3  FEATURE ARTICLE

Australian agricultural output is projected to continue to grow strongly over the next forty years, with the gross value of annual farm output estimated to virtually double by 2050 despite the projected impact of climate change, a new report has shown. If the sector adopts some relatively modest climate adaptation measures or utilises the opportunities that a changing climate will provide to grow new products, it is very likely that gross agricultural output will be higher in 2050 than it would have been without climate change. Further adding to the future potential for Australian agriculture, growing world populations and increased economic wealth will boost global demand and ensure prices for Australian agricultural products remain strong for extended periods between now and 2050.

If the above seems contrary to other media stories that have been circulated based on research into the future impacts of climate change on Australian agriculture released by ABARE in late 2007, it is perhaps not surprising. Almost without fail, media reports about this same research report led with headlines such as “Farms face climate devastation” or “Emission cuts vital to save farms”.

How both these sets of contrasting headlines could be generated by a single research report is a matter worthy of further examination, because it highlights how some of the media reporting of climate change issues has become hysterical, and runs the very real risk of eroding industry confidence in public research agencies. A loss of industry confidence in these agencies could be very counterproductive in the future when objective research will be critical for good decision-making.

2  INSTITUTE ACTIVITIES

A brief overview of the Institute’s key activities from February to April.

6  FOLLOWING ON

A look at further developments on issues the Institute has researched. In this edition, getting a balanced picture of the debate on native vegetation clearing.

7  FARM POLICY PROGRESS

A review of farm policy developments within Australia and internationally. In this edition: The growing concern of increasing food prices, an outline of the European Comission report on Prospects for Agricultural Markets and Income in the EU, a US Farm Bill update, the pressures arising from biofuels and a look at both the ABARE and USDA’s outlook conferences.

10  INSTITUTE RESEARCH AND EVENTS

The Australian Farm Institute held a Summit on Agriculture, Greenhouse & Emissions Trading 21st - 22nd April 2008, on the Sunshine Coast. The Summit involved 100 participants from a cross section of organisations.

11  FARM POLICY JOURNAL

The May edition of the Farm Policy Journal examines various emerging agricultural exporters, and the impact which they are having on Australian agriculture.
Out and about

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

• A one day workshop on “Climate change: issues and challenges for the economy and society” at the 52nd annual AARES (Australian Agricultural and Resource Economics Society) conference in Canberra
• Nuffield Scholars Conference in Echuca
• Northern Territory Cattleman’s Association annual conference in Darwin

Corporate Support

The Institute would like to welcome Mallee Sustainable Farming as its 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

New Staff at the Institute

The Institute welcomed two new staff members in February. Tracey Bligh has taken on the role of Administration Officer and Sally Davison is the new Project Officer here at the Institute.

Sally is a former ABC Radio Rural Reporter, working in various regions across Australia, including Broken Hill, Wagga, Orange, Federal Parliament Press Gallery, Canberra, Sydney. In 2006 Sally joined Australian Wool Innovation as Media Manager. Sally is working on a project exploring the economics of differing greenhouse gas emission mitigation options.

Tracey is originally from Burnie on north-western coast of Tasmania. She has worked in a variety of roles for both the Commonwealth Bank and TNT couriers services. Tracey’s role at the Institute will be to look after members and subscribers and to provide administration support to the Institute’s staff.

Call for papers

The August 2008 edition of the Farm Policy Journal focuses on agriculture training and skills. The deadline for papers is 7 July 2008.

If you are interested in submitting a paper, please contact the Institute on (02) 9690 1388 or email info@farminstitute.org.au
Agriculture to boom with a changing climate

Mick Keogh, Executive Director, Australian Farm Institute

Australian agricultural output is projected to continue to grow strongly over the next forty years, with the gross value of annual farm output estimated to virtually double by 2050 despite the projected impact of climate change, a new report has shown. And if the sector adopts some relatively modest climate adaptation measures or utilises the opportunities that a changing climate will provide to grow new products, it is very likely that gross agricultural output will be higher in 2050 than it would have been without climate change. Further adding to the future potential for Australian agriculture, growing world populations and increased economic wealth will boost global demand and ensure prices for Australian agricultural products remain strong for extended periods between now and 2050.

If the above headline and story seem counter to other media stories that have been circulated based on research into the future impacts of climate change on Australian agriculture released by ABARE in late 2007, (Gunasekera et. al. 2007) it is perhaps not surprising. Almost without fail, media reports about this same research report led with headlines such as “Farms face climate devastation” or “Emission cuts vital to save farms”. The media stories then detailed the results of the research, claiming it revealed that farm production will drop by 10% by 2030 and 20% by 2050, and farm exports will fall by a greater amount. Both the Prime Minister and the Agriculture Minister extensively quoted these figures, citing them as proof that urgent action on climate change was needed to save Australian agriculture.

How both these sets of contrasting headlines could be generated by a single research report is a matter worthy of further examination, because it highlights how some of the media reporting of climate change issues has become hysterical, and runs the very real risk of eroding industry confidence in public research agencies. A loss of industry confidence in these agencies could be very counter-productive in the future when objective research will be critical for good decision-making.

Research into climate impacts on agriculture

The ABARE research report that triggered the dramatic headlines and became the subject of comments by senior politicians was an attempt to develop some initial forward projections of the potential impacts of climate change on Australian agriculture over the next forty years.

Attempting to model the potential impacts of climate change some forty years into the future is obviously an exercise that is fraught with difficulties, due to the high level of predictive uncertainty associated with virtually all the key variables that need to be brought into consideration. First and foremost is the uncertainty associated with projections of future climate, especially at a regional level which is the level relevant to understanding the potential future impacts of climate change on agricultural production. The divergence between Bureau of Meteorology six monthly forecasts that were released in Autumn 2007, and subsequent seasonal conditions, which resulted in millions of dollars of losses to farmers who planted crops in the belief the drought was over is a stark reminder of this.

The uncertainty of future climate projections is a product of both the inherent uncertainty of computerised climate models, and the uncertainty associated with projections of future atmospheric greenhouse gas concentrations. A CSIRO/Australian Bureau of Meteorology report released in 2007 (CSIRO, 2007) projected a ‘best estimate’ warming range of between 1.2 - 2.2°C over Australia by 2050, and 1.8 – 3.4°C by 2070, compared to 1990 temperatures. Warming was projected to be greater than average in inland areas, and regionally variable. For rainfall, there is a much higher level of uncertainty, with projections varying from -10% to +5% in northern areas and -10% to 0% in southern areas by 2030, and -30% to +20% for northern areas by 2070 and -30 to +5% for southern areas by 2070, relative to 1990. Other reports, including those issued by the IPCC and the UK Government, provide similar ranges of projections of future climate change on a global scale, and highlight the high degree of uncertainty associated with these projections.

A second level of uncertainty inherent in predictions about the impact of future climate changes on agriculture is the extent to which these changes, over the projected timeframes, will result in changes in agricultural output. This uncertainty has two elements – the first being...
uncertainty associated with the ability of agricultural systems to adapt or evolve in response to changes in climate over an extended period, and the second being the likely responses of markets to changes in agricultural supply and demand.

Some idea of the degree to which agricultural systems are able to adapt to changes in climate is evident from the climatic and geographical range over which different agricultural commodities are currently produced. Cattle production, for example, occurs throughout the entire geographical and climatic range of Australia. A number of crops also have an extensive geographical and climatic ranges. Sheep production is less geographically diverse than cattle, but still occurs in a wide range of different climatic conditions. Some horticulture and vegetable crops have quite specific climatic ranges, while others are produced under a wide range of differing situations. Dairy production occurs in all states under widely differing climatic conditions. Adaptations are already available to enable each of these commodities to be produced under different climatic conditions, and there is no reason to suspect this will not continue to be the case, especially if some new technologies or varieties are introduced in response to future changes in climate.

The potential for enterprise substitution, or the potential to develop new agricultural enterprises will also be important in determining the extent to which a change in climate reduces or potentially increases agricultural output.

The potential for different agricultural commodities to change in their relative value over time is also an important determinant of the future value of agricultural output. The recent dramatic increase in oilseed prices is a relevant example of the uncertainty associated with trying to project changes in the future value of agricultural output over a forty year timeframe. The successful development of cellulosic biofuel technologies during that period could, for example, result in major change in the relative value of cereal and forage crops, which may be favoured or disadvantaged by changes in climate. Projecting the impact of such changes over an extended period into the future obviously entails a very high degree of uncertainty.

Predicted future impacts of climate change on global agriculture

The above elements of uncertainty are all inherent as part of the foundations of the ABARE research outcomes reported under such dramatic headlines in the media, and subsequently quoted extensively by various politicians. And just as a small variation in the foundations of a tall building can have major implications by the time the upper storeys are built, so a small variation in the assumptions underlying a forty year economic projection can also have major implications for the reported outcomes. For that reason it is very important to ensure that the underlying assumptions are carefully analysed.

The ABARE research referred to above used the results of a detailed modelling project carried out by Cline (Cline, 2007). That research used a number of different techniques to project the potential impact of changes in temperature and precipitation on agricultural output by individual nations in the year 2080. To do this, he relied on the outcomes of climate projections arising from six different computerised Global Circulation Models, utilising the Intergovernmental Panel on Climate Change (IPCC) A2 scenario of future greenhouse emission levels. The A2 scenario involves the second highest level of future atmospheric greenhouse gas concentrations of all the emission scenarios that have been developed by the IPCC. This scenario projects temperature increases for Australia of approximately 3.5 °C by 2080, and a 3% reduction in average rainfall levels, with variations by region.

Having developed projections of climate change at a national level, Cline then employed a range of different methodologies to attempt to develop a consensus projection of the likely impact of climate change on agricultural output. One methodology involved agronomic models of the responses of different crops to temperature and rainfall changes, and a second involved regression equations that link regional climatic conditions to the economic output of agriculture in that region. Both approaches have limitations, especially in projecting potential future responses by farmers, in particular the potential for adaptation or enterprise substitution.

Noteworthy in Cline’s analysis was a decision to use fixed prices as a means of projecting future changes in agricultural output. Cline used 2003 prices to calculate the total value of current global agricultural output, and then applied these same prices to the projected volume of agricultural output in 2080, in order to quantify the projected change. The reason Cline used fixed prices was his observation that if future agricultural output growth slows while population and wealth growth continues, then the unit price of agricultural products will increase in the future. Unless constant prices are used, a decrease in the volume of agricultural output will lead to increased prices, and the end result could be an increase in the total value of global agricultural production by 2080, even if the total volume of production has been restricted by climate change.

An important aspect of Cline’s projections involved recognition of carbon fertilization. This is the phenomena whereby as the concentration of carbon dioxide increases in the atmosphere, the productivity of plants increases. Earlier estimates based on laboratory studies were that carbon fertilization may boost plant productivity by 30% as atmospheric carbon dioxide concentrations increase to projected future levels. Cline recognised the potential for carbon dioxide fertilization to boost future crop yields, but opted to apply a conservative 15% yield increase, which is a level that has been recorded in field experiments.

Using a fixed price approach, Cline projected that global agricultural output will decline by 16% by 2080 without carbon fertilization, and by 3% with carbon fertilization. For Australia, the projection was a decline in output of 26.6% by 2080.
without carbon fertilization, and 15.6% with carbon fertilization.

**Predicted impacts on Australian agriculture**

As noted, the ABARE research reported so dramatically in the media used the projections by Cline as the basis of some further economic modelling, to examine in more detail the potential impacts of climate change on Australian agriculture over the period to 2050. The ABARE research rested on a number of important assumptions, and ABARE was careful to note that the research outcomes represented the outcomes of an ‘illustrative scenario’.

Analysis of the assumptions underlying this ‘illustrative’ scenario highlight that in many respects, the ABARE projections are what might be considered a worst-case scenario. Firstly, the ABARE research was based on the assumption that Australian agricultural output will decline by 17% by 2050 as a result of the impact of climate change, and that there will be no beneficial impact arising from carbon fertilization. It is apparent that the 17% figure has been derived by projecting backwards from the 26.6% decline by 2080 calculated by Cline. A problem with this approach is that the relationship between temperature and agricultural output is not linear, and scientists agree that agricultural output will initially increase as temperatures rise by between 1-3 degrees, before then falling as temperatures increase beyond that point. As a consequence, a linear projection backwards from 2080 to obtain an estimate of the reduction in agricultural output by 2050 will over-estimate the projected decline in agricultural output, as can be observed in Figure 1. Rather than a decline in output by 2050, most current climate scenarios suggest agricultural output may well have increased in response to projected temperature increases by that time, but may subsequently decline as temperatures increase beyond that level.

A second important point to note about the assumptions underlying the ABARE analysis is that, whereas Cline used fixed prices to project future changes, ABARE incorporated projections of future price changes. However, contrary to Cline’s expectation that a future decline in agricultural output will result in agricultural commodity price increases, ABARE modeled a scenario under which a projected decline in future agricultural output results in slower global economic growth, and therefore reduced demand and prices for agricultural products. Not only is this assumption contrary to Cline’s, but it also depends on climate change having a negative impact on agricultural output over the period to 2050, which Figure 1 highlights may not be the case. An assumption of future reduced global economic growth rates as a result of agricultural output decline also appears questionable on the basis of the small share agriculture makes up of the GDP of developed nations (which account for the bulk of world GDP), and the relatively inelastic nature of demand for food.

A third assumption incorporated in the ABARE analysis is that Australian agriculture does not adapt to changes in future climate over the period to 2050. This is, of course, a highly unrealistic assumption, a point that was noted in the ABARE report. As later (but unreported) sections of the research identified, even the incorporation of relatively modest rates of adaptation by farmers (things like changing management systems or growing more suitable crop varieties) halved the projected negative impact of climate change over the period to 2050.

Taken together, it is apparent that the assumptions underlying the ABARE analysis were clearly a ‘worst-case’ scenario, used to illustrate the potential future impacts of climate change on the sector in the event that worst-case climate scenarios quickly emerge, that this has a dramatic impact on global economies, and that no adaptive action is taken by farmers or the broader agricultural industry in response to climate change. Emphasising this, the ABARE report repeatedly referred to
the fact that the outcomes were based on an illustrative scenario, which was not necessarily realistic.

The resulting media coverage, however, ignored all these qualifications, and to make matters worse universally misinterpreted what the results actually meant. Rather than projecting a decline in future agricultural output relative to current production levels (as was widely reported), the ABARE research actually reported the projected change in agricultural output relative to a reference case, which was an uninterrupted continuation of the current annual growth of economic output by the sector of approximately 2% per year. That is, rather than projecting a future decline in agricultural output, the ABARE projections were that climate change would result in a slightly slower rate of growth in output, over the period to 2050.

The actual results of the ABARE research are shown in Figure 2. The graph shows the ‘business-as-usual’ scenario of agricultural output increasing from the current level of approximately $33 billion per year to approximately $77 billion by 2050, in the absence of any impact of climate change. It then shows the results of ABARE’s ‘worst-case scenario’ incorporating the assumptions discussed above, which result in annual agricultural output increasing to approximately $63 billion by 2050. Also displayed is the projected outcome in the event of modest adaptation by agriculture, resulting in projected output of $69 billion per annum by 2050. If Cline’s estimates of the impact of carbon fertilization are taken into account, the result would actually be a significant increase in agricultural output by 2050, relative to the “business-as-usual” case.

As this graph highlights, the headline displayed at the start of this article is a much more accurate reflection of the actual outcomes of the ABARE research than was reported in the media, or reflected in the statements of politicians.

**Longer-term implications**

Of itself, the media coverage of the research outcomes was probably of little long-term consequence, but the incident does highlight a growing problem for public research agencies, especially those that are charged with providing objective information for industries and policymakers. The ABARE research release coincided with a visit by the Australian Prime Minister to Bali as part of global climate change negotiations, and was immediately seized on by the Prime Minister as evidence in support of Australia ratifying the Kyoto Protocol. While the ABARE research was instigated well before that event and the timing of its release was clearly a coincidence, it would be very easy to gain the perception that the research outcomes were motivated in part by political imperatives – especially once the assumptions underlying the results were examined in more detail.

This, in turn, could erode industry confidence in the objectivity of the research outcomes from Government agencies, which could have major long-term consequences. Very significant economic implications arise from decisions made by industry participants and policymakers on the basis of information contained in the outputs of Government research agencies. This makes it imperative that the research is objective, factual, and untainted by political considerations. This has generally been the case in Australia, however recent publicity suggesting that Government research agencies including Rural Research and Development Corporations, ABARE and the CSIRO are now required to have their publications ‘cleared’ politically before they are released raises concerns that this may not continue to be the case in the future.

A second issue that emerges from this incident is the need for considerable care in the way in which research outcomes are communicated to the media. The ABARE research used an ‘illustrative scenario’ based on unrealistic assumptions to test modelling methodologies and develop some initial forward projections. This subtlety was not reflected in media reports, which not only failed to note the illustrative nature of the research, but also misreported the research results as a future reduction in agricultural output, rather than a slowing of future rates of growth in output.

**References**


Developing a greater customer-focus for Australian agriculture

In October 2006, the Australian Farm Institute released the results of a research project that examined the concept of developing a greater ‘customer-focus’ in Australian agricultural production systems. The background to the research was the rapid emergence of developing nation agricultural exporters such as Argentina, Brazil, China and nations previously a part of the USSR, which have much lower production costs than developed nation farmers, and are much more price competitive in global commodity markets.

The research, which was co-funded by Elders and the National Food Industry Strategy, highlighted that the comparative advantages of Australian farm businesses were no longer cheap land or labour, but factors such as a skilled and educated workforce, high standards of quarantine and biosecurity, a robust animal health system, and well developed product integrity and traceback systems. These factors were identified as being of value in higher-value consumer markets, rather than in bulk commodity markets where the supplier with the lowest costs is more likely to succeed.

This, in turn, led to consideration of the ways in which Australian agriculture could continue to be internationally successful in the future. A key message from the research is that to succeed in higher-value markets there is a need for a much closer focus on understanding the needs (some might say whims) of consumers. The challenge for farmers is to adopt a customer rather than a production focus.

The recent strong increases in the prices of agricultural commodities globally could lead to the conclusion that the need for a strong customer focus for agricultural business managers no longer applies. Why bother going to the extra effort to understand consumer desires and tweak production systems to better meet those desires, if global demand conditions are such that any product will obtain high prices?

There are several reasons why the ‘customer-focus’ message remains as important, if not more important than it does during periods of excess supply in agricultural markets.

The first is that higher value markets continue to deliver higher value to successful suppliers, even during periods when demand more generally is quite strong. The relative advantage in being a supplier of higher value markets might reduce slightly, but is unlikely to disappear altogether.

The second is that higher-value markets cannot simply be switched on as conditions change. Much of the value in these markets appears to be based on a supplier’s reputation, the perceived quality of the product and the integrity of the brand-name, and the standards of food safety and product integrity that are part of the production system. These all take time to establish in the minds of consumers, and also often require on-farm investments in technology or management systems. Even if short-term market fluctuations occasionally make other markets appear more attractive, there is a need to consider the longer-term implications of abandoning the capital investment that has been made.

A third reason that the ‘customer-focus’ message still appears relevant is the realization that, while current buoyant demand and strong prices are certainly welcome from a farmer perspective, there is no guarantee there will not be future periods when prices are again lower and farm profitability will be under pressure (especially for farmers with higher costs of production). During such periods, those suppliers who have successfully secured higher-value markets through developing a stronger customer-focus are likely to be better insulated from low prices than those who are simply supplying a bulk, undifferentiated commodity that competes purely on price.

The Institute has commissioned further research on this topic, which will be released in June, 2008. This research is a compilation of international case-studies of farmers who have developed a strong customer focus, and who have developed a variety of different business models to service these markets. A critical question for many farmers contemplating such changes is whether the returns available justify the extra costs. This soon-to-be-released research report should help to answer that question.
Food Prices

Food prices all over the world are rising, and it is developing countries that are being greatly affected. The World Bank has issued an urgent call to those in developed nations to help reduce the rising prices.

Increased food prices have led to increased poverty and in many countries social unrest. Many food staples around the world have increased dramatically in price, for example the price of rice has increased by 75% in the past two months, and wheat prices have more than doubled in the same amount of time (ABC News). In general, the World Bank has said that food prices have climbed about 83% worldwide over the past three years.

The reasons for the food price crisis – competition from biofuels, high price of oil, drought, population growth and climate change – are straightforward enough to define, however the solution to the problem is not. The World Bank has developed what it says is a ‘new global food policy’. Through the policy emergency help will be given to a number of countries, including Haiti which has been one of the worst hit by the rising prices. The new policy will also boost agricultural productivity in poor nations, improve access to food through schools or work places and help small farmers.

A panel of experts from the United Nations Educational, Scientific and Cultural Organization (UNESCO) have put together a report about the current state of agriculture. Salvatore Arico speaking on the behalf of the experts said:

‘Modern agriculture will have to change radically if the international community wants to cope with growing populations and climate change, while avoiding social fragmentation and irreversible deterioration of the environment’.

Many are also worried that the high food prices will push countries to protectionism, which has already been seen. Some examples of countries who have banned the export of foodstuffs are Guinea, Argentina, Mexico, Russia, Ukraine, Vietnam, China, Egypt, Ethiopia and Morocco (IFPRI).

EU Update


The report said that markets for cereals have had extraordinary developments in the past few months. Prices were reported at being at record levels due to a variety of structural drivers including steadily rising food demand, biofuels, and a significant slow down in yield in the EU. The report predicted that cereal prices will continue at high levels well into the first half of the projection period, however prices won’t be as high as those which have recently been observed.

The outlook for animal products is reasonably positive for poultry, pig meat and the dairy markets. Beef production is expected to decline due to structural reduction of the dairy herd and the impact of decoupling.

The medium-term income projections indicated a rather favourable outlook as the EU-27 agricultural income is expected to grow by 18% between 2006 and 2014 in real terms.

However this favourable outlook is dependent on certain factors including the outcome of the current Doha Development Round of trade negotiations, the macro-economic environment, policies on renewable energy and future climatic conditions.

GM Corn now allowed in Mexico

Mexico has recently allowed experimental planting of GM corn crops throughout the country. The regulations were passed in an official gazette which was the last step needed to implement a law that was passed by Mexico’s congress in 2004. However the move does come with restrictions; farmers must register with the agricultural ministry and environmental authorities in order to request a permit, and GM crops will not be allowed to be grown in areas which are identified as ‘centers of origin’ which house unique strains of corn that are only found in Mexico.

Corn tariffs between the US, Canada and Mexico were disposed of in 1994 and as a result Mexico now imports 35% of total corn consumed from the US. Due to biofuels, the cost of this imported corn has risen dramatically of late and it is hoped that planting these new GM crops will increase domestic production, thus reducing the amount of corn that needs to be imported.
Pressure on EU to ditch biofuels

With food prices increasing worldwide, many have been urging the EU to ditch its biofuel plans.

The timing could not of been worse for the United Kingdom (UK), where new biofuel regulations came into effect recently. The new regulations required that 2.5% of fuel sold should be made from grains and grass. This figure is set to increase to 5% by 2010, all in an effort to reduce the amount of carbon dioxide being released into the atmosphere. Due to increasing international pressure UK Prime Minister Gordon Brown has said that if food shortages can be linked to biofuels then he will encourage the EU to rethink its policy.

The EU’s current plans are for 10% biofuels by 2020. Stefan Tangemann, Director of the Trade and Agricultural Directorate for the Organization for Economic Cooperation and Development (OECD), told Speigel Online that first generation biofuels ‘don’t hold as much potential environmental benefits as people thought when they embarked on these policies. We must come to the conclusion that maybe it is time to revisit our commitment to biofuels’.

The OECD’s criticisms of biofuels is just one of the many voices beginning to reconsider the benefits of biofuels. The strongest criticism has been from the UN, with one of their special Rapporteur’s, Jean Ziegler, describing biofuels as “a crime against humanity”. An interesting question is whether the EU will take notice of its own scientific advisory body, which reported that the 10% mixture rule should be scrapped.

USA Farm Bill update

The debate on a 2007 US Farm Bill began in early 2005, and three years later its only now beginning to move towards resolution. The current hold-up has been between the House and the Senate over funding for the bill.

The House wanted more money for a variety of programs and they have proposed a tax increase to pay for them. The Senate wanted more money for a permanent disaster program and more conservation projects, however they were unable to define any set sources of funding.

Despite the previous conflict, House and Senate negotiators have agreed on a preliminary outline of a new Farm Bill, which will set food and agriculture policy for the next five years. It is believed that the agreement will increase spending on food stamps and other nutrition programs. It is also believed that existing farm subsidies will be maintained despite this being a time of record profits for farmers.

USDA Outlook

The United States Department of Agriculture held its annual Agricultural Outlook Forum on February 21-22 in Arlington, Virginia. The event provided a forum for those involved in agriculture to come together and discuss the industry’s future.

The overall message from the conference was that the outlook for US agriculture is positive. Joe Glauber, Chief Economist at the USDA, says that continued world economic growth coupled with the depreciation of the US dollar will play an important part in the success of agriculture. Main predictions were that cropland area is likely to expand due to higher expected net returns for the major field crops.

Glauber said that he expected domestic and world wheat prices to reduce as the world wheat supply gradually increased. This increase in supply is largely due to US estimates that Australian wheat production will bounce back from the drought reduced levels of the last two years.

Ethanol production continues to be the main driver of corn prices, which are expected to increase. Corn acreage on the other hand is expected to decline due to strong competition from soybeans.

The main issue facing the livestock sector is high feed prices. A result of these is that dressed weights are expected to decrease as producers begin to market animals at a lower weight in an attempt to offset the higher feed costs. The dairy industry is currently expanding, due to strong international and domestic demand. However overall there is a small decline projected in the value of production in the livestock sector.

In terms of ‘speciality crops’ such as fruit, vegetables, greenhouse/nursery crops, sales are expected to rise modestly. Due to increased competition from field crops (which can be sold at much higher prices) it is likely that resources will be taken away from these speciality crops.

Finally, despite increasing production costs farm income is expected to remain at record levels, largely driven by strong demand for feed crops, oilseeds and food grains.

ABARE OUTLOOK

The Australian Bureau of Agriculture and Resource Economics (ABARE) held its annual outlook conference on Tuesday 4 March – Wednesday 5 March. The conference was opened by Kevin Rudd, Prime Minister of Australia.

High on the agenda for the conference was the changing nature of international trade. Biofuels, changing attitudes to tariffs, climate change and animal welfare have all had an effect on the nature of international trade. It was forecast that high prices for grains and oilseeds will continue into at least the near future, thus increasing the prices for stockfeed.

ABARE also forecast a recovery in sheep numbers, dairy production and beef herd numbers largely due to expected improvement in seasonal conditions in Australia.
Agriculture, Greenhouse & Emissions Trading Summit

A A Summit convened by the Australian Farm Institute and held on 21-22 April 2008, involving participants from a wide cross-section of organisations involved in and with the Australian agriculture sector, considered the challenges and opportunities presented to agriculture by a national greenhouse emissions trading scheme.

Participants who attended the Summit recommend that the Australian agriculture sector should recognise the significant challenges and costs presented by climate change, and be willing to make a major future contribution to help reduce Australia’s net greenhouse gas emissions. This will be in addition to the contribution the sector has already made, being the only sector of the economy that has substantially reduced net greenhouse emissions since 1990.

The Summit participants believe that Australian agriculture has enormous potential for continued growth which will further expand its role as a major efficient supplier of food and fibre to world and domestic markets, generating wealth and jobs for Australia, and in particular regional Australia. Reconciling the task of reducing agricultural greenhouse emissions while responding to growing world demand for agricultural products will be a major future challenge for government and the agricultural sector.

Australian governments, farmers, and the agriculture sector will need to jointly commit resources to prepare the sector for this change. The delegates believe that the way which this could best be achieved was through the establishment of a joint industry/government taskforce, consisting of Australian Government representatives at a Ministerial level, and leaders of industry bodies and organisations involved in the entire agribusiness chain, including farm input and service providers, farmers, researchers, processors, marketers, exporters and retailers.

Proceedings

Delegates heard from a variety of speakers who came from a wide range of backgrounds and presented their expertise on a variety of important aspects of climate change. Proceedings will be available for purchase on the AFI website. These speakers included:

• Blair Comley, who is the Deputy-Secretary of the Australian Government Department of Climate Change. In this role he is closely engaged in the development of Australia’s ETS to commence in 2010.

• Dr Brian Fisher, who was formerly director of ABARE, spoke of the Economic Implications of an Emissions Trading Scheme.

• Cher Brethour who is a Canadian agricultural Economist who works with the George Morris Centre which is an independent agricultural policy research institute in Canada.

• Charlie Pedersen is the national President of the Federated Farmers of New Zealand, he has been actively involved in negotiating the role of agriculture in the NZ emissions trading scheme.

• David Crombie, has had extensive involvement in Australian agribusiness and is currently the President of NFF. He recently attended the United Nations Climate Change Conference in Bali.

• Dr Michael Robinson is Executive Director of Land & Water Australia, he spoke to the conference about his involvement in developing a greenhouse research program for Australian agriculture.

• Dr David Whitehead is a senior scientist with Landcare Research in New Zealand. His research has a strong focus on greenhouse inventory measurement methods and current and potential future greenhouse mitigation technologies.

• Dr Beverley Henry is currently working on greenhouse policies for Meat & Livestock Australia. Her presentation focused on measurement issues and mitigation options.

• Dr Richard Eckard is currently involved in greenhouse research at the University of Melbourne his presentation provided good insight livestock and fertiliser measurement issues and mitigation options.

• Armineh Mardirossian is the Group Sustainability Manager for Woolworths. She was able to talk to the conference about possible supply chain implications for the agriculture sector.

• Dr Tingsong Jiang is a senior economist with the Centre for International Economics (CIE). He is currently involved in researching the economic implications of an emissions trading scheme for Australia.
Emerging Agricultural Exporters

Over the past two decades, the landscape of global agricultural markets has changed dramatically. Once dominant exporters such as Europe and the United States have seen their share of global markets decline; while nations such as Brazil, Argentina, Chile, China, India and Russia have emerged as major exporters in specific commodity markets. How should developed-economy agricultural exporters such as Australia respond to the changes?

The May 2008 edition of the Farm Policy Journal will contain a series of papers seeking to provide answers on these challenging issues.

Bill Pritchard is an economic geographer whose research has focused on global change in agriculture, food, and rural places. He has authored two books, edited four others, and written more than forty refereed publications. He is an active member and former convener of the Australia & New Zealand Agri-Food Research Network, as well as many other research organisations. His article looks at India as an emerging exporter of agri-food. The article examines the factors which are behind India’s increased production in this area.

Professor Greg Brock earned his PhD in Economics from The Ohio State University and his B.A. in Economics from the University of Michigan in 1983. He has taught Economics at The Ohio State University, Kent State University, Vilnius University (Lithuania), Volgograd State University (Russia), Moscow State University (Russia) and University of Veracruz - Jatapa (Mexico). Professor Brock worked as a Program and Project Evaluator for USAID/Moscow from 1996-1998, and as an Economic Consultant for KPMG/Barents Group LLC in Moscow from 1994-1995. His article discusses the current world wheat situation and the possible threat posed by Russia and the Ukraine.

Ronald Thompson is a 2006 Nuffield Australia Farming scholar, he travelled internationally in 2007 researching agricultural production and workforce issues. He operates a 935ha intensive, irrigated farm enterprise at Chinchilla, Queensland, with wife Sally. They produce a diverse range of horticultural crops, cotton and cereals, and run up to 400 head of beef cattle on improved pasture. Mr Thompson has an Advanced Diploma in Agricultural Business Management and is a director of Nuffield Australia. Ronald’s article examines Brazil’s impressive agricultural productivity, particularly the countries’ current beef situation.

Dr. Sophia Wu Huang is an agricultural economist at the U.S. Department of Agriculture’s Economic Research Service. She began analyzing major U.S. agricultural markets in East Asia, especially Taiwan, and then moved on to researching international trade of fruits and vegetables. She is a University of California graduate of agricultural economics and statistics studies. Her work includes major authorship and coordination of Global Trade Patterns in Fruits and Vegetables (2004), as well as many ERS articles. Sophia’s article looks at China’s expansion within the vegetable export market in both fresh and frozen. While the article looks at the threat which China poses to other countries it also looks at the challenges which China faces in terms of vegetable production.

Wayne Prowse has worked for 25 years in the food industry, initially at Edgel Birdseye (now Simplot) before moving on to Horticulture Australia Limited (HAL) to manage domestic and export marketing programs for macadamias, stone fruits and avocados. In his current role Wayne is HAL’s Export Development Manager within an export team that covers market access, market development and export promotion for all Australian horticultural products. He participates as a representative of HAL on the Southern Hemisphere Association of Fresh Fruit Exporters (SHAFFE). Wayne’s article looks at how Chile, Argentina, Brazil and South Africa are increasingly beginning to compete with Australia in horticulture exports, the article also defines current expanding markets which Australia should concentrate on.

Dr. Deepak Shah is currently a Senior Faculty Member at the Gokhale Institute of Politics and Economics in Pune, India, which is a leading research and teaching Institute for Economics in India. He has been working in the area of agricultural and rural economics over the last 20 years. He has accomplished large number of research projects on varied issues, funded by the Ministry of Agriculture and Planning Commission, Government of India. He is also a member of Research and Advocacy (READ) Group of Oxfam G.B. Initiatives (Make Trade Fair), Centre for Trade and Development, New Delhi, India. Deepak’s article looks at how India has become a major player in the world dairy market despite having many obstacles to overcome in order to get there.

The May edition of the Farm Policy Journal will be released in early June. It can be viewed by members and subscribers, or purchased by non-members, at www.farminstitute.org.au/publications/journal2
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