Impacts of the GFC on Agriculture Sectors

The speed with which global economic conditions have changed in the last twelve months has been unprecedented, and has left many in agriculture very uncertain about future prospects. Record high agricultural commodity prices suddenly slumped during the second half of 2008, and many markets have since struggled to establish anything resembling a new sense of normalcy.

That agricultural commodity prices would be suddenly impacted by a crash in world stock markets is, at first glance surprising, but on further reflection perhaps should have been anticipated for a number of reasons. Firstly, for some time economists have observed an increasingly close linkage between grain and oil prices, as the world turns to biofuels as a source of energy, therefore a sudden drop in oil prices would be expected to result in a similar movement in grain prices. Secondly, speculators have obviously been attracted to booming soft commodity markets over recent years, and would be expected to exit very quickly once markets turned. Thirdly, agricultural exporters are very dependent on the availability of credit for shipping, so the sudden lack of credit would be expected to create a major disruption to shipping, as was evident in the dramatic fall in the Baltic Dry Index, an indicator of international shipping rates. This inability to ship products would, in turn, have a very sudden impact on agricultural markets. Fourthly, industry participants holding stocks when the markets suddenly dropped would also be expected to use up higher-priced inventories before again re-entering markets.

These factors perhaps help to explain short-term reactions that occurred in agricultural markets over recent months. But what will the impact of global financial market changes be in the medium to long term? Will strong demand again re-emerge for grains, livestock and horticultural products?

In this edition of Insights, we ask a number of industry experts for their views on what direction agricultural commodity markets are likely to trend in 2009.
Agriculture Roundtable Conference

The Institute held its 2008 Agriculture Roundtable Conference in Canberra on Monday 10th and Tuesday 11th November 2008, with 100 participants from the agribusiness sector. The Honourable Tony Burke, Minister for Agriculture, Fisheries and Forestry gave the keynote address to the Conference dinner, touching on issues including the Carbon Pollution Reduction Scheme, exceptional circumstances drought assistance and economic forecasts for the agriculture sector.

Mitch Hooke, Chief Executive of the Minerals Council spoke at the Conference breakfast about issues facing both the mining and agricultural sectors, focusing on Australia’s emissions trading scheme (ETS). Explaining that the Minerals sector has major concerns with the design of the ETS, especially in the absence of a comprehensive international agreement to reduce emissions. Other presentations at the Agriculture Roundtable Conference looked at agricultural development in northern Australia, the nation’s future transport needs, and the impact of the global economic crisis on the world and Australian economies.

Research Report seminars – Value in Value Chains

A series of masterclass seminars, facilitated by author Michael O’Keeffe, launched the Institute’s recent Research Report – Value in Value Chains: Collaborative Business Models and Farm Accreditation Systems Examined. The seminars were held in Brisbane, Melbourne and Sydney in late October, last year.

Out and about

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

- Australian Forest Growers Conference
- Horticulture Australia Limited Industry Forum
- Nufarm National Conference
- Ruralco Conference
- Victorian Farmers Federation Kerang Meeting

Corporate Support

The Institute would like to welcome Australian Wool Innovation Limited as our newest corporate member. For more information on how you can support the Institute’s work (individual and corporate opportunities available) please contact the Institute on (02) 9690 1388 or visit the website www.farminstitute.org.au

In the News

The Institute’s report Preliminary Modelling of the Farm-Level Impacts of the Australian Greenhouse Emissions Trading Scheme was the subject of a story featured in The Australian. The article by Sid Maher focused on the effect that climate change policy will have on the agriculture sector as well as more economy-wide affects such as the increase in food prices. In addition to this the November Farm Policy Journal, ‘emission impossible? agriculture’s role in emissions trading’ was the subject of an article by Rural Press journalist Matthew Cawood.

Call for Papers

The May 2009 edition of the Farm Policy Journal focuses on northern Australia. The deadline for papers is 30 March 2009.
Impacts of the Global Financial Crisis on Agriculture Sectors

Grain
Malcolm Bartholomaeus
Managing Director
Callum Downs Commodity News

The global financial crisis has hit grain markets in three ways. There has been a major move in currencies, a drop in commodity prices, and destruction of demand.

Grain markets actually peaked well before the peak in other commodities and well before the moves in currency and general commodity prices. Grains were responding to global shortages that were relieved as the new northern hemisphere crops were harvested.

The major downward move in the Australian dollar, or upward move in the US dollar, began in mid July. At that stage, December 2008, CBOT futures were trading at around 834 USc/bu, or A$313/t.

As the financial crisis began to unfold our dollar slid dramatically, from a peak of 98.49 US cents on 15 July, to a low of 60.02 US cents on 27 October.

At the same time there was a sharp drop in all commodity prices, with crude oil down almost US$100 per barrel from its peak. Wheat fell from 834 USc/bu in July, down to 534 USc/bu by the end of November. This was a 36% drop, but in Australian dollars the US futures only fell by about $12/t, to $301.50/t.

Finally we have had destruction of demand for commodities and consumer items. High commodity prices, and in particular, high crude oil prices, have taken their toll, to the point that for the first time ever we have economic recession in both developed and developing countries.

This has taken demand away for grains for use in biofuels, and reduced demand for feed grains as meat consumption pulls back globally.

Australian grain prices have been relatively stable throughout the crisis to date, with changes in US dollar prices being cancelled out by moves in currency. We can expect this to continue in 2009, with wheat the grain most likely to break that pattern in response to changes in supply from the 2009 northern hemisphere crop.

Cotton
Dave Anthony
Auscott Limited

Cotton as with other commodities has experienced considerable price volatility over the last year. Much of the price movement (especially in futures) has been independent of cotton market fundamentals. Activities of hedge funds and other financial institutions embroiled in the frenzy of 2008 financial markets have significantly influenced cotton prices both up and down – but to a lesser extent than grains and other oilseeds.

However, the activities of hedge funds and speculators particularly in February and March 2008 created significant issues for a number of international cotton merchants. Unexpected and extreme margin calls combined with reduced access to credit as the sub-prime problems rattled the world banking industry were at the heart of these issues. A number of Australian growers were affected. Cotton futures prices have followed financial and equity markets down through much of 2008.

The Australian dollar however, has been friendly to Australian cotton prices. Having fallen from an exchange rate nearing parity with the US dollar to levels in the 60 to 70 cent range, cotton has been able to maintain reasonable Australian dollar prices. As Australia produces a premium type of medium staple cotton well suited to high quality products as well as for blending to improve yarn characteristics of other growths, Australian merchants have been able to achieve reasonable basis levels helping to offset falling futures to some extent.

By far the biggest issue for Australian cotton producers has been the lack of irrigation water. Almost all Australian cotton growers operate mixed farming operations either with grains or livestock or both. With water allocations close to zero at times and frequently less than 25 per cent in recent years, and grain prices rising, many cotton producers have turned to a higher proportion of grains in their enterprises. Given reasonable water, cotton still remains the most profitable crop and the most able to support employment and regional value adding.

Recent rain damage to grains, improved dam levels and falling grain prices have lent further support back towards cotton.

Looking forward however, it is hard to see consumption picking up as the world deals with reduced consumer demand as recessions bite globally. The US consumer is particularly important to world cotton consumption and reductions in discretionary spending by consumers in all countries will impact cotton demand. While cotton still represents close to 40 per cent of total world textile consumption, at present world cotton stocks have reached four to five months supply for spinning mills. Normally around 3 to 4 months use of cotton stocks is seen as a reasonable
position. The recession may see world cotton stocks exceed six months supply.

Falling interest rates are helping growers, although the impacts of higher funding costs for banks including the added cost of the government bank guarantees are likely to filter through the system somewhat offsetting the falls in the cash rates.

**Dairy**

*Steve Spencer*
*Director, Freshlogic*

Dairy commodity prices hit historic highs on world markets during 2007 due to a combination of steady growth in demand and shortages of supply from traditional exporters, in turn affected by poor climates and high feed costs.

Market conditions weakened in the first half of 2008 as buyers became reluctant to lock in their forward requirements at high prices, while record farmgate milk prices encouraged prospects of a rebound in global milk supply. Nonetheless as the Australian 2008/09 southern milk production season began in July, opening milk prices offered by major exporting dairy companies were above the starting prices of the prior record season.

Since the extent and effect of the global financial crisis became apparent in October, international dairy market conditions deteriorated rapidly, the decline in product prices deepened as buyers became anxious about the effect of global recession on demand, staying out of the market to await weaker buying prices. Downstream food processors in developing economies have cut inventories, anxious at making forward commitments in a falling market.

Exporters have also been hampered by limits on trade finance for exports to certain markets and/or customers.

The conditions have prompted a resumption of market intervention. The US Government has bought milk powder, signalling a new, lower market floor in prices at around US$1800/tonne (compared to spot prices of US$5000 in late 2007). The EU has re instituted export refunds to protect its own exporters from weaker world prices. These measures, coupled with high stockpiles, will ensure a slow recovery in prices.

The sharp fall in the value of the Australian dollar may ultimately cushion the effect of the market slump, although individual company exposure to currency will vary.

The poor outlook has prompted exporting companies to make cuts to earlier-announced base milk prices, reducing farmgate prices over the full year by about 12% compared with 2007/08 prices. Cuts in milk prices of companies which mostly service the domestic market have, to date, been smaller.

**Horticulture**

*Mark Panitz*
*Chief Advocate, Growcom*

Horticulture growers report more positives than negatives in economic crisis – so far. With media headlines worsening as the global economic crisis deepens, the view from the horticulture farm so far remains ‘steady as she goes’.

The horticulture sector enjoys some resilience to economic conditions, thanks to a diverse portfolio of crops and the fact that production occurs in geographically distinct regions across Australia.

Some growers are concerned that fresh fruit and vegetables historically get chopped off the shopping list early in a major economic downturn. But so far they have seen no less demand for produce on the domestic market.

In addition, fruit and vegetable businesses are not reporting any pressure to reduce prices on produce supplied to the chains, although growers have had to manage gradually declining commodity prices for years with a corresponding upward spiral in costs. High interest rates, escalating transportation and fertiliser costs in particular took their toll on viability last year.

Demand from export markets was strong late last year as the Australian dollar began to fall. However, the currency of other exporting countries in competition with Australia also depreciated. Consequently, Australian exporters are seeing static demand with no new opportunities.

On the good news front, interest rates are coming down which will help growers manage debt. Fertiliser, fuel and chemical costs are also falling, but not at the speed at which they rose in recent months. Growers recognise that a recovery in the demand for oil globally will also see prices rise again for oil and oil based products.

Growers express hopes that unemployment in the mines and elsewhere will spell a larger available labour pool for horticulture, one of the key issues in the sector.

In summary, with pressures easing on interest rates, fuel and fertiliser prices, many growers are so far feeling more positive than negative about the future.

**Meat and Livestock**

*Dr Peter Barnard*
*General Manager, International Markets and Economic Services, Meat and Livestock Australia*

Prior to the global financial crisis, rising levels of world demand were being experienced, holding prospects for a sustained period of higher global meat and livestock prices.
However, demand for meat and livestock has suddenly entered a very uncertain period, with the global financial crisis. The most substantial and longer lasting impact of the financial crisis is likely to be in lower consumer expenditures across all major goods and services, but most of all for the more expensive and ‘luxury’ items, such as cars, jewellery and expensive clothes.

As an essential item, expenditure on food is less sensitive to income. However, the belt-tightening is still likely to lower spending on the food category, including meat, and cause a significant alteration in consumer’s eating and purchasing habits.

As household budgets come under increasing strain, more consumers are opting to eat at home and eat out less. At retail, consumers are choosing cheaper meats (eg poultry and pork) and cheaper cuts (eg mince, casserole cuts and sausages). When eating out, consumers are shifting from independent middle and upper restaurant meals to cheaper outlets, such as fast food.

The impact on the Australian meat industry of these changes in consumer purchasing, however, is likely to be limited. US demand for Australian manufacturing beef should remain firm (due to strong fast food demand and lower US cow beef supplies), and in other US segments, as well as in Japan and Korea, Australian product is seen as more affordable than competing local or US product.

Furthermore, economic and meat demand growth is expected to continue, albeit at slower rates, in Australia, South-East Asia, the Chinas, the Middle East and Russia.

When these considerations are added to the benefits of a much lower Australian dollar, Australian livestock prices are actually expected to strengthen during 2009.

However, such a bold prediction must be qualified. First, the financial and economic situation remains most uncertain and volatile, and conditions are outside any experienced in the past eighty years, if not ever.

Second, the benefits of a lower Australian dollar are yet to flow through to Australian exporters of beef (our main meat), due to the short term disruption caused by the rapid credit and currency changes. In some cases buyers have withdrawn from the market, cancelled orders, failed to honour contracts or adopted a hand-to-mouth buying approach to purchases. Global beef import demand is expected to remain weak for the first quarter of 2009, as stockholdings are reduced and credit restored, and buyers await a stabilisation in currencies and clarity in underlying consumer demand.

Third, demand and prices for livestock co-products, particularly hides, skins and tallow, is being severely impacted, as many of these are used in luxury goods (eg expensive garments, car upholstery and cosmetics) destined principally for the recession-hit US and European markets.

The beef trade could take months to recover and co-products much longer, though trade in sheep meat and livestock has already been boosted by the low dollar.

Once the credit crisis recedes and the global economy commences a widespread recovery, growth in world meat demand is expected to again outstrip supply, heralding a period of rising meat prices and expanding trade.

### Wool

**Chris Wilcox**  
Poimena Analysis

Australian wool prices and demand for Australian wool have been remarkably resilient in the face of the crunching economic downturn in all the major wool consuming countries which has followed the global financial crisis.

After hitting a nineteen year high in US dollar terms in January 2008, wool prices (in Australian dollar, US dollar and Euro) fell steadily until the start of October 2008 due to a cyclical weakening in demand. Prices then dropped sharply in October once the full extent of the financial crisis became evident. Prices have softened since in Australian dollar, US dollar and Euro. Now, a year after the peak, Australian wool prices are down by 29, 47 and 40 per cent respectively. Wool prices fell by around 40 per cent in the previous cyclical downturn in 2003/04.

Australian wool exports reached a peak of A$2.75 billion for the year to January 2008 and have since dipped to A$2.4 billion for the twelve months to November 2008.

In spite of these negatives, wool prices have been resilient, holding at around 750Ac/kg, in the face of a dramatic slowdown in the economies of every one of the top six retail countries for wool clothing. The US, Japan, Italy, Germany and the UK are all in recession and economic growth in China, the largest retail market, has slowed to its lowest annual rate in four years.

Wool prices have been supported by low wool supply, both globally and particularly from Australia. Wool production in Australia in 2008/09 is expected to be the lowest since 1925/26 as the result of drought and a shift by growers to other agricultural enterprises over the past decade.

2009 will be a tough year for wool given the poor economic prospects in the major wool consuming countries. The global financial crisis will deepen and lengthen the cyclical downturn in demand and wool prices, although low supply and an underlying consumer trend to natural fibres and fine Merino wool in particular will help support the market.
Sugar

Kim Morison
General Manager, Marketing
CSR Sugar

Australian sugar values have enjoyed a long overdue return to above average levels in the past 12 months.

After languishing sub-10 cents per pound for all of 2007 due to excessive global stocks, international sugar values finally caught some bullish sentiment initiated by spec fund investor interest in January 2008. Values surged along with oil prices throughout the first half of 2008 as Brazilian cane production was skewed in favour of ethanol.

By mid-2008, sugar settled into a 15 to 16 cent per pound range; a well above average price but certainly not the unprecedented highs being experienced in oil and grains. And probably for that reason, the impact of the credit crisis since mid-2008 has not been as dramatic as witnessed in other commodities.

Returns in Australian dollars per tonne are actually higher now than they were at the US cent per pound peak in mid-2008! The 30 per cent fall in the Aussie dollar has more than offset a fall in international sugar values.

Fundamentally, the sugar balance sheet is projected to tighten over the coming year. As an essential staple, sugar’s global consumption is not expected to soften too dramatically, while production will be significantly lower in India and the EU.

Unlike most soft commodities, Brazil so dominates the international trade, that it is clearly the market maker. A lower Brazilian Real against the US dollar has enabled Brazilian producers to sell sugar more aggressively and still return the same revenue in their local currency terms (just like the Australian dollar situation above).

However very tight credit lines, and some bankruptcies, has forced Brazil to be a ready seller of sugar in the past three months as its harvest approached its zenith and storage neared capacity.

We expect this selling pressure will continue through the first few months of 2009, but the longer term fundamentals remain quite positive.

Fortunately the fall in sugar values has not been a trigger for widespread contract defaults from import buyers. There have been some slow shipments and hiccups mostly as a result of tight bank credit lines, but no outright defaults to this point.

Dramatically lower bulk ocean freight rates are having a significant impact on the regional sugar trade. In mid-2008, ocean freight from Brazil to the Far East Asian markets was costing around $140 per tonne of sugar. Today that value is less that $20 per tonne. On that basis, it is expected that 500,000 tonnes of Brazilian raw sugar will arrive into Asian markets in the coming few months competing directly against Australian exports.

Fortunately Australian exporters appear well covered for the first half of 2009, so there is likely to be little impact near term, but the above average Far East premiums enjoyed in the past year are not expected to hold for the remainder of the 2009 season.

Finally, lower interest rates, lower diesel prices and now lower fertiliser prices are being welcomed by Australian cane farmers. Farmers and milling companies are also looking forward to an easing in regional employment markets as they have all had a tough time finding suitably qualified seasonal and full-time employees in the wake of the mining boom.

The overall picture for the Australian sugar industry is very positive for 2009. Prices are well up on 2007 and 2008, and the trend in many direct on-farm costs appears to be heading lower. The recently deregulated market has permitted a lot of profitable forward pricing to be completed in the past three to six months for the next two to three seasons averaging over $400 per tonne.
China update: agriculture’s productivity challenge

China, being a key market and competitor to Australian agricultural products has long been an area of interest to the Australian Farm Institute. In February 2007 the Institute released a Farm Policy Journal entitled ‘China – emerging opportunity or emerging threat?’. That same year, a research report ‘The Implications for Australian Agriculture of Changing Demand for Animal Protein in Asia’ was released in October. ‘Following on’ this quarter takes another look at the situation in China, by examining some of the challenges facing the agricultural sector.

An important challenge for the Chinese Government in recent decades has been to ensure the dramatic economic growth that has occurred in urban China also delivers benefits in rural areas by increasing wealth. Coupled with this is a government desire to ensure that China maintains an acceptable degree of agricultural self-sufficiency, by increasing the productivity of the agricultural sector. In seeking to achieve these two objectives, there are a number of issues that appear critical to long-term success.

The first of these is access to land and water resources. China is home to 21% of the world’s total population, has 10% of the world’s arable land and only one quarter of the average world water resources per person – the statistics alone speak for themselves. In addition to this, the current land tenure system (despite its many reforms) has proven to have many limitations.

In many areas of China the existence of competing land use means that there is continuing pressure to convert agricultural land to other uses. In many instances, there are reports that local officials have removed agricultural land from farmers, without compensation, and these actions have created uncertainty amongst farmers, and are likely to reduce their willingness to invest in new machinery and in land improvements.

In addition, a lack of water resources is a significant barrier to possible further growth in agricultural output. Researchers reviewing water issues have suggested a fundamental shift in the way in which water is managed needs to take place, given that it is such an essential part of agricultural and thus economic growth.

As well as providing advantages to farmers, secure titling systems for land and water resources facilitate farmers’ ability to buy and sell their interests in these resources. This allows more efficient farmers to increase the size of their production, enables land and water resources to be consolidated or sub-divided as market conditions dictate, and enables the ownership of land and water resources to be separate from the use of those resources in a farm business, where that is desirable.

Increased mechanisation of crop production in Australia has been a key part of agricultural productivity growth, but achieving this change in China will necessitate complex social and cultural changes. Average farm size in China is estimated to be 0.6 hectares, and this land is often in several plots, making increased mechanisation difficult. Productivity growth could occur if the holdings were consolidated, but this in turn means hundreds of millions of peasants will need to migrate from rural areas and find urban employment, which is in turn dependent on strong national economic growth. Unfortunately, the current economic crisis has reversed this migration, with the Chinese statistics bureau recently estimating that up to 100 million unemployed workers may return to rural areas in the next year.

Historically, labour has not been a limiting factor in Chinese agriculture, although this has changed in recent years in some regions, and will make increased mechanisation both desirable and necessary. Linked with the potential productivity benefits available from mechanisation is the recognition that there are greater advantages for large-scale farm businesses from increased mechanisation than for small farms. This means that facilitating the rationalisation of land ownership into larger holdings will be necessary, especially for those farmers involved in crop production. Such changes will no doubt require careful management, but as generational change and time weakens the link between urban people and their traditional rural origins, such change will be made easier. A transitional process will be the growth of specialist contract farmers who manage landholdings on behalf of a number of owners. Providing contract farm managers with increased levels of security and legal protection against unwarranted breaking of contractual arrangements will be an important step in progressing these changes.

The already high levels of inputs such as fertilisers used in many sectors of Chinese agriculture, together with the increasing evidence of diminishing marginal returns from additional units of input provides an indication that simply increasing current levels of inputs will not lead to sustained increases in productivity and output. A consequence of this is that if farmers are to increase their levels of productivity they will need to do it through the introduction of new technologies and agricultural structural changes, thus making agricultural research and development an ongoing priority.

A summary of international farm policy developments

EU re-introduces Dairy subsidies

The EU Commissioner for Agriculture Mariann Fischer-Boel has announced that the Commission will re-introduce dairy export subsidies on butter, cheese and whole and skimmed milk powder that had been suspended since 2007 ‘in response to the serious situation on the EU dairy market, caused by a recent sharp fall in producer prices’ (Reuters).

Trade ambassadors from the Cairns Group as well as many Australian politicians have expressed their dismay at this decision. The Cairns Group said in a press statement that ‘increasing trade-distorting measures and protectionism in a time of a crisis carries a very high price. The reintroduction of export subsidies at this time ... is likely to drive international prices down to artificially low levels and, at the very least, prolong the current downturn.’

The financial crisis has led to many governments introducing protectionist trade policies, WTO Director-General Pascal Lamy issued a statement warning against these measures to the organisations’ member states asking them to ‘resist the impulse to institute protectionist measures during the economic and financial storm’.

US Dairy

Falling milk prices have led many US dairy farmers to sell their animals for slaughter. There are a number of factors that have led to what the Associated Press calls ‘a perfect storm of destructive economic forces’.

Domestically feed prices are rising and consumers are eating out less often, thus reducing a key market segment. Internationally the global recession has reduced the demand for butter and cheese from the US. Prices for milk currently stand at about half what it costs farmers to produce, leading industry officials to project that more than 1.5 million of the country’s 9.3 million dairy cows could be slaughtered this year. Dairy farmers are hoping that the drop in consumer prices will stimulate consumption.

Change to agriculture in Japan

The landscape of the Japanese agriculture sector is likely to change as quickly as March 2010. The Council of Food, Agriculture and Rural Area Policies which is an advisory body to the farm minister, has started discussions about a new basic plan for Japan’s agriculture sector.

Initial discussions began on January 27 during which time many council members suggested a review of the policy which encourages the reduction the area of land used for rice farming. The current policy (which has been in force since 1971) was put in place in order to control rice prices when domestic output overtook consumption. The policy maintains rice prices and rewards farmers who reduce their rice cultivation through subsidies, however many council members argue that this policy does not increase either farmers’ incentive nor income.

If the policy comes to fruition then farmers will have more freedom in running their enterprises, however it would also mean that they would suffer from falls in market price, without the buffer of government subsidies.

US Department of Agriculture releases census

The US Department of Agriculture came out with its Census of Agriculture in late January. Interestingly the census found that while an increasing number of Americans are moving to country and adopting a ‘Green Acres’ lifestyle (the number of farms increased by 4 per cent from 2002 to 2007), very few of them are actually making a living from the farm. More often that not their ‘country’ lifestyle is funded by an off-farm income.

Andrew Martin, a journalist with the New York Times, commented in his article ‘Farm Living (Subsidized by a Job Elsewhere)’, that ‘American farming is becoming a story of extremes – 900,000 of the nation’s 2.2 million farms generated $2,500 or less in sales in 2007, and on the other hand 5 percent of total farms, about 125,000
operations, accounted for 75 percent of agricultural production’.

It is something that concerns Tom Vilsack, the new Agriculture Secretary, who has vowed to do something about the trend. In an interview with the Times Mr Vilsack said that he would ‘encourage income opportunities – like energy production, carbon sequestration, conservation and ecotourism – that go beyond just crops and livestock.’

New US Secretary for Agriculture endorses carbon credits

New US Agricultural Secretary Tom Vilsack has publically supported carbon credits as a way for farmers to gain financial revenue as the financial crisis places the security of farm subsidies in jeopardy.

Reuters reports that Vilsack commented that America could create ‘a whole system of green payments that will help support farmers across the country’. The article also points out that whilst the possibility of opportunity is great, there are many details that have yet to be settled, for example how much credit and income farmers would earn for carbon controls.

Argentina in drought

Argentina has been suffering its worst drought in fifty years. The Argentine Rural Society estimates that the drought has killed 1.5 million cattle, which is a sizable amount when you consider that the country sent 13.5 million beasts to slaughter last year. However it is not only the country’s cattle industry that has been affected. Soy, corn and wheat crops have also been greatly affected by this drought, proving devastating for both the Argentinean economy and world food supplies, as Argentina is one of the world’s top exporters in all these commodities.

The Associated Press reports that ‘Skeletons of livestock are piling up in the scorching sun of the Southern Hemisphere’s summer as the worst drought in a generation turns much of Argentina’s breadbasket into a dustbowl’. The article goes on to say that the country stands to lose $5 billion this year alone.

China wheat crop saved

China has also been affected by drought; Reuters reports that Beijing has declared an emergency over the drought in parts of northern China that lie between Beijing and the Yangtze River, which have seen little snow or rain since November. Henan (China’s largest wheat growing province) has been amongst the hardest hit. However China’s main wheat crop may be relatively unaffected, as Beijing officials make efforts to fund last-minute irrigation.

Reuters reports that the drought area covers almost half of China’s winter wheat fields. Only a fraction of these have suffered real damage to date, however this is likely to change if irrigation does not occur soon.

President Hu Jintao is encouraging farmers to put in ‘all-out efforts to combat the severe drought’ and the government has mobilised millions of farmers to water their dry fields by offering subsidies and sending experts to help drought relief, which should minimise the impact on seedlings. It is expected that any shortage may prompt some sales from the Chinese granaries, which are currently overstocked, but it is unlikely that China will need to import any grain.

Financial crisis

Leading financial and economic institutions have urged countries to try and prevent their economic stimulus packages from affecting global trade. The leaders of the World Trade Organization, the International Monetary Fund and the World Bank issued a statement saying that openness to trade and cross-border investment are ‘the best preconditions for ensuring that economic momentum is regained on a global scale’.

This statement comes on the back of many trade officials saying that the Doha round of trade talks could be the key to getting the world economy back on track, the likelihood of this occurring is somewhat limited due to the fact that the US – a major player in the talks – is unable to focus on such matters until the new administration is settled in their new roles.
ETS implmentation research predicts: Agriculture costs increase while production decreases

Under current Kyoto Protocol accounting conventions, agriculture is a major greenhouse gas emitter. If covered by an ETS, agriculture will face a significant cost impost through the need to purchase permits corresponding to its emissions. Agriculture will be affected both indirectly – through its use of energy based inputs – and directly through the possibility that it will be covered by the scheme.

Findings of new research carried out by TheCIE for the Australian Farm Institute, show that emissions costs will be significant, as Australian agriculture – especially the livestock sector – is greenhouse gas emission intensive. The report, Some Impacts on Agriculture of an Australian Emissions Trading Scheme, was produced with joint funding from Dairy Australia, Australian Wool Innovation, and the Cotton Research and Development Council.

It is worth considering what impact an Australian emissions trading scheme (ETS) could have on the Australian agricultural sector. What sort of cost impost would the requirement to purchase permits to cover emissions imply for agriculture? What are the likely implications of these cost increases for exports and production? And whether the inclusion of agriculture in the ETS has implications for the economy-wide costs of mitigation?

This report addresses these questions by undertaking a model based analysis of the impact of emissions trading on the agricultural sector. The research considers three scenarios: non-participant, early entry and conservative. Four sets of models are used (an economy-wide model of Australia and three agricultural commodity models).

Each scenario assumes as its end point the government’s target of a 60 per cent reduction in emissions from 2000 levels by 2050. This target requires a 75.8 per cent reduction from projected business as usual emissions in 2050.

Under both early entry and conservative modelling scenarios, by 2030 farmgate prices are projected to rise, while the net prices that farmers receive after paying for permits are projected to fall (relative to business as usual). The percentage ratios of farmgate price compared to those net of permit costs are modelled as: beef, +4.7:–18.4; sheep meat, +2:–15; pork, +1.7:–3.9; poultry meat, +1.6:–1.9; wool, +5.2:–21.1; milk, +2.7:–7.4; wheat, +0.9:–1.2; barley, +1:–1.1; other coarse grains +0.5:–1.1; and cotton +0.5:–0.5.

As most Australian agricultural products are exported and Australia is a small player in the world market, it will be hard for farmers to pass through emission permit costs to downstream users and consumers. Under the conservative scenario modelling, by 2030 emission permit costs are projected to account for 25 per cent of farmgate price for wool, 22 per cent of that for beef, 16.5 per cent for sheep meat, 10 per cent for dairy, 5.5 per cent for pork, 3.5 per cent for poultry, and 1–2 per cent for crops and cotton. Most of this will be borne by farmers.

Production is projected to decline in response to higher costs, by 2030 production is projected to fall from its business as usual level by 12 per cent for beef, 8 per cent for wool, 7 per cent for sheep meat, 4.5 per cent for other meat and about 1 per cent for other agricultural commodities.

Uncertainties about true net emissions from agriculture and the need to maintain competitiveness all point to a need for ongoing R&D within agriculture. It is unlikely that the challenges facing the industry, and the policy challenges associated in incorporating agriculture within cost effective mitigation efforts, could ever be solved without substantive new knowledge.

The research reported here provides critical and timely information that will assist the farm sector and policy-makers in future decision-making processes relating to this most challenging issue. The introduction of an ETS will be a major policy intervention – ultimately affecting all households and businesses.

It is hoped this research will assist both the farm sector and policy-makers in reaching robust and appropriate decisions about the future role of the farm sector in the national emissions trading scheme. The changes likely to arise from these decisions will be profound and long-lasting, and for that reason require very careful consideration and analysis.

To get a full copy of the report, go to the website or call Tracey Bligh on (02) 9690 1388.

For more information on this subject the latest issue of the Farm Policy Journal: Emission Impossible? Agriculture’s Role in Emission Trading also examines the ETS through economic modelling and utilising the experience of those already taking part in carbon trading schemes.
Food security: avoiding a hungry future

High commodity prices and the flow-on effects have brought food security into the spotlight once again. Solutions to the problem are complex – is it simply that agricultural production needs to increase globally or does the problem run deeper? Is there need for a review of agricultural policies worldwide? What role will climate change, genetically modified crops and biofuels play? What approach should Australian agriculture take?

The February 2009 edition of the Farm Policy Journal will contain a collection of papers discussing decisions confronting agriculture in responding to global food security.

Tony Burke was elected to Australian Parliament in 2004 as the Member for Watson. He has a background in small business and industrial relations. Following the election of a new Labor Government in November 2007, the Prime Minister, Kevin Rudd, gave Tony the honour of being named Minister for Agriculture, Fisheries and Forestry in the Rudd Government’s first Cabinet. Before entering Federal Parliament, Tony served as a member of the NSW Legislative Council. His article focuses on the current world food prices, its causes and possible solutions.

Julian Cribb is the principal of Julian Cribb & Associates, specialists in science communication. He is Adjunct Professor of Science Communication at the University of Technology Sydney and is founding editor of ScienceAlert. From 1996–2002 he was Director, National Awareness, for Australia’s national science agency, CSIRO. A journalist since 1969, he was editor of the National Farmer and Sunday Independent newspapers, editor-in-chief of the Australian Rural Times, and chief of the Australian Agricultural News Bureau. For ten years he was agriculture correspondent, science and technology correspondent and scientific editor for The Australian. He is the author of a forthcoming book on the global food crisis, The Coming Famine.

Terri Raney is the Senior Economist/Editor of The State of Food and Agriculture and André Croppenstedt is an Economist, both in the Agricultural Development Economics Division, Food and Agriculture Organization of the United Nations, in Rome, Italy.

The State of Food and Agriculture is the annual flagship publication of the Food and Agriculture Organization of the United Nations. Each year, the report presents an in-depth review of a special theme in the global food and agricultural economy. The 2008 special theme was ‘Biofuels: prospects, risks and opportunities’. It is available at www.fao.org/sof/sofa. Their article looks at the effect of biofuels on global food security.

Dr Tony Fischer has engaged in agronomic and crop physiological research at the NSW DPI and CSIRO; directed the Wheat Program at CIMMYT (Mexico) for seven years; and worked for ten years as a Program Manager at ACIAR. Tony has travelled widely in the developing world, visiting agricultural projects, research institutes and farmers. Until recently he was involved in a wheat-sheep farm in southern NSW. He continues to publish in scientific journals.

Dr Denis Blight is Executive Director of the Crawford Fund. Throughout his career he has lived and worked in Asia, Africa and Europe. In 2004 he was awarded the Order of Australia for services to the community in international education, bioscience and development. From 1984 to 1986, he was Assistant Director General of AusAID, responsible for Australia’s aid programs to South-East Asia and China. From 1982 to 1984 as Centre Secretary he helped to establish the Australian Centre for International Agricultural Research. From 1971 to 1982, he served as an Australian diplomat in Turkey, Kenya and the United Kingdom. Together with Dr Fischer, Dr Blight has written an article which looks at how Australia can help the world food security problem.

Professor Stanley R Thompson teaches in the Department of Agricultural, Environmental and Development Economics at Ohio State University. His research interests focus on agricultural market analysis, trade and policy, especially the impact of policy reform on agricultural markets, including projects studying the effects of reforming the European Union’s Common Agricultural Policy. Past research has included use of commodity futures markets as a risk management tool, agricultural policy analysis, economics of commodity advertising and promotion, and various applications of econometrics.

Emeritus Professor Luthor Tweeten was Ohio State University’s first Andersons Chair in Agricultural Marketing, Trade and Policy, before his retirement in 2000. His research interests include agricultural policy, international trade, macroeconomic policy, resource economic policy. Recent studies include regionalisation in trade, strategic trade theory, farmland preservation, the changing structure of agriculture, farm policy after commodity programs and the economics of carbon sequestration. Professors Thompson and Tweeten’s article looks at the long term future of global food demand and whether supply can accommodate this.

The February Farm Policy Journal will be released in early March. It can be viewed, by members and subscribers, or purchased at http://www.farminstitute.org.au/publications/farm-policy-journal.html
Agriculture, Greenhouse and Emissions Trading Conference 2009

What are the implications of the Australian Government’s emissions trading White Paper for agricultural industries in Australia? How should farmers and agribusiness respond? What will be the impacts on the emissions trading scheme on farms and agribusinesses, and what changes will industry sectors need to make in preparation?

These are all critical issues facing Australian agriculture that will be addressed in the second ‘Agriculture, Greenhouse and Emissions Trading Conference’ that will be held by the Australian Farm Institute on May 6th and 7th, 2009.

Senior Australian Government personnel will provide in-depth presentations about the scheme, and about the future role that may be played by Australian agriculture. The conference will feature expert speakers from a wide-cross section of farm and agribusiness backgrounds, including meat and dairy processors, farm input suppliers, and representatives from a range of different farm commodities. International speakers from the USA and New Zealand will also provide insights into emissions policies being adopted in those countries, and the implications they may have for Australian agriculture.

The implications of carbon sink forestry development for both the forest industry and agriculture will also be discussed. The conference will feature a series of facilitated interactive workshops, which will enable participants to gain a deeper understanding of these issues, and the implications that will arise for their businesses.

Further details of the conference will be made available on the Institute’s website at www.farminstitute.org.au. The conference will be held at Novotel Twin Waters Resort on Queensland’s Sunshine Coast on May 6th and 7th, 2009. To register your interest in the conference please phone 02 9690 1388 or email info@farminstitute.org.au.

Australian Farm Institute Publications List

Research Reports and Proceedings

Members first copy free, additional copies A$44; & Non-members A$66

Preliminary Modelling of the Farm-Level Impacts of the Australian Greenhouse Emissions Trading Scheme
Value in Value Chains: Collaborative Business Models and Farm Accreditation Systems Examined
Conference Proceedings: Agriculture, Greenhouse and Emissions Trading Summit
Australia’s Emissions Trading Scheme: Knowledge Gaps and Research Needs for Primary Industries
Estimating the Value of Environmental Services Provided by Australian Farmers
Back copies: Members A$44 & Non-members A$66

The Implications for Australian Agriculture of Changing Demand for Animal Protein in Asia

Developing a Good Regulatory Practice Model for Environmental Regulations Impacting on Farmers

Farm Policy Journal

Members AS$27.50 & Non-members AS$44

Vol. 5 No. 4 2008 emission impossible? agriculture’s role in emissions trading
Vol. 5 No. 3 2008 who will mind the farm? tackling the rural skills shortage
Vol. 5 No. 2 2008 new kids on the block – emerging agricultural exporters
Vol. 5 No. 1 2008 biosecurity policy – safe trade or safety trade-off?
Vol. 4 No. 4 2007 animal welfare – consumer fashion or passion?
Vol. 4 No. 3 2007 water policy reform – will it perform?
Vol. 4 No. 2 2007 biofuels – can agriculture fuel the world?
Vol. 4 No. 1 2007 China – emerging opportunity or emerging threat?
Vol. 3 No. 4 2006 environmental management systems – is there value in the cost?
Vol. 3 No. 3 2006 regional development policy – can it work?
Vol. 3 No. 2 2006 drought – developing policy before the inevitable dry?
Vol. 3 No. 1 2006 agricultural research and development – a private future?
Vol. 2 No. 4 2005 salinity and native vegetation – policy solutions required!
Vol. 2 No. 3 2005 marketing on-farm environmental services – any buyers?
Vol. 2 No. 2 2005 EU agricultural policy – reforming or rebadging?
Vol. 2 No. 1 2005 industrial agriculture – farming the food chain
Vol. 1 No. 3 2004 climate change – can agriculture take the heat?
Vol. 1 No. 2 2004 biotechnology – agriculture’s gene revolution
Vol. 1 No. 1 2004 the future of farmers and farming

(all prices are inclusive of GST)

Discussion Paper

Members A$33 & Non-members A$55

The New Challenge for Australian Agriculture: How do you muster a paddock of carbon? (on greenhouse policy and emissions trading)

Platinum & Gold Corporate Partners:

Australian Farm Institute
Suite 73, 61 Marlborough St
Surry Hills NSW 2010
T 61 2 9699 1388
F 61 2 9699 7270
E info@farminstitute.org.au
W www.farminstitute.org.au