

The export-oriented nature of much of Australia's agricultural sector means developments in global markets will have a significant effect on the country's food sector over the next 2 years. Developments in the large U.S. economy, and the spinoff effects on international economic activity, will be of critical importance to global demand for food and agricultural commodities. Australian producers and traders of traditional commodities, fresh horticultural products, and processed food products will continue to look to Asia as the largest single geographic market for their exports. Drought in parts of Australia in 2002 can be expected to adversely affect farm incomes and possibly contribute to higher retail prices for some foods in 2002-03.

Macroeconomic Situation and Outlook

Since the beginning of 2002, there have been indications that economic activity in the United States is recovering. Stronger U.S. economic performance, and therefore higher import demand, will provide support for economic recovery in other parts of the world, especially in Western Europe and the newly industrialised economies in Asia. Less promising for Australian food and agriculture is that economic activity in Japan, the Australian industry's largest single market, is expected to remain weak in the next few years.

Despite the global economic slowdown, the performance of the Australian economy has been strong. Over the past year, domestic demand has strengthened, led by robust growth in housing activity. A sharply weaker Australian exchange rate, especially against the U.S. dollar, has provided strong support for Australia's export performance.

In the next 12-18 months, economic growth in Australia is expected to remain firm. While activity in the housing market is expected to moderate, growth in consumer spending is likely to strengthen, and a recovery is expected in business investment expenditure.

During the course of 2001, Australia's official interest rate was progressively reduced from 6.25 percent to 4.25 percent. The main factor affecting Australian interest rates is the outlook for economic growth and inflation. Given the outlook for continued strong growth in Australia, and hence higher inflationary pressures, Australian interest rates are likely to increase gradually in 2003.

Following a sharp depreciation in the first 9 months of 2001, the Australian dollar has gradually appreciated against major international currencies. Between October 2001 and August 2002, the Australian dollar appreciated by around 8 percent on a trade-weighted basis, 9 percent against the U.S. dollar, 10 percent against the Japanese yen and 2 percent against the euro.

Short-term movements in the Australian dollar are likely to be influenced by the prospects for economic recovery in the major world economies, especially in the United States and Japan, and hence by the outlook for Australia's terms of trade and export performance. Stronger world economic growth and associated prospects for higher commodi-

ty prices on world markets would provide support for an appreciation of the Australian dollar.

One important factor that will affect Australian exchange rate movements is the strength of the U.S. dollar. The U.S. dollar has appreciated by around 15 percent on a trade-weighted basis and 20 percent against the Australian dollar since early 2000. The Australian dollar is assumed to average marginally higher in the short term, rising from an average of US\$0.52 and TWI (trade-weighted index) 49 in 2001 to US\$0.54 and TWI 52 in 2002.

Food Prices and Consumption

Australian retail food prices increased by 6.5 percent in 2001. The increase reflected, in large part, hefty rises in prices of unprocessed or lightly processed foods. In the year to December 2001, major increases were recorded in fruits and vegetables (16 percent) and meat and seafood (15 percent). Although food prices are forecast to rise 3.5 percent in 2002 and 3 percent in 2003, the final outcome will be heavily dependent on weather conditions (especially for fruits and vegetables) and global markets (especially for livestock and crop products).

Developments in the domestic Australian food market are important for the rest of the economy since they have a significant effect on overall inflation. In 2001, food accounted for about one-quarter of the 4.4 percent rise in overall inflation as measured by the consumer price index. Retail prices of beef (which rose 24 percent in the year to December 2001) are likely to fall in 2002 and 2003, due to lower world prices for beef. Lower expected Australian dollar prices of other meats and dairy products will also help moderate domestic inflationary pressures.

With world grain prices having risen since mid-2002, Australian wheat growers are expected to receive higher prices for their 2002 planted crop. An assumed stronger Australian dollar is expected to partly erode the effects on earnings of improved world (U.S. dollar) prices due to drought in parts of North America, a decline in global stocks and continuing firm demand. Prices of the principal oilseed in Australia, canola, are forecast to be substantially higher for the 2002 crop. Smaller Canadian and Australian crops and a likely reduction in South East Asian palm oil production are expected to be the main factors influencing prices. The average return per tonne of sugar cane harvested is forecast to be around 23 percent lower in 2002-03 (July-June), as world prices average lower and a stronger Australian dollar erodes sales revenues.

From a high of US\$1.59 (A\$3.06) a kilogram dressed weight equivalent in 2001-02, Australian saleyard prices for beef cattle are forecast to average 23 percent lower in fiscal 2002-03 (July-June). The drop in prices reflects an expected increase in the turnoff of cattle for slaughter, weak demand in Japan after last year's discovery of bovine spongiform encephalopathy (BSE or "mad cow disease") in the Japanese domestic herd, and U.S. tariff rate quota limits on growth in

exports to that market. Prices are forecast to fall further in 2003-04 as numbers of cattle slaughtered grow and more beef is diverted to lower priced markets. Saleyard prices of lambs are forecast to fall in 2002-03 because of increased production and growing competition in the domestic market from lower priced beef. The farm-gate price of milk is forecast to fall 20 percent to US\$0.13 (A\$0.24) per liter in fiscal 2002-03 as international prices for dairy products fall.

Food Processing and Marketing

The Australian market for food has been growing relatively strongly. Despite lower economic growth in 2001, sales grew in real terms. The outlook for domestic food sales is for further growth in 2002 and 2003 as economic growth picks up.

The total value of food sales in 2000-01 was estimated at US\$38 (\$A71) billion, an increase of 6 percent (in Australian dollar terms) over the previous year. Supermarkets accounted for over 63 percent of all food sales and increased their total value of sales by around 6 percent. Of the other main forms of food retailing, the café and restaurant sector recorded strong sales growth of 11 percent, while sales from other outlets (mainly delicatessens, butchers shops, and greengrocers) declined by 8 percent. Sales by takeaway food outlets grew by 11 percent, reversing a previously declining sales trend evident since 1996-97.

Exports of food and beverages (in Australian dollars) grew in value by 20 percent in 2000-01, to US\$13 (A\$24) billion. Most of the growth was in shipments of substantially transformed foods, including meats, dairy products, seafoods, and wine. Exports of more elaborately transformed foods remained low, at around 1.2 percent of total exports. Most of the trade in food continues to be focused on the Asian market. Australian exports of processed food and beverages to Asia were valued at US\$6.3 (A\$11.7) billion in fiscal 2000-01 (July-June year). Processed food exports to the European Union in 2000-01 were worth US\$1.0 (A\$1.9) billion and those to North America were valued at US\$1.9 (A\$3.6) billion.

Although there are no recent official data on the subject, it is clear that merger and acquisition activity continues to be significant in the Australian food industry. As a result, the Australian food processing industry is becoming highly concentrated. Two major domestically owned supermarket chains, Woolworths and Coles, dominate the Australian food retail market. These firms currently account for around 70 percent of total retail food and grocery sales (AFFA 2002, p. 8). Two foreign-owned supermarket chains (the German retailer, Aldi, and the South African retailer, Pick 'n Pay) have started to establish themselves in food and grocery retailing.

New product development and branding are increasingly dominating global consumer markets. As is the case in other developed countries, there have been significant shifts in the way different groups in the Australian food supply chain influence the type of products available to consumers. Major retailers and food service providers, rather than food processors, are increasingly shaping the market for products and hence for innovation (Marceau and Wixted 2002).

In many cases, innovation in the Australian food market is mainly about competition between existing products. Such competition is assisted by demographic trends, particularly the ageing of the population and the related demand for easy-to-prepare foods and packaging in single portions in supermarkets (Marceau and Wixted 2002). Increasing numbers of women with families in the workforce, and hence less time to prepare meals, plus the related trend toward more meals being eaten in restaurants or taken away for consumption at home, are also providing opportunities for innovation in food products.

Agricultural Production and Trade

The gross value of Australian farm production (food and fiber) is forecast to contract by 15 percent in 2002-03 (July-June) to around US\$18 (A\$32) billion. The lower earnings are expected to result largely from smaller crops due to drought and reduced prices for farm products such as beef, sheepmeats, wool, and dairy products — affected in part by an assumed stronger Australian dollar. The net value of farm production (the residual between gross value and costs) is forecast to fall by over 60 percent to US\$2 billion (A\$3.7 billion) in 2002-03. The total value of farm exports from Australia is forecast to be down 7 percent to US\$15.8 billion (A\$28.7 billion) in 2002-03.

The development of an El Niño weather event since around mid-2002 is expected to have a substantial effect on Australian crop and grazing livestock production in 2002-03. Lack of rain in some of the main growing areas means plantings of the three main winter grains — wheat, barley, and canola — are estimated to total around 15 million hectares (37 million acres) in 2002-03, down from 17.1 million hectares (42.3 million acres) in 2001-02. The smaller planted area and well-below-average yields in most areas are forecast to result in total production of wheat, barley, and canola falling by over 40 percent in 2002-03, to around 19 million tonnes. Continued dry weather since these forecasts were made in early September mean the final harvest is likely to be even smaller. Sheep numbers are estimated to have fallen 3 percent to 113 million in the year to June 2002, and are forecast to decline further to around 112 million in 2003 as producers respond to relatively high prices for mutton by turning off large numbers of adult stock for slaughter. The national cattle herd (beef and dairy) is forecast to rise from 28.8 million in June 2001 to around 30.9 million in June 2003. Milk production is projected to rise 2 percent to 11.5 billion liters in 2002-03 as the herd grows.

Food and Agricultural Policy

With 60-70 percent of Australian farm output (by value) exported, international trade reform remains a key policy objective for the government. The economic benefits of global reductions in agricultural protection to most developing and developed countries (including Australia) are likely to be significant.

A number of actions have been identified by the Australian Bureau of Agricultural and Resource Economics (ABARE) as being essential if

the current WTO agriculture negotiations are to achieve fundamental reform in world commodity markets. The basic requirement of a successful multilateral round of negotiations is large reductions in actual levels of market-distorting protection and support to agriculture in all countries (ABARE 2001). This can be achieved by increasing access to markets, eliminating export measures that distort trade, and eliminating as far as possible market distortions arising from domestic support for agriculture.

A range of related issues will also need to be negotiated in order to achieve a successful outcome to the current round of the WTO. These include dealing with so called “multifunctionality of agriculture” arguments (promoted by supporters of continued high levels of protection), and the concerns of developing countries about the benefits to them of agricultural trade liberalization (Roberts, Podbury, and Perry, 2002). Maintenance of high protection in some developing countries, which would be to their own economic cost, would prejudice the chances for a successful outcome for agriculture from the WTO round.

Efforts to reduce regulation and improve economic efficiency within Australia will continue. In the case of grains, state governments have divested themselves of their rail networks and corporatised and privatized their grain storage facilities. Such changes have contributed to greater entrepreneurship, innovation, and lower costs in the marketing chain, and to more opportunities for growers to respond to consumer needs. The dominant grain marketer, AWB Limited, which was listed on the stock exchange in 2001, has retained its single-desk export marketing powers for Australian wheat until at least 2004. At that time, its performance will be reviewed in terms of the benefits to the grains industry and to the wider community. In the state of Victoria, the previous single-desk marketing arrangement for barley was abolished in 2001.

A major future challenge for the Australian grains industry will be dealing with the related issues of identity preservation and product integrity. To date, there has been little interest or acceptance of the planting of genetically modified grain crops within Australia. This largely reflects problems with consumer acceptance. It has also to be established how the reputed gains from sowing genetically modified crops — largely in the form of reduced costs of production — measure up against any market premiums or discounts that may apply to such crops.

In adopting GM varieties of crops, it is likely to be costly to establish testing procedures to determine the presence or otherwise of genetically modified varieties (identity preservation), and then to maintain a segregation system through the marketing chain (product integrity) to guarantee supply against buyer requirements. So far, the premiums needed to justify the large-scale adoption of such testing procedures do not appear to have been established in the Australian market place (Connell, Barrett, and Andrews, 2002).

Food Safety

Food safety is a key public health policy issue because of the economic costs of treatment for affected individuals and productivity losses asso-

ciated with foodborne illness, and management of the food production and distribution system to reduce risks. The importance of food safety issues in trade is also becoming more important, particularly under the sanitary and phyto-sanitary (SPS) arrangements of the food trade framework, agreed under the Uruguay Round of the WTO.

Reliable data are not available on the actual incidence of foodborne illness in Australia. Nevertheless, it is estimated that there are over 4 million cases of foodborne illness every year in Australia (ANZFA 1999). Estimated rates of foodborne illness in Australia are 220 cases per 1,000 of population, higher than for New Zealand (190 cases per 1,000) and the United States (175 cases per 1,000). There is some evidence that the number and severity of cases is increasing. Foodborne illness was estimated in 1999 to cost the Australian community over US\$1.7 (A\$2.6) billion a year (ANZFA 1999).

Several factors are responsible for the increasing risk of foodborne illness. These include changes to human demographics, changes to the food supply, new emerging pathogens and improved detection of these, and changes in eating patterns.

An aging population can be expected to be increasingly susceptible to severe foodborne infections. Those at risk include the elderly, the very young, pregnant women, and immuno-suppressed people including cancer and transplant patients.

Structural changes in the food supply system, including intense farming practices, more extensive food distribution systems, and growth in consumption of minimally processed foods can contribute to an increased risk of foodborne illness. For example, fresh fruit and vegetables are susceptible to faecal contamination and, when consumed without a bacterial “kill step” such as cooking, can cause foodborne illness. The time between the processing and consumption of food is also increasing. This increases the opportunity for contamination and time/temperature abuse of the product and hence the risk of foodborne illness.

Previously unrecognised microbial foodborne hazards have emerged as a result of changes in food consumption (Collins 1997). Many of the most significant foodborne pathogens were unrecognised as causes of foodborne illness 20 years ago. The emergence of drug-resistant pathogens has also significantly influenced the costs of their treatment. The incorrect therapeutic use of anti-microbial agents in human and animal populations can also create conditions that favour survival of resistant bacteria.

Fast food restaurants and salad bars are today a primary source of food consumption for many Australians. Around 60 to 80 percent of foodborne illness arises from the food service industry. Consequently, with the increasing trend toward takeaway food and dining out, there is the likelihood of increasing numbers of people contracting foodborne illness.

Australia currently has a combination of food safety systems, largely underpinned by the international standard in food production and processing — Hazard Analysis and Critical Control Point (HACCP) — principles. A new joint food standards code — under the auspices of the Australia New Zealand Food Authority — will replace existing

food standards codes in both Australia and New Zealand in January 2003. The Authority was established in 1991 with responsibilities for improving food safety and standardising the approaches used in relation to food safety and food trading issues.

Operational responsibility for enforcing domestic food safety standards falls to state government bodies. Enforcement of safety and other standards associated with food exports and imports is the responsibility of the Australian Quarantine Inspection Service, a federal organisation. Food processing accreditation is compulsory for some higher risk products including fish and seafood, dairy products, eggs, and meat.

Adoption of formal HACCP risk management strategies by food processing firms is voluntary and funded by the firms involved as a normal business cost. While no data exist on the proportion of firms covered, the potential for litigation for failure to meet a high duty of care ensures high compliance. All food sales outlets are required to be licenced and are regularly inspected by state health inspection authorities.

In an effort to promote harmonisation of food safety issues, Australia has been an active participant in international scientific bodies such as Codex. On trade access and food safety, Australia applies the key provisions of the Uruguay Round SPS Agreement on food imports. This means that standard scientifically based risk assessment procedures are used for determining whether foods that may pose some risk to human, animal, or plant health can be imported and under what conditions. Some of these assessments — in relation to imports of fresh salmon, pork, chicken, and some fruits, for example — have proved contentious. Refusal of some imports following risk assessments have resulted in claims by applicant exporters that market access might be being restricted for non-scientific reasons.

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AUSTRALIA

	Units	1998	1999	2000	2001	2002 ^e	2003 ^f
FOOD CONSUMPTION PATTERNS ^a							
Per capita calorie intake	Cal/day	3059	3056	3053	3050	3047	3044
Animal products	Cal/day	1028	1023	1018	1013	1008	1003
Vegetable products	Cal/day	2031	2033	2035	2037	2039	2041
% Protein	per cent	13.9	13.9	14.0	14.0	14.1	14.1
% Fat per cent	31.3	31.2	31.2	31.1	31.0	31.0	31.0
% Carbohydrates ^{b,c}	per cent	50.1	50.2	50.3	50.4	50.5	50.6
FOOD PRICES							
Disposable personal income ^{d,e,f,g}	US\$/capita	13334	14150	13294	13458.33842	13668	13884.22443
% of disposable income for total food ^{d,b}	per cent	14.5	14.4	14.2	14.1	14.0	14.0
% disposable income food away from home ^{d,b}	per cent	1.7	1.9	2.0	2.0	2.1	2.1
Food price index ⁱ	1989-90=100	122.2	127.1	131.3	139.9	144.8	148.9
General price index (CPI) ⁱ	1989-90=100	121.1	122.9	128.4	134.0	137.9	141.8
POPULATION DEMOGRAPHICS ^e							
Total population	million	18.8	19.0	19.2	19.4	19.6	19.8
Urban ^j	million	15.3	15.5	15.7	15.8	16.0	16.1
Non-urban	million	3.5	3.5	3.5	3.6	3.6	3.7
Share of population in following age groups: ^k							
0-4 years	per cent	6.8	6.7	6.6	6.5	6.3	6.1
5-14 years	per cent	14.1	14.0	13.9	13.7	13.6	13.5
15-19 years	per cent	7.1	7.0	7.0	7.0	6.9	6.8
20-44 years	per cent	38.1	37.9	37.7	37.4	37.2	37.1
45-64 years	per cent	21.8	22.2	22.6	23.0	23.4	23.8
65-79 years	per cent	9.5	9.5	9.4	9.4	9.4	9.5
80-over	per cent	2.7	2.8	2.9	3.0	3.1	3.2
Median age of population	years	34.6	34.9	35.2	35.4	na	na
Female labour force participation ^l	per cent	53.9	53.6	55.0	55.1	na	na
LIFE EXPECTANCY ^m							
Males	years	75.7	75.9	76.2	77.4	77.4	77.36
Females	years	81.4	81.6	81.8	82.6	82.6	82.62
FOOD INFRASTRUCTURE							
Trade capacity							
Grain exports ⁿ	1000 Tons	21620	21762	21094	22194	20500	17800
Grain imports ^{b,n}	1000 Tons	51	45	44	43	45	50
Total food and ag trade ^o	million US\$	13504	14336	13414	13483	13600	12735
Total food and ag exports ^{o,p}	million US\$	10960	11786	11038	11163	11300	10613
Perishable products ^{o,p}	million US\$	3292	3553	3838	3520	3535	3276
Fishery exports ^p	million US\$	935	975	1157	1128	1212	1270
Total food and ag imports ^p	million US\$	2544	2550	2376	2320	2305	2310
Perishable products ^p	million US\$	596	600	620	630	630	630
Fishery imports ^q	million US\$	378	499	456	451	na	na
Port capacity ^{rs}	1000 TEUs	2287	2563	2785	2845	na	na
Road access ^t	1000 kms	803	804	806	808	na	na
Rail access ^t	1000 kms	39.8	39.9	40.3	40.6	na	na
Telecommunications	million US\$	na	na	na	na	na	na
Power Generation ^{b,u}	GWh	202358	207374	211183	214255	220344	225184
Percentage of population w/refrigerators	per cent	100	100	100	100	100	100
Post harvest losses		na	na	na	na	na	na
ROLE OF AGRICULTURE AND TRADE IN THE ECONOMY ^b							
Agriculture as a share of GDP ^d	per cent	2.8	2.8	2.8	2.8	2.8	2.8
Self sufficiency in grain ^w	per cent	322	293	285	290	286	283
Self sufficiency in horticultural products ^{p,q}	per cent	182	161	196	204	na	na
POLICY TRANSFERS ^x							
Consumer subsidy equivalents	per cent	-3	-2	-3	na	na	na
Total transfers (subsidy/tax)	Million US\$	-212	-123	-168	na	na	na
Transfers per capita	US\$/capita	-11	-6	-9	na	na	na
MACROECONOMIC DATA							
GDP Growth	per cent	5.6	4.7	3.7	2.3	3.7	3.8
Exchange rate	US\$/A\$	0.63	0.65	0.58	0.52	0.54	0.55
Interest rate ^y	per cent	8.2	8.0	9.2	9.3	8.4	8.7

Estimates are in bold face na = not available

a. Source: FAO database.

b. Data on a financial year (July-June) basis (2000=2000-01).

c. Source: ABS, Apparent Consumption of Foodstuffs and Nutrients Australia, cat. no. 4306. Data beyond 1992 have been extrapolated from historical trend.

d. Source: ABS, National Income, Expenditure and Product, cat. no. 5206.

e. Source: ABS, Australian Demographic Statistics, cat. no. 3101.

f. In real terms.

g. Series has changed from that reported in previous years, for example now includes investment income from retirement funds.

h. Source: ABS, Retail Trade, cat. no. 8501.

i. Source: ABS, Consumer Price Index, cat. no. 6401.

j. Defined as sum of persons in population centres greater than 30 000 residents.

k. Source: ABS, Estimated Resident Population of Australia, cat. no. 3201.

l. Source: ABS, Labour Force, cat. no. 6203.

m. Source: United Nations, World Population Prospects 1994 revision.

n. Source: ABS, Foreign Trade: Magnetic Tape Service, cat. no. 5464.

o. Data expressed in chain volume measures. Reference year is 1999-00. Balance of payments basis.

p. Source: ABS, International Merchandise Trade - Australia, cat. no. 5422.

q. Source: ABS, International Merchandise Imports - Australia, cat. no. 5439.

r. Total of major Australian ports of Brisbane, Sydney, Melbourne, Adelaide and Fremantle.

s. Source: Bureau of Transport and Communication Economics, Waterline, issue no. 14.

t. Source: ABS, Yearbook of Australia, cat. no. 1301.

u. Source: ABARE database.

v. Source: ABS, Detailed Country by Industry, Foreign Investment in Australia and Australian Investment Abroad - Total Direct Investment.

w. Source: ABARE, Australian Commodity Statistics, 2001; ABARE, Australian Commodities, March 2002.

x. Source: OECD, Agricultural Policies in OECD Countries, 2001.

y. Prime lending rate to large businesses.