

Outlook for Australian agriculture and the wider economy

09 November 2006

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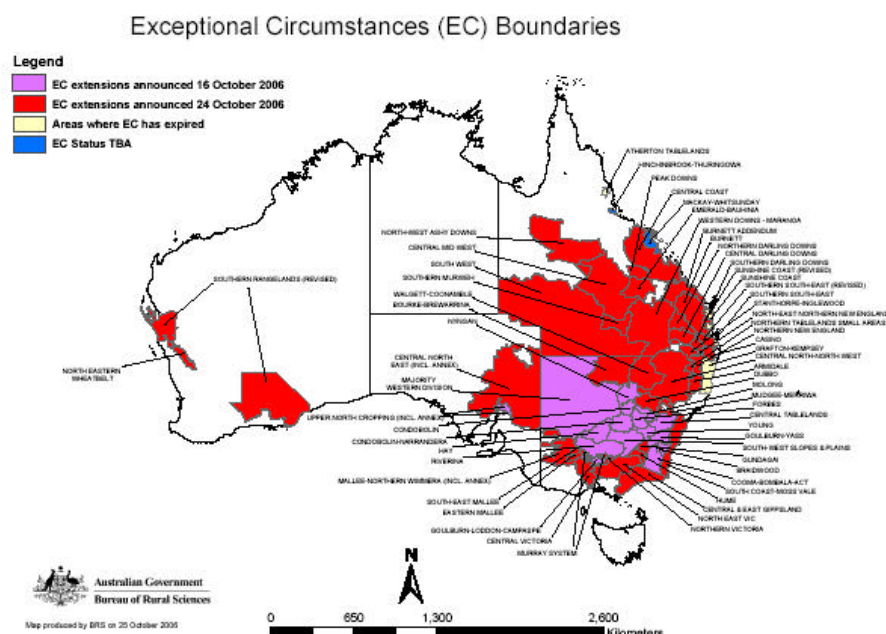
Key points

- This drought will be at least as severe as the 2002-03 event. Most of Australia's mainland arable regions are now drought declared;
- The farm sector is entering this drought from an already weak position in terms of realised incomes, input costs and export earnings;
- Agriculture contributes less than 3% to GDP, but the impact of this drought could shave up to 0.8 ppts from GDP growth in 2006-07;
- The impact on agricultural regions and sectors will vary. While the total impact of the drought is firmly negative, some bright spots will remain.

Extent of the 2006-07 drought

Below average spring rainfall has led to the return (or in some areas, continuation) of very dry conditions to much of regional Australia. As of late October, a large swath of eastern Australia was declared to be eligible for Federal Government exceptional circumstances (EC) assistance, including southern, central and lower eastern Queensland, all of NSW except a small strip on the north coast, northern and eastern Victoria, and eastern SA. Parts of southern WA are also EC declared. Only the NT and Tasmania are thus far unaffected (or, at least, are not EC declared).

Most of Australia's arable land is now drought affected

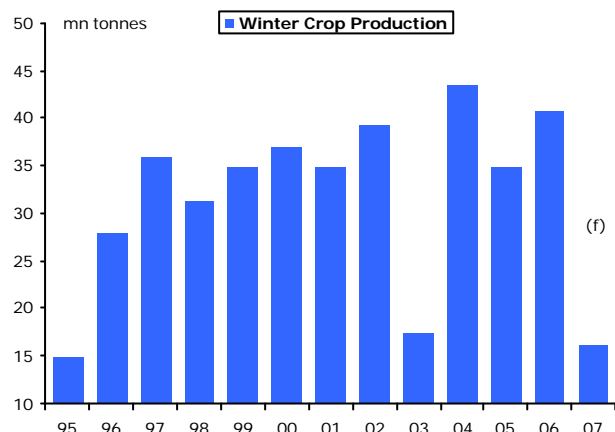


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As a result, Australia's chief commodity forecaster, the Australian Bureau of Agricultural and Resource Economics (ABARE) has significantly reduced its forecasts for winter crop production. ABARE now expects production of the three major winter crops, wheat, barley and canola, in 2006-07 to total 13.6 mn tonnes, a fall of 63% from 2005-06 production. If realised, this harvest would be the smallest for these crops since the drought of 1994-95, when 12.1 mn tonnes were harvested.

This drought will be at least as severe as 2002-03



Source: Australian Bureau of Agricultural and Resource Economics

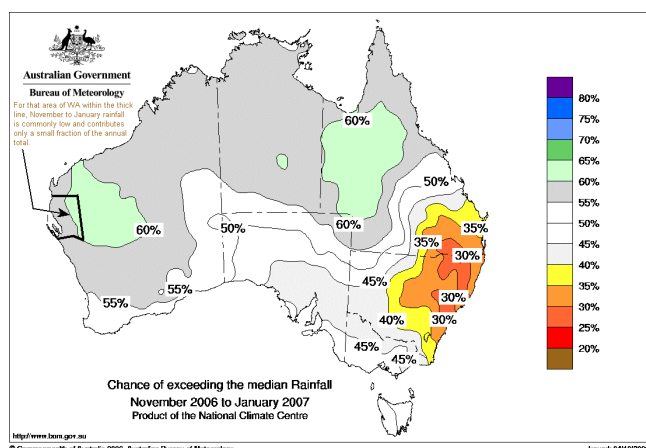
Prices for grains are heading up in response, but even taking this into account, the gross value of production of the three major winter crops is forecast to decline by 54% to \$43.7bn in 2006-07.

Although most of the prime arable land across mainland Australia is affected, production in NSW is likely to decline the most, to 2.7 mn tonnes from 10.4 mn tonnes in 2005-06.

In September, ABARE also estimated the area sown to summer crops will decline by 10% in 2006-07, reflecting drier than normal conditions for south eastern Queensland and northern NSW during the main spring sowing period for summer crops. This will particularly affect water availability for irrigated summer crops such as rice, cotton and fruit.

While some parts of the worst-hit areas in northern NSW and southern Queensland had good rains in early November, this was not enough to break their drought (although for some farmers, it was enough to enable summer crop sowing, see p.5 below). The big dry across the southeast of Australia is not expected to be alleviated this summer, with the Bureau of Meteorology forecasting a low probability of summer rains exceeding local median rainfalls in most areas. Northern Australia may be wetter.

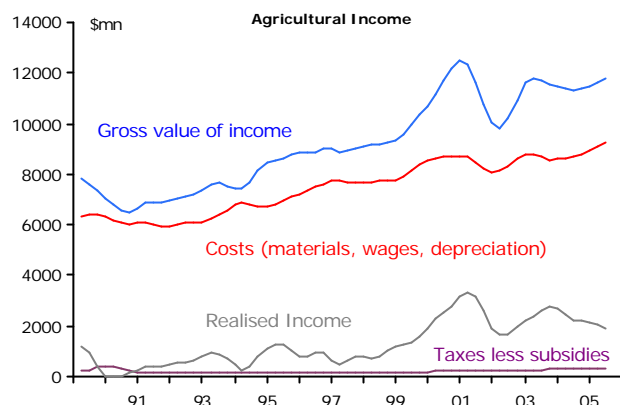
A long dry summer lies ahead



Impact on farm incomes

The anticipated decline in **gross** rural income will be broadly in line with 2002-03, or perhaps even slightly more severe. But the impact on **realised** farm incomes (after deduction of costs but before tax) may be even more severe for two reasons.

Farm incomes are declining due to rising costs, even before the drought



Source: Australian Bureau of Statistics

First, the decline in 2002-03 followed a number of years of strongly rising incomes, so the fall was from a high base. Although realised income broadly halved from peak to trough, it was reduced only to around the levels of mid 2000. In the current cycle, realised income has already been declining since late 2004 under pressure from rising costs, particularly interest costs, fuel and other inputs. This means the starting point is lower this time — farmers will experience a drought-induced fall in incomes from what is already a significantly lower income base, saddled with a higher cost base.

Despite increased wealth through rising land prices over the past decade, interest costs for farmers can be particularly significant. ABARE estimates that among farms receiving EC interest rate subsidies in June 2005, their average capital value was \$2.5mn and the average debt was \$477,000 — a seemingly low debt gearing ratio at less than 20%. Relative to their total costs and realised income however, interest costs (for all farms) have risen from 5.3% of total costs in 2001-02 (just before the last major drought), to 7.1% in 2005-06. Other costs will however, fall as farm production drops or ceases. Higher EC interest subsidies and a higher balance of funds held by farmers in the Farm Income Equalisation Scheme will also help (see below).

Second, in the current cycle, many broadacre farms have already incurred the full costs of planting their winter crops, enticed by what had initially seemed to be adequate pre-planting rainfall. This means farmers can't look to a fall in costs (other than harvesting costs) to help offset the impact on their bottom line from the decline in gross income.

Farm income assistance

Agricultural businesses are famously asset rich but cash poor. 'Lumpy' incomes can also make it difficult to budget for rising input costs or unexpected falls or delays in income. In recognition of these factors, the long-running Farm Management Deposits Scheme allows primary producers to set aside taxable primary production income in profitable years, to be withdrawn in low income years with deferred tax benefits. Deposits must be held for at least 12 months, except in EC declared areas where they can be accessed earlier. Interest is earned at market rates on the deposit's full amount, with deposits held by authorised financial institutions such as banks. As at 30 June 2006, there were 42,365 participants in the Scheme, with total holdings of \$2,796mn.¹ These funds are now available for deposit holders to draw back upon.

In times of serious ('exceptional') drought, various national and state government assistance programs become available to eligible farmers in EC declared areas (see map on page 1). The Federal Government estimates it has spent \$1.2bn on EC assistance to farms over the last five years, with another \$910mn in EC farm aid announced in 2006.²

Federal assistance for eligible EC farmers currently includes family relief payments (equivalent to the Newstart Allowance, at around \$700 per fortnight), farm help assistance (for re-establishment, training and advice) and interest cost subsidies on farm business loans. The maximum interest subsidy was increased in 2005 and again in 2006. It is currently calculated at 50% of annual interest costs in the first year of assistance (to a maximum of \$100,000) and 80% in subsequent years of assistance (up to a maximum of \$500,000 over 5 years). This grant is paid as an annual lump sum to the farmer.

While these maximum limits seem generous, most farmers will receive much lower sums, in the order of \$21,250 in their first year and \$34,000 in subsequent years (based on a typical farm business loan of \$500,000 and an annual interest rate of 8.5%). Nevertheless, these subsidies will help to cushion eligible farms from the effects of the rising interest rates that have affected all Australian businesses and households through 2006.

Eligibility criteria have also been altered recently to enable more farms to qualify for EC assistance. For example, the maximum deposit cap for the Farm Management Deposits Scheme was increased from \$300,000 to \$400,000 and the non-primary production income cap was increased from \$50,000 to \$65,000.³ Some industry estimates indicate that up to half of all Australian farms could be receiving EC assistance by mid-2007, with assistance in most EC areas continuing until at least March 2008.

¹ Dept. Agriculture, Fisheries and Forestry www.daff.gov.au

² McGauran, P. "Drought assistance extended to small business", Media release DAFF06/167PM, 7 Nov 2006.

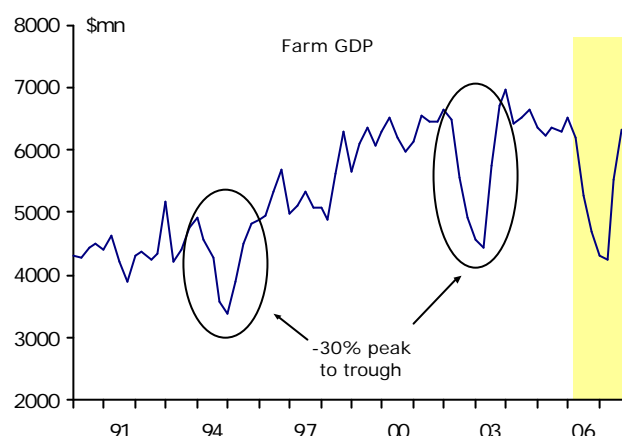
³ Dept. Agriculture, Fisheries and Forestry www.daff.gov.au

Impact on economic growth

The farm sector is a relatively small part of the Australian economy, currently contributing about 2.75% to total Australian GDP. Farm output tends to be more volatile than other sectors of the economy. In years that are within the normal range, these variations tend to have little significant impact on the overall rate of economic expansion. However, very large swings in rural output — such as those associated with widespread drought — can have a significant impact on national growth.

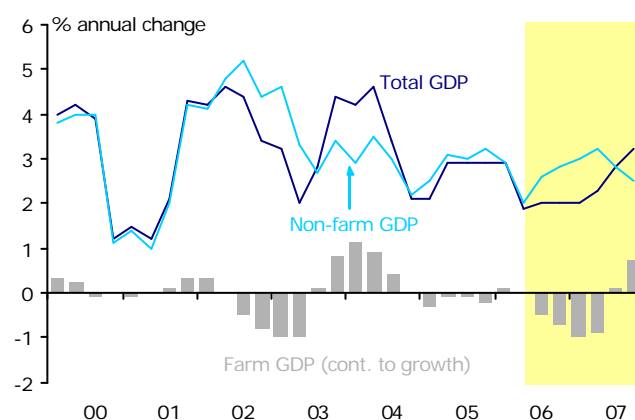
Overall, this drought is expected to reduce farm GDP by around 30% in 2006-07 — similar in magnitude to previous droughts. At this stage, we anticipate a quick and strong rebound in farm GDP in 2007-08. While such a profile is typical following a drought, it is predicated on the assumption of a return to normal seasonal conditions next year — a result that is far from guaranteed. If current dry conditions continue into next season, farm output would be much softer than implied by our forecasts.

Agricultural GDP could fall by a third



Source: Australian Bureau of Statistics and Economics@ANZ

Non-farm economic growth is not as strong as during the 2002-03 drought



Sources: Australian Bureau of Statistics and Economics@ANZ

As a result, we now expect GDP growth to slow to just 2.1% in 2006-07 — some 0.8ppts lower than it would have been in the absence of the drought. This pattern will be reversed in 2007-08, when the

rebound in farm GDP will push total GDP growth above what it would have been without the drought.

While the economic impact of the current drought is expected to be similar to the 2002-03 drought, it will be much more noticeable this time around, given the underlying non-farm economy is tracking at a significantly reduced clip. In 2002-03, annual non-farm GDP growth was 4.4% and peaked at over 5% in the September quarter 2002. So while the fall in farm output reduced GDP growth by 0.8ppts that year, it only reduced it to 3.25% — a rate in line with the economy's long term potential (and indeed one sufficiently high that we haven't achieved it in the last two years!). Presently, the non-farm economy is growing at an annual rate of 2%, and while it is expected to pick up over the course of 2006-07, it is unlikely to grow beyond 3% as the effects of higher interest rates and the end of the business investment boom weigh on growth.

The impact on state economies is more complex than a simple correlation with drought locations. Although the drought is most severe in NSW, all agricultural production (including forestry and fishing) comprises a far smaller share of the NSW economy (2%) than it does in other drought-affected states (4% in Queensland and 6% in SA, based on 2004-05 GSP). Thus while NSW is currently the worst affected state physically, SA and Queensland may well suffer a bigger impact to their state economies. Relative to its economy, Tasmania has the largest agricultural sector (7% of GSP). Luckily, it is thus far the state least affected by the current drought.

Impact on exports

Around two thirds of Australian farm production is exported, so the drought will impact heavily on agricultural export earnings, particularly from grains. Rural exports by value currently comprise 12.5% of total exports of goods and services. In contrast to all other categories of exports, rural exports have trended downward by value over the past 5 years. In the most recent quarter (Sept. '06), the value of rural exports was 16% lower than the peak of \$7.9bn in the same quarter 5 years earlier.

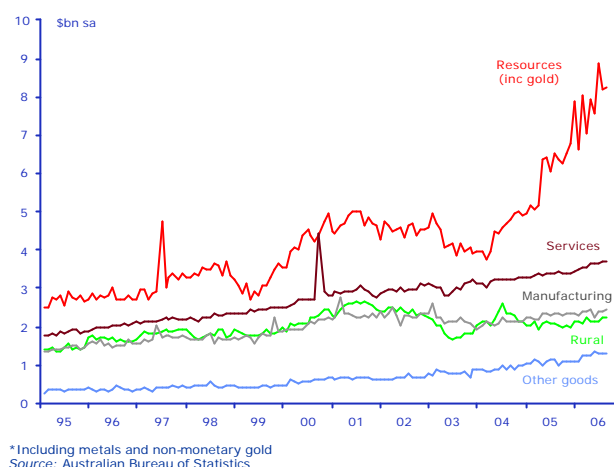
The 2002-03 drought led to an additional dip in rural exports within this generally soft story. At the low point in the Sept. quarter of 2003, the value of rural exports fell to \$5.2bn — about a third lower than the Sept. quarter 2001 peak.

This means that as with farm incomes, farm exports are already travelling on a relatively weak track going into this next drought. ABARE estimates the export value of our three major winter crops (wheat, barley and canola) will fall by a further 30% in 2006-07, relative to 2005-06. With spring plantings already reduced, 2007's summer crop exports are likely to be similarly affected.

The more sober outlook for rural exports dashes hopes of a resources-led improvement in the trade

accounts, which are now likely to remain in deficit over the next year and will remain a drag on Australia's economic growth.

Rural exports will fall further behind



Impact on selected agricultural sectors

While the total impact of the drought on Australia's agricultural producers will be firmly negative, some sectors will suffer more than others, depending on their location and their water requirements. Even at a regional level, water availability to individual properties can vary considerably, depending on their water access and allocation arrangements. Irrigation allocations will vary from zero in the worst-affected water systems to a full allocation in others (with major differences, in some cases, from nearby or even adjacent water allocation systems).

On the other hand, some regions and individual producers will emerge as 'winners' if they can produce a harvest and benefit from high prices (e.g. rising prices for grains and summer fruits). Potential examples include: southwestern WA wheat farmers; NT and northern Queensland cattle graziers and tropical fruit growers; NSW, Victorian and SA fruit growers undamaged by frost; and a range of Tasmanian producers.

Wheat and other winter crops

National production of the three major winter crops is expected to fall dramatically in 2006-07. The national output will be similar to the drought years of 2003 and 1995 (see first graph on p.2). Reflecting the geography of the drought, NSW, Victoria and SA are expecting less than a third of their 2005-06 output, but Queensland and WA are expecting over half (see table below). Victorian Mallee wheat farmers have just begun harvesting and early indications are that crop yields are better than initially expected, but still well down (by up to 80%) on last year. Southern WA wheat producers are expecting significantly higher crop yields than elsewhere, but it will still be at least a third less

than their own average. Over half of the expected national canola crop will come from WA.

On the brighter side, grain prices for food production and feedstock purposes have risen significantly on the back of these forecasts, so grain producers with something to sell (albeit reduced in volume and/or quality) can look forward to good returns. Canola prices at eastern ports are double prices of a year earlier. Already, WA grain is being shipped to the eastern states instead of following its usual export route,⁴ and WA growers are seeking to export independently of the Australian Wheat Board so as to maximise their returns in a tight global market. For this small group of grain producers, 2007 may yet turn out to be a very profitable growing season.

For the eastern states, bulk grain imports from quarantine-approved countries will help to address the expected shortfall in feedstock supplies in 2007. The federal government is currently assessing around 40 applications for bulk imports of feedstock grains including maize (corn), sorghum and wheat. The last time Australia imported any grain feedstock was in 2003, in response to the 2002-03 drought.⁵

Wheat, barley & canola production forecasts

	2005-06	2006-07	% change
NSW	10,420	2,700	-74.1
- wheat	7,921	2,100	-73.5
- barley	2,245	580	-74.2
- canola	254	20	-92.1
Victoria	5,102	1,320	-74.1
- wheat	2,705	690	-74.5
- barley	2,059	540	-73.8
- canola	338	90	-73.4
Queensland	1,644	850	-48.3
- wheat	1,385	750	-45.8
- barley	259	100	-61.4
WA	12,706	6,760	-46.8
- wheat	9,478	4,900	-48.3
- barley	2,598	1,600	-38.4
- canola	630	260	-58.7
SA	6,481	1,910	-70.5
- wheat	3,578	1,090	-69.5
- barley	2,685	750	-72.1
- canola	218	70	-67.9

Source: ABARE, *Crop and Livestock Report*, Oct. 2006.

Rice, cotton and other summer crops

Rice, one of Australia's smaller (but thirstier) crops, is mainly grown in the irrigation areas of NSW and southern Queensland. These areas were already suffering dry conditions and will be hit hard by this drought. Australian rice production is very volatile from year to year, depending mainly on water availability (if sufficient water is not available then farmers do not plant rice that year). In September 2006, before the full extent of the current drought was evident, ABARE was already forecasting national rice production to fall to 400kt, less than half of 2005-06 production (1,048 kt) but of a similar size to the annual rice crops in each of 2002-03 (438kt), 2003-04(553kt) and 2004-05 (339kt).

Australian cotton is also mainly grown in Queensland and NSW. The 2007 cotton crop is currently being planted. Early estimates by the industry indicated that 2007's output would be almost half that of 2006 (about 1.5mn bales instead of 2.6mn). In late October, ABN Amro Morgan forecast a total cotton crop of 1.4mn bales for 2007, but other industry commentators suggest it could be as low as 1.1mn bales (nearly 60% below 2006 production). Just a week later however, good rainfalls in southeast Queensland saw cotton farmers in the Darling Downs region immediately increasing (and in some cases doubling) their plantings — a good example of the speed at which a crop outlook can turn on changing local weather conditions.

Cotton producers are also looking at a depressed international price outlook (\$350-\$400 per bale in 2007), due to expected excess production in China, Pakistan and the US. As a result, major Australian producers (such as Queensland Cotton Holdings and Namoi Cotton Cooperative) have downgraded their profit outlooks for 2007 and 2008.⁶

With spring and summer rainfalls expected to be below average across most of Australia, other summer crops including sorghum, soybeans, sunflowers and maize will also be much reduced. Plantings will be smaller and crop yields lower in most areas. On the other hand, soybean growers on the north coast of NSW (one of the few areas of the state that is not EC declared) are reportedly expecting a bumper crop and high returns, as they respond to rising prices (over \$380 per tonne) and growing demand from biofuel and other processors.⁷ For most summer crops however, replacement imports are already being organised to address expected shortages and to take advantage of rising local prices.

⁴ ABC Rural News, 'Graincorp to ship wheat to eastern states, 24 Oct. 2006; 'Lower canola yield boosts returns', 25 Oct 2006.

⁵ McGauran, P. "Imported grain issues", Media release DAFF06/161PM, 27 Oct 2006.

⁶ Lee, T. "Gloomy outlook for cotton growers", *Australian Financial Review*, 30 Oct 2006, p. 17; ABC Rural News, 'Rain boosts cotton planting areas', 06 Nov 2006.

⁷ ABC Rural News, 'Soybean producers buoyed by higher prices', 03 Nov 2006.

Livestock grazing

For cattle, sheep and other livestock graziers, the drought has thus far resulted in poor spring pastures and rising prices for substitute feedstock. In response, farmers have sought to reduce their herds and thus their costs. Yardings (sales) of cattle and sheep have risen and prices have fallen.

The proportional effect on the volume of production is not expected to be as great for livestock graziers as it is for crop producers (see table below). In value terms however, falling prices will mean that the gross value of beef production is expected to fall by 13% in 2006-07, to \$6.6bn, and the gross value of sheepmeat production is expected to fall by 35%, to around \$1.4bn.

Livestock production forecasts

	2005-06	2006-07	% change
Cattle (mn)	28.5	27.9	-2.1
slaughter ('000)	8,401	9,000	7.1
production (kt)	2,077	2,160	4.0
Value of prod'n (\$bn)	7.6	6.6	-13.0
Sheep (mn)	100	96	-4.0
sheep slaughter ('000)	11,830	13,000	9.9
lamb slaughter ('000)	18,666	19,000	1.8
sheep production (kt)	244	256	4.9
lamb production (kt)	382	370	-3.1
Value of prod'n (\$bn)	2.16	1.40	-35.0

Source: ABARE, *Crop and Livestock Report*, Oct. 2006.

As with crops, there are major differences in livestock grazing conditions across states. SA's largest cattle station, Anna Creek, has reportedly sold off 12,000 of its 16,000 head of cattle since November 2005 and may look at reducing its herd even further.⁸ Other graziers in SA and NSW are similarly affected. At the other end of the country, cattle stations in Queensland — home to 45% of the national cattle herd — are not as badly affected and have not yet seen an increase in yardings or slaughters.

The sprawling cattle stations of the NT are similarly unaffected and may even be looking at an above average year. The Australian Agricultural Company (one of Australia's largest agricultural companies) for example, has announced it is "experiencing a bumper year". This is primarily because the majority of its 24 properties are located in northern Queensland and NT and "have plenty of water and stock feed". This is enabling them to take advantage of low animal prices in the southeastern states to

increase their herds.⁹ The NT is also expanding its live cattle exports out of Darwin, particularly to neighbouring Southeast Asian countries such as Indonesia and Malaysia.¹⁰ Such results reinforce the differences in weather patterns and economic outlooks between the northern and southern halves of rural Australia.

Dairy

Dairy is less affected than other major agricultural sectors due to its geography. The relatively high water needs of this sector means dairy cattle tend to be concentrated in the naturally wetter regions of Australia, such as Tasmania, southeast Victoria, southwest WA and coastal NSW. These regions are thus far less affected by the drought than inland, although dairy yields and cash returns are still likely fall due to drier pastures and increased feed costs. Dairy farmers in the Upper Hunter region of NSW have called for an increase of 5 cents per litre in the contract price of milk to help cover these cost increases.¹¹ Such requests are likely to become more widespread as the drought continues and rising production costs bite further.

Impact on other agricultural sectors

Producers reliant on grain supplies to feed livestock such as cattle, poultry, pigs and game are already facing increases in grain prices. In the case of chicken meat for example, feedstock comprises around 60% of total production costs, so any price rises for grains has a significant impact. Feedstock prices are expected to remain high throughout 2007. Farm gate chicken meat prices will rise by at least 15% as a result.¹²

Fruit and vegetable growers across Australia have been adversely affected by a number of weather-related events in 2006 in addition to the drought:

- North Queensland banana output is still recovering from cyclone Larry in early 2006;
- several major fruit production areas in Victoria, Tasmania and SA have been hit by spring frosts that have caused extensive damage to trees and greatly reduced expected yields for 2006-07;
- spring frost damage to several wine-growing regions in SA and Victoria, causing up to \$100mn damage to vines in SA alone;
- a continuing 'supply glut' for the wine sector;
- zero water allocations (but not necessarily zero water charges) from some irrigation systems in

⁹ ABC News Online, 'Ag company doing well despite drought', 31 Oct 2006.

¹⁰ ABC Rural News, 'NT cattle exports to Malaysia almost double', 31 Oct 2006.

¹¹ ABC News Online, 'Dairy farmers counting on milk price rise', 26 Oct 2006.

¹² ABC Rural News, 'Farmers to bear higher feed costs', 31 Oct 2006.

⁸ ABC Rural News, 'Dry forces cattle sell-off', 3 Nov 2006.

Victoria and NSW, on which many fruit growers wholly rely for their water supplies.

Impact on non-agricultural industries

It is often observed that a major drought event affects all rural businesses and not just the farmers. This is true to the extent that farmers' spending on local goods and services reduces. In many rural regions however (and particularly those near coastal areas), farms are no longer the only source of customers for local businesses. Tourism, 'seachangers', mining, light and heavy industry, and services that have relocated from the more costly urban centres (such as the large call centres found in many regional towns) all play an important role in local regional economies. On the other hand, some regional non-agricultural industries will be adversely affected by drought too. They too will face higher water prices and restrictions (e.g. for industrial and urban use) and tourists may be harder to attract to a dry and parched landscape.

Some local businesses are of course more affected by agricultural downturns than others. Those directly supplying agricultural goods and services (such as tractors, machinery, fertiliser, chemicals and harvesting services) will be directly and adversely affected by reduced agricultural demand. More general regional retailers and service providers with customers from a variety of industries and/or locations will be less affected. Ascribing 'multiplier effects' from the drought to more general regional businesses may therefore overstate the net impact on local non-agricultural businesses.

In the 2002-03 drought, a government assistance program was established to assist selected non-agricultural rural businesses with interest rate relief of up to \$5,000 per business. A low number of applicants and difficulties in identifying eligible businesses meant that just \$1.1mn was provided to 182 regional businesses nationwide, at an estimated administrative cost of \$800,000.¹³ On many measures then, this program could be regarded as something of a failed experiment.

Despite this experience, the government is now extending drought relief to small businesses located in (or servicing) EC declared areas until March 2008. This time around, businesses employing up to 20 people must show that at least 70% of their income is "derived directly from farmers located in such areas" (i.e. EC declared areas), in order to receive income support and interest subsidies on their business loans. The government estimates that "more than 5,000 small business operators" will be eligible and "more than \$200mn" will be spent (in addition to EC funding already announced).

Reactions to this small business assistance announcement have been mixed, with rural

businesses that employ more than 20 people particularly concerned at being excluded. Others have suggested that a Farm Management Deposit Scheme for agricultural services (such as harvesters and aerial services) would be a better approach.¹⁴

Elsewhere in the economy, the food and beverages manufacturing sector will be among the first to feel the impact of higher prices and reduced supply from agricultural producers. Flour millers and bakers are expecting the winter crop losses to add up to 40% to their production costs, while beer producers are concerned about both the price and quality of the grains that will be available in the coming year. For consumers, fresh food prices (meat, fruit and vegetables) are likely to be affected first, followed by price rises for processed foods and beverages.

¹³ Breusch, J. "Deaf ear turned to rural business", *Australian Financial Review*, 30 Oct 2006, p. 60.

¹⁴ McGauran, P. "Drought assistance extended to small business", Media release DAFF06/167PM, 7 Nov 2006; ABC Rural News, 'Mixed reaction to drought aid', 8 Nov 2006.

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