such a ‘knowledge system for sustainability’ will be a major undertaking that will challenge the ways that both landscape science and environmental policy-making are currently practised. It is, however, the best way to ensure that the transparent and iterative input of scientific knowledge into policy that you are calling for actually happens.

Regards,

Dr Andrew Moore

CSIRO Sustainable Agriculture Flagship
Has social media supplanted traditional lobby groups in contemporary politics?

The Hon Sussan Ley MP
Member for Farrer
Liberal Party of Australia

As a recent empty nester, I tried to phone my student daughter the other day. Not an urgent matter, mind you, just a quick check-up call on her wellbeing. No answer. Ok then, let’s try a text? Same result. Facebook? Bingo. Status happy… studying hard (sure, thinks mum)… all ok!

For we baby boomers the thought that ‘logging on’ could one day completely unseat the once perfectly reasonable concept of a phone conversation is slightly bewildering. Then again, I guess it was only a hundred or so years ago early patents of the telephone were dismissed as gimmickry that could never surpass the unadulterated joys of letter writing. Members of Parliament who are, let’s face it, not traditionally shy, find this astonishing proliferation of ways to express ones views as both a beautiful progression but also, on occasion, a little too revealing for their own political good.

You know, it really was not that very long ago a constituent or organisation with genuine or earnest concerns felt they could not directly approach their MP except by formal postage. At the top end of Capital Hill, getting the direct attention of a Minister was also often nigh impossible, bar paying a professional lobbyist to smooth the way for an appointment.

Today, all but the most reserved of my colleagues are now available directly via a message on Twitter or Facebook which most will read instantaneously on their mobile phone, completely bypassing any staff or advisers. And, if a ‘tweet’ is more hostile than thoughtful (sadly, a rising trend), you can be sure it’s already been bounced around ‘twitter world’ and read 100 times before you’ve even considered whether a response is warranted.

Where once a cranky letter or phone call could be privately assessed, not so a cursory mention beamed into cyberspace which sits there for several thousand browsers to see and do with as they wish. Whether the original comment or claim was accurate, truthful or even warranted is an emerging debate which can be had on another day. Suffice to say, just as telephone etiquette took many of our forebears a while to master, today’s new communication tools are still settling on appropriate propriety.

As a result, it’s not without cause for my colleagues and I to summarily dismiss tweets or emails from authors with vast address books. We must also sometimes ignore or de-friend repeat writers of nebulous comments on Facebook. Some of the ridiculous or snide asides which string from the end of a blog or news article on the web, speak for themselves and, through questionable anonymity, not much anyone else. It is worth noting the apparently revolutionary reliance on social media seems to hold less currency in rural constituencies, where word of mouth and personal repute thankfully hold sway.

Why a handshake still ranks solid in the bush compared to the number of disparate followers or friends you can boast from the web, is uncertain but very welcome. Especially so when in the more remote parts of this country the arrival of these new, easily accessible, mediums has been a godsend. Perhaps it is because we still place value on “it is not what you say but what you do”, a credo that is yet to be a focus of disposable internet-based commentary.

Social media is the communication channel of a new generation and regarded with fascination and a little bemusement by the rest of us. Mind you we also thought morning newspapers would last out this millennium. Still perhaps best not to fight it, especially if you want to keep track of how your children are faring. But has it replaced a polite phone call or request for a meeting with your local polie? Not yet and not for a while, I hope.

Sussan Ley’s career path has been wonderfully varied, with odd jobs on the way to a pilot’s license – roles as an air traffic controller, stock-mustering pilot and occasional shearer’s cook followed! While raising three children on a family farm, 10 years of study led to a senior position at the Australian Taxation Office before she successfully sought Liberal Party pre-selection for Farrer (NSW). Now in her 11th year of federal politics, Sussan was allotted Shadow Ministerial roles Employment Participation, Childcare and Early Childhood Learning in late 2010.

Readers are invited to continue the discussion on the Ag Forum blog.
A truly mass media

Senator Scott Ludlam
Senator for Western Australia
Australian Greens

It used to be that ‘social media’ meant distributing leaflets hand to hand or sending a letter to the local newspaper. Social networks, particularly in small regional communities, meant face-to-face contact and the ubiquitous ‘grapevine’ that passed news and gossip from hand to hand.

While that is still the case in close-knit communities, at a regional scale things have been going awry for some time. Consolidation in local radio markets and the closure of regional newspapers has begun to fray the social glue that helps hold communities together. Australia has among the highest concentrations of media ownership anywhere in the world, meaning a small handful of voices and views have tended to drown out the raucous diversity that characterises healthy public debate.

Rapid advances in telecommunications are beginning to change all this. There is no need to engage in the kind of breathless cyber-utopianism that sometimes follows broadband announcements: social media really is beginning to change the way we communicate with each other. There are elements of the grapevine here – with all the good and bad that this implies – but now the reach is global. We see examples of all facets of the human condition expressed through this medium – care, creativity and compassion, but also trivia, bad taste, bullying and worse. One thing is for sure: there are now many examples of people with creative ideas that sidestepped the old gatekeepers and took their idea to a global audience.

A broadband-enabled society radically undermines the tyranny of distance. While we have been critical of some aspects of the National Broadband Network, there is no question that it is a better alternative than going back to a mishmash of competing technologies where the cities were well served and the bush was forgotten. It is essential that the aim of universal access to rapid broadband survives the 2013 election campaign.

Social media do bring communities back together again, and they can be communities of interest distributed around the world, as well as communities in the traditional geographical sense. I suspect no matter how far these technologies advance, there will never be a substitute for old fashioned face-to-face contact, but I do believe the existence of a global civil society is genuinely new; as we link up with people all around the world we will come to realise how much we have in common, and in troubled and uncertain times that can only be a good thing.

Senator Scott Ludlam is based in Fremantle, Western Australia. He is the Australian Greens Senator for Western Australia, and the Greens spokesperson for Communications, Infrastructure, Housing, Heritage, and Nuclear Policy.

He was elected at the 2007 Federal Election and has represented Western Australian since 1 July 2008. In that time he has been a strong advocate for improving communications infrastructure in Australia, affordable housing, and better public transport.
Rookie errors on the road to an agricultural boom

The growing media excitement about the future potential of Australian agriculture as the next ‘boom’ sector of the economy has triggered a slew of analyses discussing how the sector can take advantage of the opportunities. In their new-found agrarian enthusiasm, some of the commentators are perhaps less than familiar with the agriculture sector, and not aware of the dangers inherent in taking some of the sector’s official statistics at face value.

Prominent amongst the rookie errors evident in some of the analysis has been a reliance on ‘average’ farm profitability data to gauge the financial health of farm businesses, and a focus on the apparent ‘ageing’ of farmers as evidence of weakness in the ability of the sector to rise to the opportunities that are emerging.

Dealing first with farm profitability data, a recent article by Julie-Anne Sprague (Australian Financial Review, 22/10/2012), quoting some analysis by Port Jackson Partners, noted that:

> [...] Farm performance has been deteriorating – since the 1990s more than a quarter of broadacre farms made a loss every year, and half achieved an average cash income of $43,000. This makes expanding production a challenge for Australia...<br>

The problem with the use of this data, as experienced agricultural analysts are well aware, lies in the definition of a farm business in Australian agricultural statistics.

Farm businesses are included in the ABARES broadacre survey if they have an estimated value of agricultural output (EVAO) above a specific threshold. Between 1987–88 and 1991–92 the survey included establishments with an EVAO of $20,000 or more. Between 1991–92 and 2003–04 the survey included establishments with an EVAO of $22,500 or more. Since 2004–05 ABARES farm surveys included establishments classified as having an EVAO of $40,000 or more. This means that many of the ‘farms’ included in the analysis are not commercial farms, but lifestyle farms.

To give some indication, approximately 30% of the farm businesses included in the survey have an EVAO of less than $100,000, but these account for only approximately 5% of total agricultural output, and obtain more than 90% of their net income from off-farm wages. These farms are managed at the weekend and owned for lifestyle reasons, and are located in the hinterlands of many Australian capital and regional cities.

Including these small farms in an industry-wide analysis is a bit like calculating the average earnings of Australia’s professional golfers by totalling their earnings, then dividing that number by the total number of people in Australia (professionals and weekend amateurs) who play golf.

The 20% of Australian broadacre farm businesses that have EVAOs in excess of $400,000 per annum account for more than 70% of total annual output, and have experienced average annual investment returns over the past two decades that most superannuation fund managers can only dream about.

The article also noted that ‘...ageing farmers (average age is 53, up from 44 in 1981) has left the sector in a weaker position to manage poor weather and the rising Australian dollar.’

The first, often overlooked factor in relation to this statistic is that fact that the entire Australian population is ageing, as families have less children. In fact, over the period from 1981 to 2012, the median age of the entire population has increased by almost 5.5 years, so the apparent ageing of farmers needs to be considered in the light of trends in the entire population.

Secondly, over the period from 1990 to 2011, the average capital value of Australian farms has more than doubled in real (inflation adjusted) terms, from around $1.78 million to $3.92 million. Given this (a consequence of farms getting bigger and more efficient) it should not be any great surprise that younger farmers are less likely to be able to enter farming at an early age, given the amount of capital that is now required.

A third point to note in relation to apparent average age of farmers is that there are a significant proportion (16%) of farmers who are above retirement age and who may no longer be actively involved in farm operations, but who are still classified as farmers due to their ownership of at least some of the farm assets. The presence of this group in the statistics is likely to bias the average age upwards.

These are just two examples of the limitations of some well-meaning, but less than robust analyses of the sector that have appeared over recent times. The newfound interest in Australian agriculture by the media is certainly a welcome change, but those less than familiar with the sector need to exercise some care in the prescriptions they conclude are needed by the sector to reach its full potential.
Biofuels unsustainable

German researchers are claiming that European biofuel production is unsustainable and fails to show a greenhouse gas emissions saving of 35%, compared to conventional fossil fuels. The ‘unsustainable’ nature of biofuels could undermine the EU’s plans to reduce greenhouse gas emissions by 50% by 2017 and produce 50% of its energy from biomass sources by 2020.

If the EU is to be successful in meeting its 2020 energy target, significant investment is required to develop new biodiesel feedstocks, such as weeds and waste stems, and find ways to produce biomass that does not require additional land clearing.

The UN has also accused biofuel production of pushing up world food prices and exacerbating the effect of the US drought. The US has not backed away from its ethanol mandate, which stipulates 40% of corn production is for biodiesel. The FAO is concerned another food crisis, like 2008, could be triggered.

In a policy U-turn, the EU has proposed new rules to reduce the 2020 biofuel emissions target and is an indirect admission that the 2020 biofuel target was too optimistic. The new rules also propose to end public subsidies for crop-based biofuels after the current legislation expires in 2020. Under the proposed rules, biofuel from crop sources would be limited to 5% of total energy consumption in the transport sector in 2020. Crop based biofuels currently account for about 4.5% of transport energy consumption.

Organic food claims questioned

Organic food is often perceived to have positive health impacts and be more environmentally friendly. Following a meta-analysis of peer reviewed papers, Stanford researchers have found no real difference in nutritive benefit, apart from a higher concentration of phosphorus in organic food.

Oxford researchers have also found that organics’ practices are not necessarily better for the environment because they often require more land for the same quantity of product, even if they consume less energy. Researchers found organically produced milk, cereal and pork generate the same quantity of greenhouse gas per unit of production as conventional products. Researchers specifically pointed out that an organic label does not guarantee an environmentally friendly product.

US country of origin labelling

The WTO recently declared the US food labelling provisions in violation of global trade law and discriminatory against imported meat products. The WTO said the labelling requirements themselves are legal, however the way the rules are administered unfairly make beef and pork imports from Canada and Mexico more expensive to produce. The USA Foundation, the Ranchers Cattlemen Action Legal Fund–United Stockgrowers of America (R-CALF USA) and a meat and vegetable distributor have filed suit against the WTO and the US Government in a bid to retain the US Country of Origin Labeling Act (COOL). It is the third suit against the WTO.

R-CALF USA the second largest US cattlemen’s association, does not consider COOL as a trade barrier of any kind and believes it fulfils consumers’ demand for information. Both the USA foundation and R-CALF USA say US laws prevail in any trade conflicts between the US and other countries.

French GMO research insufficient

The European Food Safety Authority (EFSA) has concluded that a recent paper raising concerns about the potential toxicity of genetically modified (GM) maize and Roundup herbicide is of insufficient scientific quality to be considered as valid for risk assessment.

The French study found rats fed a diet containing NK603 – a maize seed variety doused with Roundup – or given water with Roundup at levels permitted in the US, died earlier than those on a standard diet. The rats suffered mammary tumours, as well as severe liver and kidney damage with 50% of male and 70% of female rats dying prematurely, compared with only 30% and 20% in the control group.

EFSA’s review said the study’s analysis was of insufficient scientific quality for safety assessments. The study had unclear objectives, inadequate design, analysis and reporting.

Keep up-to-date with discussion on current issues in Australian and international agriculture policy via the Ag Forum on the Institute website.
In the news

With foreign investment in agriculture still on the national agenda the Institute provided comment for articles on the topic, particularly in relation to the potential sale of Cubbie Station. ‘Critics making hay on foreign farm ownership,’ by Craig Emerson (11/8/2012) and, ‘Barnaby Joyce digs in on Cubbie as Coalition fractures over foreign deals,’ by David Crowe (5/9/12), both featured in The Australian and, ‘Cubbie sale no concern: AFI,’ by Colin Bettles in the Stock Journal (15/9/12).

Following the Federal Government’s recent announcement linking the Australian and European carbon markets, the Carbon Farming Initiative has also garnered a large amount of media interest. The Institute was sought for comment for the stories, ‘Changes challenge carbon farmers,’ by Sue Neales in The Australian (1/9/12), ‘Big risks in CFI: Keogh,’ by Gregor Heard (19/8/12) and, ‘Thumbs down to Carbon Farming Initiative,’ by Jenny Bartlett (4/10/12) in the Farm Weekly, and a WA Country Hour podcast (29/8/12). Anna Vidot in the ABC Rural article, ‘Mixed news for farmers under Europe carbon deal,’ on (29/08/12) quoted the Institute:

But... the deal is bad news for farmers hoping to make money out of the Government’s Carbon Farming Initiative.

‘Those projects’ revenue streams now look decidedly less certain and certainly lower. Up until now, of course, you could have budgeted for at least $15 per tonne carbon [floor] price into the future and potentially higher longer-term. That is less certain now.’

Following ongoing controversy about the humane treatment of livestock, Sue Neales’ The Australian article, ‘Farmers may have to submit to surveillance to keep Coles contracts,’ (12/8/12) reported:

Coles head of policy and quality... suggested farmers might have to consider having permanent cameras running so retailers could assure customers that their food carried a guarantee of humane animal treatment from paddock to plate...

Mick Keogh said the Coles proposal lacked context, and appeared to be a cynical appeal to well-heeled consumers. Mr Keogh asked how the purported concern for their customers matched Coles’s recent ratcheting up of billion-dollar imports of cheaper frozen vegetables and processed foods from overseas without asking for any similar supply chain guarantees.

Out and about

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

- 2012 Australian Prawn Farmers Association (APFA) and Australian Barramundi Farmers Association (ABFA) Conference, Palm Cove, Queensland
- Ebor Beef Carbon Tax Forum, Armidale, NSW
- Deakin University – Centre for Rural Regional Law and Justice Carbon Trading Forum, video simulcast
- South Australian Murray-Darling Basin NRM Board Carbon Farming Forum, Murray Bridge, South Australia
- Woolworths Young Farmers Training Workshop, Bella Vista, NSW
- 2012 AgForce State Conference, Charleville, Queensland
- Standing Council on Primary Industries Chief Executives Group
- Wheatbelt Natural Resource Management Inc Carbon Farming Initiative Workshops, Hyden, Dalwallinu, Merredin and Bencubbin, Western Australia
- GRASS Merinos Annual Field Day, Gulargambone, NSW
- The University of Queensland Carbon Tax Workshop, Brisbane
- Australian Institute of Agricultural Science and Technology: Soil Carbon and the Carbon Farming Initiative, Melbourne

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