REGULATION AND FARM VIABILITY

a case study in north west New South Wales

Alistair Davidson and Lisa Elliston

- Australia’s agricultural input markets are showing signs of becoming increasingly subject to regulatory control.
- It is likely that this trend is having a negative impact on farm viability through increased farm costs and restricted management options.
- The regulatory approach to improving environmental outcomes is inadequate and amendments are required to ensure more efficient, equitable and flexible outcomes.

Some recent indicators of Australia’s agricultural input markets becoming increasingly subject to regulatory control include changes to regulations over key farm inputs such as land (vegetation), labor, fertiliser, seeds, chemicals and genetic technology. These have occurred largely in response to increasing community demands for environmental services and health and safety standards. To achieve an efficient regulatory or other policy framework it is important to understand how these controls affect farm productivity and, as a consequence, farm returns. Of the regulations over farm inputs, it has been the restrictions placed over land use management practices through native vegetation regulation that have been the subject of recent policy debate.

A report recently released by the Productivity Commission (2004) found that native vegetation and biodiversity regulations have adversely affected the returns of many landholders by imposing a range of restrictions on farm practices. Furthermore, the commission found that the landholders most severely affected by the regulations have often suffered serious personal problems in the face of the resultant marginal viability, or even loss, of their property.

Although vegetation regulation is a dominant issue, there is anecdotal evidence to suggest that increasingly regulated agricultural input markets are affecting the viability of agricultural producers in some regions more than others. As such, this trend is likely to lead to accelerated structural change in the regions that are less able to cope with the coincidence of multiple pressures for adjustment.

This study uses a recently constructed ‘vulnerability index’ to identify broadacre agricultural regions in Australia that are likely to include farm households whose viability is at risk. A case study approach was adopted to identify the key issues facing farmers in two ‘at risk’ regions, against a backdrop of recent regulatory changes. Based on a series of semistructured interviews with farmers in each region, it was possible to consider the medium term outlook for the broadacre agriculture industries and associated rural communities. The regions studied were in the north west of New South Wales, an area likely to experience significant structural adjustment pressures in the future.

Vulnerability to adjustment pressures

A recently constructed vulnerability index (see the article by Nelson et al. in this issue of Austra-
lian Commodities) identified parts of north west New South Wales as potentially facing the greatest pressures for structural adjustment, particularly the long run declining terms of trade faced by broadacre farmers (map 1). Other areas under pressure include eastern New South Wales and south east Queensland as well as parts of central Queensland.

The index was built around Ellis’s (2000) rural livelihood framework and used data collected as part of ABARE’s annual survey of the broadacre cropping and grazing industries. Components of the index, including the level of farmer education, internet use, Landcare membership, the presence of land degradation and the diversity of income sources were incorporated to measure (either directly or indirectly) the relative exposure of farm households to external events and their internal capability to cope with these external events as they occur.

A number of factors were found to contribute to the relatively high level of vulnerability of farm households in north west New South Wales. These included low average farm incomes and little diversity in farm income sources relative to other broadacre farmers elsewhere in Australia. The presence of on-farm degradation problems was also an important contributor to the high value of the vulnerability index in north west New South Wales. The predominant degradation problem reported by farmers in this region was the presence of weeds, including woody weeds. More than 60 per cent of all farmers in parts of north west New South Wales reported significant weed related land degradation at the time of the 2001-02 ABARE survey of natural resource management in the broadacre and grazing industries (map 2).

To gain an understanding of the issues driving the apparent vulnerability of farm households across parts of north west New South Wales, a case study approach was taken in two shires: the Walgett shire, located just outside the area identified as most vulnerable and the Cobar shire, centred in the most vulnerable area. These shires both rely on broadacre agriculture but have different natural resource endowments and vary in their ability to cope with regulatory changes to key agricultural inputs and practices.

**Walgett shire**

The Walgett shire is located in north west New South Wales (map 3). It covers an area of 22,300 square kilometres and, at the time of the 2001 ABS housing and population census, 8,310 people...
were located in the shire (ABS 2002a). The population of the shire has been relatively stable, with a population of between 7200 and 8500 since the mid-1970s (ABS 2005). Throughout this entire period the agriculture sector has dominated the regional economy, employing around a quarter to a third of the regional workforce.

At the time of the last agricultural census in 2001, around 2 million hectares were used for agricultural activities and there were around 330 agricultural producers in the region. Consistent with the national trend toward fewer but larger farms, the total farm area has been stable in the Walgett shire over the past fifteen years, although the number of producers has declined 15 per cent from more than 390 in 1987 (ABS 2003).

The Walgett shire has been characterised by an increase in the intensity of land use. When converted to a consistent dry sheep equivalent basis, broadacre cropping and grazing activities in total have increased by around a third since 1987 as farmers have sought to maintain profitability. This has occurred through changes in the enterprise mix of broadacre farms across the region. The area of cereal crops and the number of beef cattle in the region more than doubled between 1987 and 2001, while the number of sheep fell substantially from a peak of 1.7 million in 1991 to the current level of around 700 000 (table 1). The changes in the Walgett shire reflect broader national trends over the same period (figure A).

The move out of sheep and wool production and into cropping activities and beef cattle production is consistent with the movement of relative commodity prices over the period. As the price of crops and beef cattle increased relative to the price of wool, on average, farmers reduced their sheep numbers and increased cattle numbers and the area planted to crops (Beare, Chapman and Heaney 1999). Improvements in cropping technology and the development of some irrigated agriculture have also contributed to the significant expansion of cropping activities in the region.

The changes in enterprise mix are also consistent with the relative productivity growth between these industries. Knopke, O’Donnell and Shepherd (2000) estimated that cropping

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specialists achieved average annual productivity growth of around 3.6 per cent a year between 1977-78 and 1998-99. Beef specialists, on average, achieved annual productivity growth of around 2.1 per cent, while over the same period the sheep specialists obtained average productivity growth of just 0.6 per cent (figure B).

Medium term outlook

When asked about their plans for the future, farmers interviewed in the region indicated that they wanted to continue with similar strategies to maintain productivity growth and profitability that they had employed previously.

‘We would expand in the next ten years if we had the opportunity. More or less the same enterprise mix would continue.’

‘In ten years time [the] ideal situation is to have 3000 more acres, [it is the] optimum for our amount of equipment.’ [ABS data indicate that the average size of farms in the Walgett shire at the time of the last agricultural census in 2001 was 6100 hectares.]

A number of farmers indicated that they would expand their operations if given the opportunity to acquire additional neighboring land. While some farmers indicated an interest in making further changes to their enterprise mix, the increased regulation of native vegetation is limiting the ability of farmers to move out of livestock and into cropping activities.

As a result, farmers interviewed in the region expected to pursue the implementation of new technologies and improvements to the efficiency of their management systems.

The recently introduced Native Vegetation Act 2003 in New South Wales is likely to be one of the most significant constraints to further productivity growth in the region. Under New South Wales native vegetation legislation, native vegetation is defined as including indigenous trees, understorey plants and groundcover, including native grasses (NVA Part 2, s 6(1)). One of the objectives of the legislation is to ‘prevent broadscale clearing unless it improves or maintains environmental outcomes’ (NVA Part 1, s 3(b)).

Controlling the clearing of trees and grasses through regulation will have a direct impact on many of the management activities undertaken by farmers to improve productivity and offset their declining terms of trade. For many of the landholders interviewed in the Walgett shire, improving productivity by expanding their crop area was being hampered by an inability to clear native groundcover, commonly known as roly poly.

‘[The] main constraint is the fact that we can’t manage vegetation in a proper sustainable way.’

Many farmers engaged in both cropping and livestock activities wished to return land that had been continuously cropped to native pastures that could be grazed in order to maintain average long term yields. To help maintain cash flow they also wished to develop previously grazed land for cropping purposes; however, the current native vegetation regulations restrict the ability of farmers to use long cycle rotations of up to several decades or more to maximise the long term productive capability of their land.

‘We also think rotations are vital. Native vegetation [regulation] has hampered us, and this is vital to us. We have old [cropping] land that we would dearly love to return to native pastures.’

In an attempt to maintain productivity growth in the face of these vegetation management constraints it is likely that farmers in the region
will increase their use of agricultural inputs such as fertilisers and chemicals. Furthermore, it is likely that some farmers will increase the use of their existing cropping land through reduced fallow periods and reduced rotations out of cropping.

‘[We] would like to return the front paddocks to native pasture and grazing but, because of the [native vegetation] rules, [we] will probably have to switch over to adding fertiliser instead.’

Other farmers may choose to ignore the regulations and continue to clear land to maintain profitability whenever they perceive that the benefits exceed the costs of clearing and regulatory noncompliance.

In addition to native vegetation regulations, occupational health and safety issues featured prominently during interviews with farmers in the Walgett shire.

‘Native vegetation and occupational health and safety are two of the biggest hassles around. All others pale into insignificance.’

The time devoted to occupational health and safety compliance was seen by a number of farmers as having a direct impact on the farm business operation. Compliance with regulatory standards was seen to be increasing farm costs as well as influencing the decision of some to employ permanent labor.

‘There are also other things that affect the business, like OH&S … we spend an enormous amount of time on those things.’

‘[I] would have two men on here permanently, but OH&S regulations — insurance and that — [are] so high [and] mean that there aren’t.’

The current debate over the practice of mulesing was causing some concern about the future for farmers in the region with sheep.

‘I’m worried that it might be banned. Stock losses would be huge in a wet year [if] we couldn’t mules.’

‘I don’t enjoy mulesing, it’s not pretty, but I hate dealing with flyblown sheep. The most humane thing to do at that point is shoot them.’

‘We’d really struggle to run a sheep flock without it.’

A ban on mulesing is likely to reduce the productivity and increase the farm costs of wool producers. Farmers with the opportunity to switch out of sheep and into other activities indicated they would do so if a ban on mulesing went ahead.

‘If it becomes an issue we’ll just sell the sheep.’

However, the current native vegetation regulations are likely to restrict the ability of farmers in the region from switching out of sheep if they have not previously used their land for cropping activities. Even mixed sheep and cropping enterprises may find it difficult under the new arrangements to increase their cropping activities in order to maintain profitability if they move out of sheep altogether.

Cobar shire

The Cobar shire is located in north west New South Wales to the south west of the Walgett shire (map 3). It is double the size of the Walgett shire, covering an area of 45 600 square kilometres, but with a smaller population. At the time of the 2001 ABS population and housing census 5160 people were located in the shire (ABS 2002b). The population of the shire has been relatively stable, with a population between 4600 and almost 5700 during the past thirty years (ABS 2005).

Historically, the Cobar shire has been less dependent on the agriculture sector. In the late 1970s and early 1980s almost 20 per cent of the workforce was employed in the agriculture sector (ABS 2005). This had declined to around 13 per cent at the time of the 2001 housing and population census. Mining has also been an important source of employment in the region. In 2001 more than 21 per cent of the workforce in the region was employed in the mining industry.

At the time of the last agricultural census in 2001, around 3.3 million hectares were used for agricultural activities and there were around 180 agricultural producers in the region. The total farm area has been relatively stable in the Cobar
shire over the past fifteen years, and unlike the Walgett shire and the national trend more generally, the number of agricultural producers has remained relatively constant (ABS 2003).

Poorer soils, lower average rainfall and problems with encroaching woody vegetation mean that the productive capacity of land in the Cobar shire is lower than that of the Walgett shire. There is only a limited opportunity for cropping and with current livestock commodity prices there is little demand to develop further land for grazing purposes. The area planted to crops has typically been in the range 20 000–30 000 hectares depending on seasonal conditions, although in 2001 the ABS recorded an area cropped of just over 60 000 hectares (table 2).

Within the constraints of land capability, however, there have been some changes to the enterprise mix of broadacre farms across the region. The number of beef cattle in the region almost tripled between 1987 and 2001, while the number of sheep declined from a peak of almost 1 million in 1991 to just 400 000 by the time of the 2001 agricultural census (ABS 2003).

The move out of sheep and wool production and into beef cattle production in the Cobar shire is consistent with the changing enterprise mix in the Walgett shire, and at the national scale as well. Declining real wool prices and the failure of the wool industry to make productivity gains comparable with those attained in the cropping and beef cattle industries have contributed to this adjustment.

A number of farmers in the region were found to be supplementing their farm incomes through the mustering and sale of feral goats, particularly in times of drought.

‘[Goats] saved all the people in the western division big time.’

‘[In this area] most people will be getting a living out of feral goats.’

‘Goats are a large part of income now — nearly 40 per cent for the last couple of years because wool income is down.’

Medium term outlook

Farmers in the Cobar region have found it more difficult to maintain their profitability through productivity gains and changes in enterprise mix compared with farmers in the Walgett shire. There is also likely to be limited potential for the further development of the agricultural sector in the Cobar shire over the medium term.

Despite Australia being the largest exporter of goat meat in the world in recent years, trade in goat meat is a very small market compared with traditional sheep and beef markets. Feral goat harvesting is a low cost operation and significant expansion of the industry beyond current levels is likely to entail significant capital investment that would alter its relative profitability. In the medium term, the likelihood of goat production growing in importance beyond that of an opportunistic supplement to farm incomes in the Cobar shire is not evident under the existing cost structures.

When asked about their plans for the future, some farmers in the region expressed concern for the future of their industry.

‘There is not a great deal of scope for too much diversification of enterprise mix.’

‘[In ten years time we] need to produce double what we produce now to stay on top of increasing costs.’

Others expected to see the continued decline of sheep in the region.

‘More cattle and goats. Less sheep.’

The recently introduced New South Wales native vegetation regulations are also an issue in the Cobar shire. Farmers in the shire face both regrowth and thickening of native woody vegetation in open woodlands that reduce the productive capacity of their grazing land.

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**2 Changes in agricultural production in the Cobar shire**

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<tr>
<td>Sheep '000</td>
<td>753.6</td>
<td>630.8</td>
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<tr>
<td>Beef cattle '000</td>
<td>12.4</td>
<td>25.7</td>
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‘Woody weeds on the red country have probably halved stocking rates.’

‘Encroachment and thickening over the last five to six years has meant that we have locked up a four to five thousand acre paddock. [It is] too difficult to stock.’

In many instances the regulations are not a binding constraint at the moment because it is not economic to manage vegetation encroachment and thickening given existing technologies and current commodity prices. However, if it became economically viable for farmers to clear this vegetation on their property then the regulations could have a significant impact. The current regulations are not sufficiently flexible to accommodate the very long management cycles (spanning decades) that typify production systems in semiarid regions.

Despite the fact that thickening vegetation is contributing to a decline in stock rates, a number of farmers interviewed in the shire were aware of the role that woody vegetation played in ‘holding the country together’ and did not want to return to the days of the ‘legendary’ dust storms. However, high levels of farm debt may result in some farmers in the region increasing stocking rates to reduce the level of vegetation with negative impacts on the environment.

‘[People with] low equity will have to have higher stocking rates, less involvement in natural resource management and will bash it to try and get results.’

With a much larger proportion of farmers in the region dependent on sheep for their livelihood and with few opportunities to diversify into other broadacre activities, the possibility of a ban on mulesing was a concern for the medium term outlook for the region. A ban on mulesing is likely to require altered farm management practices and increase farm costs.

‘If prohibited, it will mean altered management of the flock. [We] may have to crutch twice a year. Mustering the sheep causes stress.’

‘[I’d] rather mules once than [use] chemicals all the time.’

‘[We could] feedlot sheep more to get productivity gains. Could consider not mulesing and fatten wethers instead.’

Implications for broadacre agriculture

The historical data indicate that broadacre farmers in north west New South Wales have made ongoing changes to their enterprise mix and farming methods in an effort to capture productivity gains and maintain their profitability. However, the recently conducted interviews indicate that the ability of farmers to continue making these changes over the medium term is being made difficult by the increasing level of regulation. Changes to regulations affecting vegetation and workplace safety, as well as any restrictions that might be placed on sheep husbandry practices, affect farm cash incomes and therefore farm household viability.

The recently introduced New South Wales native vegetation regulations are of particular concern because they affect three significant components of farm livelihood strategies. Farmers in north west New South Wales are particularly reliant on clearing regrowth and remnant vegetation — both trees and ground cover — to increase their productivity. Placing constraints on these and other management strategies is likely to reduce their productivity growth and therefore affect farm cash incomes. Furthermore, vegetation regulations are likely to affect their ability to further diversify their enterprise mix and may lead to increased landscape degradation in those instances where clearing regrowth is permitted.

If broadacre productivity growth is restricted in these regions because of the cumulative effects of these increased regulatory controls then farm incomes can be expected to decline in real terms over the medium term. There are also wider consequences, particularly for rural communities that are highly reliant on broadacre farming for their economic survival. Furthermore, a number of the existing regulations are likely to result in an increase in both the intensity of land use and
the incidence of regulatory noncompliance in some areas. Both of these responses are likely to counter efforts to improve environmental and safety outcomes.

**Conclusion**

This research has established a clear link between the vulnerability of farm households in north west New South Wales and the increased regulation of farm inputs and practices. It is likely that growing regulatory control of agricultural inputs will have a negative impact on farm viability through increased farm costs and restricted management practices in the future.

If society’s demands for environmental and animal welfare objectives continue to trend upwards under existing farm cost structures, then there is likely to be accelerated structural adjustment within the rural communities that are least able to cope with these emerging adjustment pressures. Although farmers are likely to benefit to some extent from these policy initiatives (private benefits), the evidence would suggest that these are small relative to the benefits accruing to society as a whole (social benefits) and that a disproportionate share of the costs of these policies are being borne by rural communities.

There is growing concern about the inadequacies of a regulatory approach to improving environmental outcomes. A better understanding of how environmental benefits and services can be delivered within a viable farming system is also required. Where current or proposed regulations work at cross purposes there may be unintended consequences. For example, any regulation that reduces farm margins may lead to more intensive management with a reduced focus on maintaining environmental assets.

The current regulatory approach does not allow for tradeoffs between the ongoing viability of farm households and society’s desire for environmental and welfare improvements. It is also not flexible enough to deal with any future shifts in these community expectations. There is also a limited opportunity for society to establish the level of environmental services that it is willing to pay for. Amendments to improve existing policies are therefore warranted to ensure more efficient, equitable and flexible outcomes.

**References**


—— 2003, AgStats on GSP, selected data, cat. no. 7117.0.30.001, Canberra.


Structural adjustment: a demographic and social perspective
Neil Barr

This paper is based upon work supported by Land & Water Australia, the Australian Bureau of Statistics and the Victorian Departments of Primary Industries and Innovation, Industry and Regional Development

The tension between production and amenity

The quest for productivity
In most agricultural industries in most years, farmers and scientists will find new methods of producing more food or fibre for less cost. As knowledge of each new idea spreads, the same number of farmers will find themselves producing more in aggregate than they did the previous year. But if demand for the product does not increase to match the increased production, then the price of the product will fall. In the long run, demand for increased agricultural production lags behind increases in agricultural productivity. Consumers do not eat more bread because there are more loaves of bread on the supermarket shelf. The result is a long-term real decline in the price of agricultural commodities.

Get big or get out
Traditional farm businesses cannot ignore the compression in their terms of trade. The traditional response of successful farmers has been to make sure they capture their share of the possible gains in productivity. Often these gains can only be achieved by increasing scale of business activity. A larger header can be used to make a cropping farm more efficient if the same number of workers can use the header to harvest a larger area of grain crop. Those who choose not to or who are unable to pursue increased productivity will find that their farm becomes increasingly smaller in financial terms as the years progress. Eventually the manager of a larger farm business will purchase this farm.

The inevitability of fewer farms
Overall, the terms of trade pressures will ensure the number of commercial farms will continue to decline, and fewer farms will produce more and more of the agricultural production of the country. In recent decades there has been an average annual 1.5 per cent decline in the number of farm establishments in Australia 1. The pressures for change are more intense in industries with a history of innovation. In the past 25 years the volume of milk produced by Australian dairy farms has increased by 50 per cent. The number of dairy cows has hardly changed and the number of dairy farmers has decreased by 80 per cent 2. These trends are obvious not only in Australia, but in other developed nations 3, 4, 5.

But this is not happening in all farming landscapes
The Australian agricultural sector is composed a large number of small farms and far fewer larger farms. The largest 10 per cent of farms (as measured by gross farm income) produce over 50 per cent of the value of Australian agricultural production. The smallest 50 per cent produce 10 per cent of the value of production. Recent research has consistently shown that most productivity growth in agriculture is captured by the financially largest of Australian farms 6, 7, 8. These larger farms are not distributed homogenously across the rural landscape. In some regions of rural Australia much of the agricultural land is managed as part of these large enterprises. In other parts of the rural landscape small farms manage most agricultural land. To understand this distribution we need to examine the land market competition between farmers and other land purchasers.

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Landscape and social amenity

The growth of urban Australia

Australia is urbanising at an accelerating rate. In 1920 there were 20 Victorians for every farm in the state. By 1970 the ratio had risen to over 50. Today the ratio is 175 Victorians for every farm in the state. Modelling of the potential future adjustment of agriculture suggests that this ratio may approach 400 by 2025. It is inevitable the culture of farming will have less and less influence upon Australian social values.

Multi-functional landscapes

One of the consequences of urbanisation is an increasing demand for ‘multi-functionality’ from land and water resources. Multiple functions include improved protection of old-growth forests, improvements in the quality and quantity of water supply, improved health of riverine habitats, ‘clean’ food and landscape amenity \(^9\). Again, Australia is reflecting international trends. In the ecological economics literature there is an on-going debate about the nature of the ‘Environmental Kuznets Curve’. Researchers have demonstrated a strong relationship between economic development, reforestation and ecosystem protection \(^11; 12; 13; 14\).

Demand for landscape amenity

The greatest influence of urban environmental preferences on the agriculture sector is in the high price of land in the more amenable and accessible parts of the rural landscape. Land that is close to major urban centres, has good views, is close to water or has a benign climate attracts migrants from the town. Research in the United States has shown that landscape amenity was the best predictor of rural area population change \(^15\). In landscapes with few redeeming amenity characteristics, agriculture remained the dominant economic activity and population decline was the norm \(^16\). In the amenity landscape agricultural businesses are in competition with not only each other, but with new entrants who value the land as an amenable residence.

Get out or get small

In districts where there is a amenity demand for land, higher land prices restrict the capacity of many agricultural businesses to increase scale to maintain competitiveness. Those that do purchase expensive land are following a high risk strategy. Rural counsellors say one of the major reasons they have clients is the decision by some farmers to pay too much for land \(^17\). An alternative option is to sell the land and purchase greater land in another area where land prices are lower. For most farm families this is a socially unattractive option. Most farming families will continue farming in their current high-priced location and explore other paths to productivity that do not require land purchase. Improved grazing management or irrigation development is commonly considered. Younger farmers will take off-farm work. Older farmers with high equity in their business can absorb the declining terms of trade. Their easiest course of action is to remain in farming for as long as they are healthy and able to enjoy it. Of course, there is little real hope of passing on the farm to the next generation. These latter choices inexorably drive the path of farm adjustment towards an ageing farm population and a non-commercial agricultural future. The choice turns the traditional dictum of farming on its head. Get out or get small!

Demographic and cultural influences of adjustment

We are living longer (and farming longer)

Retirement, life expectancy and deferred fertility

Australia, like all developed nations, has undergone a transition from a high mortality to a low mortality society. Early in the 20th century reductions in mortality were achieved through reductions in the deaths of the young. More recent gains in the latter half of the twentieth century have been a result...
of reduced mortality amongst older persons. Since the 1970s the Australian male life expectancy has increased by almost ten years.

During the latter part of the 20th century there has also been a trend towards earlier and earlier retirement. Three-quarters of men aged 60 to 64 were in full time work in 1970. Thirty years later this full-time participation had dropped to 35 per cent.

One can see that these two trends will significantly increased Australia’s retiree population. This population is about to experience another jump as a consequence of the deferred fertility decisions made by Australian couples during the depression and the Second World War. During the past 15 years the number of persons reaching retirement age and voluntarily retiring has been low. This has been the generation born in the depression. The population of following generation, the much-maligned baby-boomers, is much larger because postponed fertility plans were implemented after the end of the war.

The oldest of the baby boomers reach 60 years of age in 2005. Over the next 15 years we can expect a rapid increase in the number of retirees. This demographic change is changing the structural adjustment patterns in Australian farming.

Baby boomer farmers approaching ‘retirement’

The age structure of farmers resembles that of many other traditional occupations. There is a baby boomer bulge that has been working its way through the career of farming. When these farmers eventually retire, there will be an increase in the rate of rural property transfer. The impact of the resultant change in property ownership will have on Australian farming will differ greatly depending upon the region. Given the de-traditionalisation of farming, the changing expectations of farm transfer and reducing attractiveness of the farm lifestyle to many young rural people, we can expect that in some landscapes the farm population will be considerably different from today’s farm. But in then meantime, there is evidence that baby-boomers, with their greater life-expectancy, are farming longer. This is partly a deferral of retirement, and partly the result of the longer lives of those who choose to be ‘carried out in a box’.

Baby boomers and the ‘grass-change’

In the wider non-farming community, most retirees continue living where they have spent most of their life. But some will choose to retire and shift residence to higher amenity locations. For many in Australia this new location will be near the sea. But some will be in rural locations with amenity and lifestyle advantage. The increase in retiree numbers over the next fifteen years ensures the scale of this migration will grow, increasing the demand for farmland for non-commercial purposes. Two potential policy changes may accelerate this migration. Decreased government support for retirees and the removal of means test protection for the family home may force increasing numbers of income poor but asset rich retirees to sell valuable capital city housing and seek cheaper housing in regional towns or rural areas. We are already familiar with the transformation of coastal farming communities in northern New South Wales. This has been achieved well before the peak of the baby-boomer retirements. Less dramatic transformations of some non-coastal communities are occurring in Victoria, driven by more subtle cultural migrations.

Women’s role in farming and families is changing

The role of farm women has changed radically in a generation

Fewer and fewer farm women identify with the once traditional role of “farmer’s wife” and increasingly are likely to identify as a joint farm manager or as having an occupational life separate from the farm business. It has been estimated that women number 40 per cent of farm business partners and 32 per cent of the farm paid workforce. Many women work off the farm to support farm family living standards. This trend is a reflection of social trends beyond agriculture and has been well documented by a number of Australian researchers.

Women’s off-farm income is crucial to the financial security of many farm families

This change in women’s roles has had some profound impacts upon the process of structural change in agriculture. The increasing participation of farm women into the non-farm workforce outside farming has in some areas reduced the pressure for structural change in agriculture by alleviating the need to increase farm income through farm business expansion.
Social amenity and the rural bride price.
The increasing involvement of women in the workforce over the past forty years means the modern young women is just as career committed as modern young men. In the same period, farming as a profession has become increasingly masculinised as rural women develop their own careers beyond agriculture and marry later in life. The number of twenty-year old women embarking on a career in farming has fallen by 80 per cent over the past 25 years. This has made it more difficult for the modern young male farmer to find a partner. The need to consider dual careers in relationship establishment may lead to new patterns of farm migration as aspiring farmers seek to accommodate the needs of potential partners who do not wish to adopt the traditional role of farm wife. The premium that must be paid to purchase a farm within commuting distance of major centres in part reflects the proximity to employment and social amenities for members of the farm household and the attractiveness for prospective partners.

Today’s successful male farmer must pay greater attention to relationship issues.
The change in women’s roles extends beyond the workplace into family and relationship expectations. De-traditionalisation of marriage relationships is a feature of the modern Australian farm family. Just as in urban Australia, women’s expectations of marriage relationships are greater than they were a generation ago. The alternatives to continuing in an unsatisfactory marriage are more socially acceptable than a generation ago. Marriage as an economic contract has been replaced by marriage as an emotional relationship, recognition of the crucial role healthy relationships play in personal wellbeing. Fewer women on farms are today willing to endure what they consider to be an unsatisfactory relationship or family lifestyle. In a study of farm families in the early 90’s, farm women’s lack of satisfaction with the marriage and family relationships was the greatest predictor of farm business failure. This was more important than farm size or profitability. Thus pressures for relationship adjustment within families were driving farm adjustment patterns. The implication of this is that the successful farm business management team today has a greater need to develop the skills of communication and teamwork within the household than may have been the case a generation ago.

More are being educated for longer

The second demographic transition: smaller farm families
One consequence of changing sex roles and the placement of the oral contraceptive pill on the Pharmaceutical Benefits Schedule was a sharp decline in Australian fertility through the 1970s. The pill provided the means for most Australian women to limit their families to three or fewer children, and to defer the age of family formation. Since the mid 1970s Australia has been at below replacement fertility levels.

Farm families have mirrored the trends in urban families. Today’s farm family has fewer children than the farming families of a generation ago. This means there are fewer descendants amongst which the family farm inheritance must be shared. Amongst this smaller pool of potential farm inheritors there has been a rapid fall in interest in taking on farming as a career.

The decline of the traditional family farm apprenticeship
In the past 15 years the number of persons under 25 entering agriculture has rapidly declined. This loss of interest is not strongly related to the fluctuations in commodity prices, but reflects the impact of modernity upon the rural youth population and the availability of educational services. The city attracts because of its educational facilities, its social and cultural opportunities and its diverse career opportunities. These attractions are compounded in areas of high landscape amenity where many farms are in a terminal business phase and offer no opportunity for the next generation to achieve a reasonable standard of living. It is this fall in the rates of inter-generational transfer that has been the focus of Australian agriculture’s adjustment to the ‘small farm’ problem of the sixties and seventies. As the agricultural economist Clawson observed in the 1960s ‘men once fully committed to farming leave it reluctantly and slowly…[and] young men refuse to enter farming as long as income prospects are poor’. Whilst rural communities express concern for the loss of the young from farming, given the limited opportunities for new entrants in the sector, the decline in inter-generational transfer has been positive for the sector. The best investment we have made in the ‘small farm problem’ of the sixties was investing in rural schools.
New forms of intergenerational transfer

The reducing rate of younger entry to agriculture is the major factor contributing to the increasing average age of Australian farmers. In the place of the traditional father to son informal farming ‘apprenticeship’ we are seeing a new form of inter-generational transfer developing in which rural migrants return to the land of their youth in later stages of their working life. The return to the farmland of their youth will often be part of the wider amenity migration discussed earlier, rather than a decision based upon the opportunities offered by the family farm. These changes have the potential to create patterns of farm gentrification in some closer settled agricultural regions whilst continuing the family farm legacy in a new form.

The labour market turnaround and youth migration.

The combination of increasing rates of retirement from the labour force and the slowing in the growth of entrants to the labour market will have a significant impact on the structure of the Australian labour market. Demand for labour will remain relatively constant, while labour supply will slow and eventually decrease as a result of declining fertility driven by changing social values. The resulting shortage of labour will accelerate the migration of the young from urban areas as well as further increasing the current difficulties that some farm industries find in attracting labour.

Old and new social landscapes

The interaction and relative influences of these productivity, amenity, culture and demographic forces will reshape the social landscape of Australian farming over the next twenty years, much as it has already reshaped the present social landscape over the past twenty years.

Broadacre cropping landscapes

Positive agricultural outlook.

The landscapes of the broadacre cropping zone offer the greatest opportunities for farm businesses to keep ahead of declining terms of trade. The main agricultural advantage is not better soils, or better rainfall, but the lack of competition from other land purchasers. Cereal cropping country is flat and featureless to the unaccustomed eye. It is the country that urban travellers must sometimes drive through to get somewhere else. It is rarely, if ever, a destination. Those who want to buy land in these landscapes, are almost without exception, broadacre farmers.

Strong productivity gains.

Over the past two decades the Australian cropping industry has achieved remarkable increases in productivity. Family incomes on these farms will generally be above the national average, except in years of drought or poor seasons. The ageing of the farm population that is occurring in these areas is merely a temporary symptom of the natural rate of retirement lagging behind the rate of productivity growth. In the meantime, expanding cropping enterprises managed by younger farmers will increasingly lease the land of older cropping farmers who are gradually cutting back on their involvement in farming.

Inevitable population decline.

The counterpoint to this productivity and innovation is a continuing trend of depopulation of the hinterland and growth of a limited number of regional centres. This decline is an inevitable outcome of competitive pressures towards aggregation in agriculture, the de-coupling of the farm sector from small town economies and the absence of other industries within these landscapes. The decline of small to middle sized country towns in cropping areas is a continuing source of anxiety for both town and farm residents, and for understandable reasons. It is these small towns that have in the past provided the social networks of the cropping communities. The relentless search for productivity on cropping farms fuels the decline of small towns.

Impact of declining social networks.

The decline of local social networks is likely to increase incentives to leave these regions in search of more fulfilling social connectedness. A major source of permanent migration to cropping farms is...
through marriage. The ‘traditional’ sources of partners in service industries in small regional towns will be further depleted as services concentrate within the major regional centres. Marriage partnerships will increasingly be made with partners from outside the district, often through the internet. This partnering will entail the negotiation of the changing expectations of women for career and access to services. I believe that we will see an increasing level of commuter farming and dual household marriages.

Amenity farming landscapes

Land values higher than agriculture can pay.
It is in the amenity farmscapes that we see the price of land generally pushed higher than farm businesses can afford to pay if they adopt a business perspective to their land purchases. Farming industries in this region are characterised by small properties, an older farm population and little farm aggregation. Younger households generally rely on off-farm income. The predominant industry is often beef production. This enterprise makes low demands on labour, allowing production in conjunction with off-farm employment or on-farm semi-retirement. Existing farms are generally locked into a slow decline in economic power as the terms of trade compress. When farmers cease their occupation, there is little likelihood of an inter-generational transfer. Properties will often be purchased by in-migrants.

Limited options for farm business expansion.
Those family farms intent on maintaining a viable family business will generally have two options open to them. One is farm intensification, particularly through the development of horticultural enterprises. The other is the transformation of farm businesses into purveyors of gourmet food experiences in which the farm is often transformed into an image that reflects the idealistic expectations of the urban consumer. However, there is a limit to the extent of intensification. Horticulture is dependent upon secure access to water. This has recently led to debate about access to river water and rights to construct farm dams for irrigation in conflict with a capping of extractions of further water from the river systems.

Positive future for small towns.
This pattern of gentrified beef production, dormitory living and horticultural niche marketing is much more successful at maintaining population than the competitive farm production landscapes of the cropping and irrigation regions. Small towns are not necessarily condemned to slow decline. Their future can be secure because of the landscape amenity, or because of particular cultural associations that encourage a cultural migration.

Transitional landscapes
To the west of Bendigo are the rolling hills of the remnants of the Great Dividing Range. This is wool country, if only because little else can be produced here. There is some amenity value, but this is muted by the low rainfall and limited elevation of the hills. In many areas land is already subdivided as a legacy of gold rush optimism.

The wool industry.
In the wool industry the most populous age cohort for the past 20 years has been those farmers born in the late 1940s. In this transitional landscape, the average age of sheep producers is closer to 60. The burden of maintaining existing social infrastructure is increasingly falling on a smaller number of established families. There are widespread unacknowledged expectations of being the terminal farm generation. Unlike most occupations, sheep farmers do not automatically retire at age 65. Within the next 15 years a large proportion of these farmers will retire due to health and mobility considerations. Many properties will change hands, but unlike past generations, there will be few neighbouring farm businesses capable of buying them out and few of the inheritors available to take over the business.

Small town welfare has de-coupled from farm welfare.
The future for many small towns in the transitional zone is insecure. These towns are often characterised by low incomes. In some there are trapped populations, unable to afford to re-establish in towns with better employment prospects because there is no-one interested in purchasing their
properties. The future appears to be one of ageing town populations with no replacement younger generation.

**A bohemian future one option?**

There are many parts of rural Australia that fit this description. Unlike the cropping country, it is not clear there is a bright agricultural future as a compensation for continuing population loss. Unlike the amenity farmlands, it is not clear there will be in-migration to replace the current landholders. In the 1970s the decline of the dairy industry created a similar transitional environment. In some localities the ‘emptying space’ was occupied by immigrants attracted by cheap land, or the opportunity to follow sometime idiosyncratic dreams. Alternative lifestyle migration created a new cultural landscape in some of these locations, changing the public image of the district from farming land to something quite different. In time, this new cultural landscape was commodified, and the new landscape was invaded by a new amenity migration attracted by the cultural experience they believed the district offered. The process is well described in urban settings economist by Richard Florida. This transformation is far from certain for any town. It is a possible future only. The towns of Maldon, Daylesford, Castlemaine and Natimuk all show what can happen. Each of these towns has been transformed by cultural migrations of musicians, gays, artists and rock climbers amongst others.


GET BIG OR GET OUT?

“There used to be a time when progress meant improvement…….”

While there are many drivers of structural change, moving at different rates at any time in our world society, the greatest mover over the past decade has been the acceleration of globalization.

Most would agree this so called progress is not always improvement. Likewise you would agree, like King Canute, we cannot turn back this tide of change.

Without doubt, the biggest companies are getting bigger; well managed and efficient, they will continue to grow, while the less efficient will fall by the wayside, echoing the well known saying “overalls to overalls in three generations”.

I have great sympathy for the small primary producer; I was forced off my father’s cattle property once I married, as the place was simply not big enough to support two families. I now live on a small farm, however, this is for lifestyle reasons, hopefully with a little income support, but is in no way a living area.

There are many instances of the growth to bigger is more profitable:

Take the poultry industry – over the last two years Inghams in Queensland, have made a deliberate change, reducing the number of broiler farms with their contracts down from 54 farms to around 40, with a few more to go. They are demanding higher quality shed standards and encouraging their best contractors to upgrade and enlarge, or better still to build much larger, new and better, fully computerised sheds, generally to house 30,000 to 40,000 birds each shed, with farm sizes now mainly 150,000 to 300,000 birds. This means fewer trips with feed and chickens, lower mortality rates and better weight gains, plus lower unit labour costs and better profits for the farmer, generally double digit returns.

The cotton growers are in the main getting bigger and certainly more efficient; this will continue. The following graph prepared by the Australian Government Cotton Research and Development Corporation and Boyce Chartered Accountants clearly illustrates the differences between the top 20 operators, and the average:
Over the last two years in particular, we have seen some spectacular sales in the beef industry, seemingly with ever increasing prices, perhaps best illustrated by the sale and resale of most of the Stanbroke aggregation.

As valuers, we worried about the depth of the market, particularly for properties over $10 million dollars. Peter Menagazzo certainly dispelled this worry! With brilliant marketing, assisted by Rod Douglas (his agent), Peter dribbled the twenty properties sold (so far) onto the market in ones and twos, and all but two have exceeded the $10m mark, with many six at $40m or higher!

Incidentally, all but one of these sales were to individuals and large family companies growing their existing holdings, with one to a private company (the Helen Springs aggregation sold to the Kidman group).

They could afford to pay top prices for quality property:

- better buying power
- better marketing power
- climate diversification (spreading the risk)
- market diversification (live export, feedlot cattle)
- vertical integration (adding breeder/backgrounding/fattening blocks)
- the rise in equity in their existing holdings, particularly with 15 year, interest only loans available at the current interest rates of around 7% or less
- they can afford to pay more for the best properties, as their efficiencies can result in higher returns than the average owner.
- They treat purchases as a business, not a way of life

Incidentally, in the main these larger landowners are also better at landcare, particularly in the lower rainfall areas, as they can afford to lighten up, or even empty paddocks or whole properties in drought times. They can also more readily restock once it rains than the small owner, as they have more resources.

The larger landowner also tends to do more research, adapt to change, experiment and provide more career path opportunities.

The battler has another great uphill battle, one that is getting steeper all the time, and that is the red tape battle!

At a meeting in Brisbane at which the Hon Ian McFarlane, the Minister for Small Business was the guest speaker, he mentioned how his government was reducing red tape; I had the opportunity in giving the vote of thanks to say that I did not believe him, and that while parliamentarians of all parties constantly mentioned how red tape was to be reduced, but instead it keeps growing!

I don't think that he heard me……..

Any wonder that there are VERY few new players entering primary production! (I am having difficulty in naming just one new player outside horse related activities).

Regulations! Permits! Vegetation management! Native title! Water rights! Superannuation! FBT! GST! CGT! Contamination! Workplace health and safety! Surveys! Records! Workers compensation! Unfair dismissal! Dark greenies who want the landowner to carry the costs for all! Litigation! Moving goal posts! Lack of certainty! Loss of rights! Thought police…….
The paperwork can seem endless. While virtually all have meaning, collectively they can be overwhelming. The big boys can afford secretaries and book-keepers to look after most if not all of these. Strange how the majority of the paperwork/regulations are overseen by those who have never been in business, nor had to put their house on the line........

With fewer land owners, of course there is a social cost. Fewer employees, better cars, roads and communications, plus better refrigeration results in the small towns being bypassed, left to ‘wither on the vine’. Who retires to the west? (Except West Australians!)

Litigation has seen the cancellation of many sporting events. Less entertainment, combined with the heat, dust, flies, less horse riding, vast distances, compared with a much better social and softer life for young people in the cities. With much of the romance gone, it is no wonder that it is hard to attract staff – and to keep them any length of time, so the pressure to produce more with fewer workers intensifies.

Many 'bushies' claim the banks left the bush. In reality, it was the other way around! When your customer base falls below a critical level, then it becomes hard to justify maintaining branches. In any case, how much better off we are with ATMs, EFTPOS, internet and 'phone banking available 24/7, plus mobile bank managers.

The big boys can also better withstand the ravages of commodity price cycles. The smaller landowner tends to be flat out recovering from the last downturn.

The small bloke is the first to call for subsidies and tariff barriers.

I disagree that we should subsidise any business. All subsidies do is prop up the inefficient, and RAISE land values. Which in turn makes it harder for the young people coming on, and makes it harder to get a return on capital comparable to other investments.

The best hand out we can get, is for government to get its hand out of our pockets, and to get out of the way so that we can concentrate on what we do best – building a more prosperous Australia (and so pay more taxes!).

No matter what our calling – farmer, grazier, butcher, valuer or public servant for that matter, we have to strive to make ourselves relevant.

The wool industry is a great case in point. “Our product is so superior” seems to have been the attitude. Wool has declined over 50% in consumption over the last decade, while the fibre market overall has increased by 35% in the same period! Productivity gains have been poor relative to other primary industries, and few people under the age of 40 have any affinity with wool. Incidentally, as an agent remarked to me recently, wool is a 'cottage industry' in Queensland now - and it seems destined to stay that way.

The dairying industry of course, has and is being decimated by deregulation in Queensland, with the numbers of producers having halved since deregulation, from 1700 to under 900, and will probably drop (by 2007?) to perhaps 400 larger, more efficient producers with good, on farm fully irrigated forage production. But I don't believe that we should just blame deregulation - this has been going on for decades! The peak numbers in Queensland topped 17,000 dairy farmers. Today’s Queensland price is dictated by the more efficient Victorian dairy farmer, plus freight costs.

We cannot be like the ostrich and put our heads in the sand, as these trends are not going to go away. The total agriculture, fishing and forestry contribution to Australia’s GDP has dropped over the years, from a peak of around 50% in the 1820s to just 3.3% in 2004 (however 1/5th of exports).
That guru, chairman of IBISWorld, Phil Ruthven, has been advocating for some years that farmers should be following the lead of other industries by avoiding the ownership of hard assets such as land, buildings and equipment, and outsourcing farm functions such as ground preparation, seeding and harvesting to service providers. It is interesting to note that this type of outsourcing is being practised on one of Australia's most efficient farms, Cubbie Station, with great success.

I certainly expect to see more land being leased in the future. One target will be the older owner, whose children are unlikely to come back to the property, who, by leasing and selling the stock, plant and equipment, can buy the brick cottage by the seaside, new car and furniture, do the world trip and still retain visiting rights to what is after all, still his property, while getting a quarterly cheque probably greater than he was able to produce himself.

Certainly something needs to happen. As Mr. Ruthven points out, the average return, including capital gains (which too many rely on too heavily) is close to just half the return from listed property trusts.

Mr. Ruthven also advocates making much more use of the water in Australia's north, where we have 60% of our annual run-off. He makes a lot of sense.

Of course, there will always be a place for the small, niche, efficient and innovative farmer and grazier, particularly for those that can add value. And for those seeking and income supplement lifestyle in semi-retirement or while holding down another job.

The middle ground farmer is bound to move slowly on, with a few breaking ranks to join the 'big boys', others to slip behind.

But the majority of small farmers and graziers, while enjoying a certain lifestyle (more so if they are relatively debt free and use only family labour), are destined to fall further and further behind the average income earner.

I'll leave you with this thought:

Remember that out there somewhere, is the very proud person who has a plaque on the wall which pronounces him as the world's very best....................................................
gramophone needle manufacturer!

Kerry Herron
1/2/2005