One of the enjoyable activities I have outside my job at the Productivity Commission is chairing the Australian Rural Leadership Foundation.

Established in 1982 by a former president of the National Farmers Federation and several others who saw a need to ensure the development of well-equipped leaders for rural and regional Australia, it runs programs in values-based leadership.

We now have over 500 graduates with more than 70 coming from South Australia. So when I was asked to give this talk, I decided to reflect on the experiences of some rural leaders in South Australia.

My talk today is not aimed at providing a comprehensive history of rural leadership in South Australia, but rather by telling a few very different stories about leaders; to illustrate:

- the nature of leadership challenges
- how the challenges have evolved over time
- the qualities of leadership in overcoming them and
- whether any themes emerge.

In South Australia as in other states there are many examples of leaders who have successfully moved people to think about things differently, to use new materials and products, and to implement fresh systems and practices. This is as true for agriculture and the rural sector as it is for other parts of the economy.

The ABS reports that in 2010-2011, the gross value of agricultural production in South Australia was $6.9 billion (ABS 2012) and in 2008-2009 the farm and food sector employed one in five South Australians (Government of South Australia nd). Major contributors were field crops, livestock, horticulture and seafood.

The significant contribution to the economy of South Australia’s food industry, can, in part, be attributed to a succession of individuals, collaborators, organisations and agencies that have challenged and changed the status quo.

From early settlement, innovations and developments associated with farming were a result of land holders applying ingenuity (or bush cunning) and leadership in response to emerging practical problems. According to Tribe and Peel (1988):

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*I am grateful to Dr Jennifer Andrew, Dr Lesley Fitzpatrick and Brian Jefferies for their assistance in preparing this paper.
... the agriculture that was developed from 1788 onwards was derivative; the crops, livestock, technology and concepts of agricultural production were all imported. The special characteristics of the climate, the soils and the economic circumstances of Australia made necessary … processes of adaptation and innovation before successful systems … could be evolved.

Compared with European soils, Australia’s poor soil quality was documented as far back as 1826 (Tribe & Peel 1988). Even earlier, in 1791, James Ruse realised that Australian soils lacked fertility so he imposed a burning regime whereby the ashes were dug back into the soil and the soil turned over to compost weeds and grass (Flannery 1995).

A brief and selective South Australian list of responses to the practical challenges of Australian agriculture includes:

- the formation of the South Australian Agricultural Society in 1839, “for the advancement of agricultural and pastoral knowledge, and to promote the development of the natural resources of our noble Colony” (RA&HS website). This represented, in many ways, community driven leadership, endeavouring to share knowledge and drive change in land management.

- In 1843 the invention of the stripper harvester by John Ridley, a flour miller. This was contested by another South Australian, John Bull who also claimed he was the inventor of a harvesting machine which used a horizontal projecting comb and revolving beaters.

- In 1865 George Goyder proposed that crops should not be planted north of a line (Goyder’s line) which generally demarcates a long term rainfall average of ten inches (254 millimetres) (Meinig c.1962).

- In 1876 Richard Bowyer Smith’s stump-jump plough was invented specifically in response to the Australian environment. Later plough developments by his brother Clarence, meant that mallee farmers no longer had to face with such trepidation, the almost impossible task of clearing their land for cropping.

- In 1913, Mr Peter Waite who gifted buildings and land to the University of Adelaide to create what was to become the Waite Institute, wrote to the Premier of South Australia:

  We have now reached a point where it behoves us to call science to our aid to a greater extent than hitherto has been done, otherwise we cannot hope to keep in the forefront… (Edgeloe in Tribe & Peel 1988)

- By 1926, agricultural colleges, to conduct research and educational programs in agriculture, had been established in Victoria, South Australia, New South Wales, Queensland and Western Australia (McLean 1982).

- Since the early 1900s, faculties of agriculture in universities have provided graduates trained in the sciences, engineering, the social sciences, economics and crop and animal husbandry (Tribe & Peel 1988).

- From the 1940s farmer groups led local land conservation in South Australia (Campbell 1994). These groups, whether statutory soil boards or catchment
groups, were chiefly involved in the control of soil erosion (according to Andrew Campbell Executive Director, Land & Water Australia, 2000-2006).

- In natural resource management, South Australian leadership on tree clearing controls, statutory catchment management groups and small endangered native Australian species are notable.

Providing a dry list of these initiatives deprives us of the colour and movement which underlies them. Achievements often appear as a few lines in a record and give no sense of the personalities, the debate, the conflicts and community priorities which inevitably underpin success.

But the following story illustrates them with clarity. The changing environment within which agricultural issues were being considered in the twentieth century can be seen in the vicissitudes of Francis Ratcliffe from CSIRO in relation to rabbit control.

Ratcliffe was a distinguished scientist and was also one of the founding members of the Australian Conservation Foundation.

In 1949 CSIRO's Wildlife Survey Section was established to:

*Take a national approach to controlling rabbits, a major pest for primary industry, and to begin studies into Australian fauna.*

We all know about CSIRO’s myxomatosis trials on Wardang Island and Point Pierce in 1936 and subsequently in semi-arid pastoral country in South Australia.

Francis Ratcliffe, who worked for ten years on myxomatosis as a potential agent for the control of rabbits, concluded in 1949 that myxomatosis was potentially a way of killing rabbits in warrens, but warned that when compared with other control methods, such as fumigation “it can only be regarded as an uncertain and rather slow means of achieving this end” (Ratcliffe 1949, p. 7).

Upon Ratcliffe’s death in 1970, C. S. Christian, an executive of the CSIRO wrote:

*He was both a creator and disseminator of ideas concerning the need for natural resource understanding and conservation and he combined a rare sympathy for wild animals with a practical recognition of the community’s need for the rational utilisation of resources... The present consciousness of the Australian community on matters concerning conservation is very largely due to his quiet, unassuming teaching of all with whom he came in contact.* (as quoted in Coresearch January 1971, p. 1)

We might assume that Ratcliffe’s elevation to a position of leadership within the CSIRO and use of that positional authority, supported by clear scientific evidence, was sufficient to promote his views free from opposition. But this was not the case.

Within the Manuscript Reading Room of the National Library of Australia, are many papers of significant Australians including numerous boxes of Ratcliffe’s personal papers.

Also within this same room are the personal papers of Dame Jean MacNamara, a Victorian medical doctor and scientist and authority on poliomyelitis. But you don’t
need to look at the personal papers of these two significant people to know of their very public disagreement.

In 1949, Ratcliffe was quoted in a newspaper article as stating that myxomatosis had failed because the infection lacked the ability to spread without sufficient close contact between rabbits.

In response, MacNamara was quoted as saying that the attempts to find out whether myxomatosis was an agent to control rabbits in Australia were “pathetic” (The Herald, 11 May 1949). She went on to say, “Few advances would have been made in medical research if work had been abandoned after such a pathetically limited inquiry”.

Yet earlier that year, Ratcliffe had already decided that myxomatosis offered some hope. In a letter to Dr L. B. Bull, Chief of the Division of Animal Health and Nutrition within CSIRO, he wrote (CSIRO Archive):

> I had thought that myxomatosis could be shelved and dismissed, but having been here for a day or two in mid-western N.S.W., I have come to the conclusion that it should be taken off the ice for one more trial. I would not suggest this if I did not think that certain special conditions were operating which might affect its chances of spread. These are very high rabbit densities, and an unstable, constantly shifting population, living to a very considerable extent (in this region at any rate) in surface cover.

However, Ratcliffe was clearly affected by Dr MacNamara’s jibes, as demonstrated in another letter to Bull (Ratcliffe, F. u.d., pers. Correspondence to Bull):

> I have indicated that one may look almost, but not completely, in vain through Dr MacNamara’s two press communications for helpful and constructive suggestions. There is one thing for which a search through them would be completely in vain—any sign of ordinary human decency and fairness, let alone generosity, towards men with whose opinions and conclusions she happens to disagree.

Ratcliffe’s letters demonstrate what history leaves out; leadership comes at a price. It is not just a simple case of believing in something and carrying it forward, it often requires courage and conviction, as both Ratcliffe and MacNamara demonstrate. It also requires an element of risk. It is not always comfortable.

This is once again demonstrated by Ratcliffe in a letter to Douglass of Angus and Robertson, dated 28 February 1968:

> It is indeed ironical that I, who am ridiculously fond of animals and have a deep-seated abhorrence of deliberate cruelty in any form, should have been indirectly responsible for the unpleasant death of hundreds of millions of rabbits. We do know, I must say, that although the symptoms of myxomatosis are rather revolting, death is actually pretty nearly painless and not nearly such a horrible experience for a rabbit as to be held all night in a trap with a broken leg, or fumigated with chloropicrin. In my sleepless moments I have sometimes wondered what form my ultimate punishment would take. If it has to wait until the day of judgement, I will be able to point out to St. Peter that I have paid the first instalment of my fine here on earth, in having to cope with Dame Jean MacNamara.

Moving on and reflecting the community’s evolving interests, the 1970s and 1980s heralded an increasing focus on issues associated with the environment. Courses
emerged in areas such as natural resource management, human ecology and environmental studies, and focused on broader interactions between humans and the environment.

Issues previously perceived largely through a primary production lens have grown in complexity to reflect diverse and sometimes competing interests, broader resource management and social and environmental issues. Effective leaders within agricultural industries today see their industry within this broader milieu.

However, what appears to remain consistent throughout history is that practical problems still provide a strong catalyst for rural leadership and change. Yet, the framing of problems appears to have changed considerably, balancing production and resource management.

Another example of South Australian leadership of which I had a general understanding is also salutary but until Brian Jefferies, Chair of the Tuna Boat Owners Association, generously gave me the details that follow I was not aware of the enormity of the achievement.

Japan and Australia commenced fishing Southern Bluefin tuna in the 1950s. Japanese fishers took adult fish on the high seas using longlines and Australian fishers caught juvenile fish with coastal pole-and-live-bait fishing initially and later moved to also employing purse-seine fishing vessels (ECOS April-June 2004, p. 25; Geen & Nayar 1988).

In the 1970s a group of predominantly first generation migrant entrepreneurs who were fishers, primarily from Croatia, settled in Port Lincoln. They were a highly competitive group.

Before 1984, the global catch of Southern bluefin tuna was unrestricted and shared between Japan, Australia and New Zealand. The Australian catch ranged over South Australia, Western Australia and New South Wales and was processed at five canneries in these three states at a price of $1.00 per kilogram.

As a result of a 1983 meeting of biologists in Japan, who recommended a significant cut in catch “to stabilize... the reproductive capacity of the stock” (Geen & Nayar 1988, p. 366), the Australian government limited the total catch to 21,000 tonnes for the 1983-1984 season. However, due to operational restrictions and reduced fish abundance off New South Wales, the total catch was almost 5,000 tonnes short of the 21,000 tonne limit (Geen & Nayar 1988, p. 366).

An Australian Government inquiry led to the introduction of a system of Individual Transferable Quotas (ITQs), (rights that can be bought, sold or leased) into the fishery in October 1984; the first to be introduced into an Australian fishery. At the same time the Australian catch quota was reduced to 14,500 tonne (Geen & Nayar 1988, p. 366).

Port Lincoln fishers borrowed heavily from banks to buy the quota owned in other States using quota as the main collateral. But in 1988 the global and Australian quota was cut again by almost 60 per cent because of the declining stock. Profit margins were being squeezed so significantly that the Australian domestic market was struggling (ECOS April-June 2004, p. 25).

According to Brian Jefferies and reports in the Western Australian (Zekulich, n.d) and the Port Lincoln Times (25 July 1989), Prime Minister Hawke announced, as part of his
1989 landmark environmental statement, that Australia would press for a complete
global moratorium on Southern bluefin tuna catches at the next international talks.
The Minister for Primary Industry, John Kerin, clarified shortly after that there would
only be a moratorium if Japan and New Zealand also agreed.

The outcome was a further small reduction in the Australian quota in 1990 to the
long-term level of 5,265 tonnes (Serdy 2008, p. 114); this represented a total quota cut
of 67 per cent over a two year period (Brian Jefferies pers. comm., 19 August 2012).

Fish were becoming so scarce that crews were shooting at one another in the Great
Australian Bight and trying to sink the nets of other boats (Brian Jefferies pers.
comm., 19 August 2012).

In 1989-1990 the Port Lincoln industry owed over $100 million to the banks; 80 per
cent to the ANZ. The banks immediately wanted to foreclose because of the quota cut.
If the banks liquidated one debtor and put the quota on the market, it would have de-
valued the rest of the quota and the fishery.

At this point, Brian Jefferies was recruited by the industry to try to negotiate a way
around this situation. Four strategic measures were taken.

- First, the banks were persuaded to put the companies into official or de facto
  receivership so they could continue to operate and not liquidate the quota. The
  banks always understood that those companies that went into receivership
  should be able to buy back their companies, and this eventually happened.

- Second, a friendly overseas group was organised to purchase 400 tonnes of
  quota to set a minimum collateral value for the quota, and this quota was re-
purchased back in 1996.

- Third, a temporary joint venture was instigated with the Japanese industry to
  use 60 per cent of the Australian quota for fishing by Japanese boats. This
  provided cash flow and bought time.

- However, the banks would only agree to these arrangements if a permanent way
  of making the industry profitable at the new quota level was possible. And so the
  fourth measure—the “global blue skies” concept of tuna farming, or ranching,
  was born.

In 1991 the Port Lincoln companies negotiated with the banks for a “two-year stay of
execution” if they could make tuna farming work.

The concept of tuna farming appeared almost fanciful at the time; to survive, the
Southern bluefin tuna needs to swim its body length per second, 24 hours a day, to
wash enough oxygen over its gills. The concept of wild fishers capturing Southern
bluefin tuna live out in the Great Australian Bight, and then transporting them to
farms near Port Lincoln, had no global precedent. It also had to be done on a
shoestring.

The skills and leadership of those involved was completely under-rated:

- the rare bush engineering skills in Port Lincoln particularly as demonstrated by
  the late Dinko Lukin;
• the onshore engineering capacity in Port Lincoln to quickly fix a problem or implement a new idea;

• the effectiveness of combining so many “just do it” people who were able to “innovate, improvise, and adapt”;

• the combination of Port Lincoln and Japanese skills initiating farming trials at Port Lincoln as a joint venture with the Japanese Government and industry; and

• enough people on the Fisheries Research and Development Corporation Board who were prepared to support funding what appeared largely implausible.

The 1991 trial used very crude methods to catch and transport the fish: Southern bluefin tuna were poled onto the deck of the boat, then lifted into a tank on the boat then transported for 96 hours to the farms.

The group learned quickly that they could quieten the fish after catching to minimise stress and reduce mortality by covering the eyes of the fish. They also learned that:

• the fish survived better in the tanks if the tank was painted a certain colour;

• the water circulation in the tanks had to be a higher level;

• the fish was a social animal and needed higher stocking rates in the grow-out pontoons; and

• the best configuration of the pontoons was circular rather than rectangular.

So, the learning was dynamic and ongoing.

The 1991 trial proved successful and the Port Lincoln group of companies marketed about 200 fish at $40.00 per kilogram in Japan.

However, to save the industry, methods were needed which could get 200,000 fish into the farms per annum; transport in tanks could only achieve about 3,000 fish per annum.

In 1992, Dinko Lukin developed a technique incorporating a purse seine capture net and 15-day tow in big pontoons to the grow-out areas around Port Lincoln. This again seemed implausible:

• how was the integrity of the towing net to be maintained?

• how could such an active fish survive a 15-day trip?

• how could they be transferred from the catching net to the towing pontoon, and again to the grow-out pontoon in Port Lincoln?

But the technique worked and by 1995 this world-first value-adding agribusiness technology was flourishing in Port Lincoln.

It was even recognised by Prime Minister Keating on 20 September 1995 when he said:

*In the last three or four years the quota for Southern Bluefin tuna available to the Australian industry reduced by around 70 per cent. But in the same period the*
value of our exports has risen dramatically. The difference is tuna farming. In 1991-92 the industry was worth $1.8 million. Today it is worth around $50 million. Tuna farmers in South Australia have become business people. They are no longer hunting and selling a declining resource for low value uses.

It was not without its problems though, and a 1996 storm caused 70 per cent of the fish to die. Ranching needed to be in much deeper (and therefore rougher) water leading to re-engineering of the pontoons and developing new feeding techniques.

By 1999 production increased rapidly, the group achieved doubling of the size of tuna in six months. The higher volume was too much for the Japanese auction market for fresh tuna. Prices fell, and containerised freezing methods were developed.

But things are never static and one of the roles for leaders is responding to a never ending suite of challenges.

In 2009 the Australian quota was cut by 24 per cent and the industry had to adapt again. In 2011 the cut was reversed and gradual increases are expected over the next decade.

This extraordinary tale of a high risk approach to overcome a range of challenges from financial to animal husbandry, from regulatory to environmental, illustrates that a good idea is necessary but nowhere near sufficient.

Conviction, resilience, credibility, adaptability, trustworthiness, clarity and understanding of complexity are just some of the characteristics of successful leadership demonstrated here.

My next example is another example of collaboration. In 2001, representatives from the grain transport industry in South Australia approached the state government regarding the competitiveness of grain rail transport in the Eyre Peninsula, as they thought the future viability of rail was ‘at risk’.

The Eyre Peninsula rail network is dedicated entirely to grain, with most grain delivered to Port Lincoln for export. Crucial to the success of this exercise was the engagement of local grower groups and community representatives, coordinated at the local government level.

A package was put together which ensured the Eyre Peninsula rail system was adequately maintained and continued to transport the majority of bulk wheat for export at Port Lincoln.

Key features of the package included:

- significant capital contributions from the Australian Railroad Group (ARG)—the integrated rail operator at the time
- AWB, ABB and ARG agreed to commit their transport requirements to rail as much as possible
- growers signalled their commitment to rail by agreeing to contribute to capital costs through a two year levy on all grain exports
the state government contributed to rail and road network upgrades, and made a (successful) submission for federal funding and funding commitments towards one-off capital improvements to rail and supporting roads, in exchange for closing a section of railway parallel to the Eyre Highway.

Local communities benefitted from the package. There was a limit on traffic in the town centre, which would have otherwise required an expensive by-pass, and small volumes of traffic travel on rural roads (creating safety benefits and savings to local government) (DTUP 2002, 2003; SVGA 2007c cited in Productivity Commission 2010). The benefits of involving all the affected players, the value of all parties making a tangible contribution to the project and integrating the local community’s interests with commercial outcomes, are clear.

One of the ongoing challenges for leaders is to understand and respond to the community’s changing values and recognise that achieving profitable production is increasingly dependent on responding to those values.

My final example of leadership in the rural sector tonight comes from the wine industry. It illustrates approaches that go beyond production, integrating many aspects of a person’s life; it marries production excellence with elements of environmental and community values; and embodies a practical application of “sustainability”.

South Australia’s wine industry is a major contributor to the State’s economy. In 2009-2010, South Australia produced 47 per cent of Australia’s total wine (Government of South Australia nd).

Sue Bell is the Winemaker and Director of Bellwether, a small wine brand, producing high-end Coonawarra Cabernet and Tasmanian Chardonnay. She uses traditional methods to make her wine: hand picking, open fermenting and basket pressing.

Sue has worked in California, France and Australia, is the Vice President of the Limestone Coast Wine Industry Council, on the management committee of the Wrattonbully Wine Industry Association, and judges at various wine shows across Australia.

Prior to establishing her own winemaking operation, Sue was head of the winemaking team at Padthaway’s 10,000 tonne capacity Stonehaven winery. She worked with the company’s regional viticulture manager to establish changes to the vineyard infrastructure and grape-growing practices of the company. Consequently, in 2005, Stonehaven wines won five trophies and seven gold medals at the Limestone Coast Wine Show, including the trophy for Most Successful Exhibitor. Two years on, and Sue became the Qantas Dux of the Len Evens Tutorial for 2007.

For her own operations, Sue has chosen a property she used to drive by—an 1857 Chinese built stone shed. Just two weeks ago Sue was awarded a federal tourism grant to turn the stone woolshed into a community winery, cellar door, produce garden, kitchen and education centre where a large focus is on changing the culture of eating and drinking.
A major influence for Sue came from her Indian experience on the Australian Rural Leadership Program. In Sue’s words:

*I travelled to India with a diverse range of people from many sectors of the rural community. We were looking at how India’s agricultural practices and policies affect people and communities on a grass roots level, in and around New Delhi, Hyderabad and Mumbai. A highlight was going to the agricultural research institute ICRISAT. It’s a research centre for scientists researching how to feed the poor. Its motto was ‘science with a human face’, and their focus was on food crops and protein rather than cash crops and only profitability like we do here.*

Bellwether focusses on the sustainability of cool climate wine via regional promotion, research, environmental management and appropriate water use. Sue is also a strong advocate of social ethics and responsible consumption of alcohol. As a result she has become involved in a unique education program that aims to provide Indigenous communities with more knowledge about wine, health and nutrition, so they are better informed to make conscious decisions about their overall alcohol consumption, with greater respect for wine. This program has been facilitated by contacts with her fellow graduates from the Australian Rural Leadership Foundation, utilising the network of alumni.

Sue is very much an example of the different approach to leadership emerging from newer generations. A Gen X-er, her approach to her life and leadership practice is based on independence and work-life balance, as opposed to the work ethic of the earlier generation (McCrindle, 2009). While at work, Sue’s young daughter, Maggie, is often playing somewhere close by.

A member of the generation that is more peer-oriented than any before them, Sue’s adaptive methods and her preference for collaborative rather than competitive approaches (like those evident in the Ratcliffe/MacNamara myxomatosis story) are more akin to the Bluefin tuna collaboration.

These stories have illustrated leadership approaches to dealing with different aspects of the production chain:

- responding to a major national pest,
- industry survival and profitability;
- getting the product to market with community benefits; and
- embodying social ethics and broader elements of the local community in production and distribution.

Whether you agree or not with the values and approaches embedded in these and other stories of leadership is not the issue; what is significant is the manner in which they responded to a problem.

While most of us would recognise the importance of clear objectives, along with access to research and a need to monitor progress, these examples demonstrate a number of other characteristics and themes associated with on-ground change.
Firstly that responding effectively to a practical problem is a first-order response that requires a high level of expertise and the willingness to adjust solutions to find the outcomes required as exemplified in all the examples.

But the days when this was the only approach are long gone. Contemporary leadership practice needs to include the constant and increasing consideration of the evolving values of the community. Dealing with an issue means that “improving production” alone is not a sufficiently broad lens through which a problem can be approached. A social licence from the community allowing firms to operate, in a way the community accepts, is essential.

The second theme is a consequence of the first, and that is that leaders of today require both the traditional skills of leadership and an understanding of the increasingly dynamic complexity of the environment and the community’s evolving values.

The third theme is that the approach to leadership is shifting as the values and experiences of leaders themselves and of society change and become more complex. Positional authority, competitive approaches and the seeking of status often evident in stories about earlier leadership challenges are giving way to more connected, collaborative, knowledge sharing examples, where leaders embed their practice in social and environmental values that align with their personal ethics.

This makes for a more complex and nuanced approach to leadership; an artefact not only of the maturing of South Australia’s primary sector, but also of Australia as a nation.

The examples tonight exemplify that leaders don’t need more skills in how to run a meeting or how to use electronic accounting systems, although these are useful skills. They need to understand themselves, their relationships, and what is important enough to them in order to take a risk and confidently drive forward in whatever sphere, and at whatever level, they are working or volunteering.

My talk tonight features South Australians involved in primary industries. The sector is, indisputably, an enduring strength of the local economy and community. These examples of contemporary leaders from this sector, plus the infrastructure that exists to support emerging leaders in education and training institutions, state and national leadership programs, and industries, suggest that South Australia has the support, resilience and creativity, needed to chart a successful future path.
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