

RURAL



outlook

January 1998

Keeping up with the mega-trends

Special report

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Issue 3/97, Item Number COR011

Summary

With commodity prices fluctuating daily and production levels changing frequently, we need to be nimble in managing our businesses on a day to day basis. However, there are forces at work over much longer periods of time which also have a tremendous impact. In this report we identify the top twenty four “mega-trends” and discuss how individual businesses can position themselves to benefit from the opportunities.

Most of the trends affect everyone in the marketing chain, from input suppliers, primary producers, processors, exporters and retailers to banks. They range from slow moving “hard to see” trends like liberalisation of world trade right through to things which are easy to see like the use of computers on farms. We present the facts about some of the common misconceptions in the industry such as the value of agriculture to the economy (it is important), rural population growth (though declining in some areas, overall it is increasing almost as fast as in the cities), farm employment (it is stable) and farm rates of return (range from very high to very low).

In our view the most influential mega-trends are:

- *rapidly rising population and incomes in developing nations, are lifting demand for fruit, vegetables and higher protein food, and have been driving our food export growth for two decades. While conditions are presently difficult in many of the Asian economies, the long term potential is still very good.*
- *rising consumer expectations of quality are the underlying force behind a wide range of developments in the marketing chain including quality assurance, vertical integration and branding;*
- *the cost/price squeeze is likely to moderate over the next few years, but continue to lead to fewer and larger commercial farms at one end of the scale while lifestyle farms continue to become more popular;*
- *information technology is allowing businesses to seek efficiencies at a whole new level through market information, communication with buyers, financial management and remarkably improved banking services.*

Increasingly, our ability to take advantage of these trends will determine the success of our business. For the most part the agribusiness sector is reacting positively to these pressures and is well placed for a bright future: Are you keeping up with the mega-trends?

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World Food Demand

World food demand is continuing to grow

The world population is projected to grow to 7.2 billion by 2010, up from 5.3 billion in 1993. The growth rate peaked at 2.1% pa in 1965-70 and has since declined progressively to around 1.7% pa. Consumption of cereal grains is increasing at about the same rate. Demand for food will continue to increase, but the rate of growth will slow because a) the rate of population growth is slowing; and b) the rate of growth in per capita cereal grain consumption is slowing. Populations in developing countries (including Asia) are rising at an average 2%pa. Increased urbanisation and rising incomes in Asia are causing a shift to more diversified diets with higher consumption of meat, milk, fruit and vegetables at the expense of cereals¹⁹. ***Rising demand for food (including processed food) in developing countries (particularly in Asia) will provide rapidly expanding opportunities for developed exporters like Australia.***

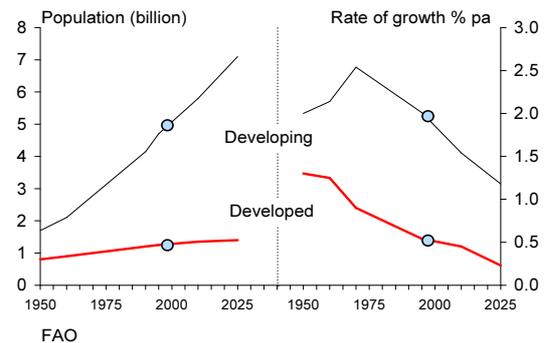
World agricultural production is increasing

Despite environmental constraints there is still potential to increase food production substantially in the decades ahead. Various international studies have estimated that world cereal production can grow by between 1.5% and 1.7% pa in the period to 2010 which will be enough to satisfy demand. Much of the growth will come from countries in Africa, Latin America and the former Soviet block. There is scope to increase yields through a greater use of inputs and continued technological progress, particularly in developing nations. This is despite limitations imposed by land degradation, water availability and urban encroachment^{20,21}. ***Concerns that future global food supply will be inadequate to meet demand are poorly based. Cereal production will grow fast enough for grain prices to continue to fall in real terms, but at a slower rate than in recent years.***

Exports are the growth area of agribusiness

Australia has the combination of a small domestic market with a large and increasing output of food and fibre. Consequently, expansion in agriculture is primarily through exports. The value of exports as a proportion of farm output has been on a long and generally upward trend from 58% in 1969/70 to 80% in 1995/96. The most rapidly expanding markets for exports are in Asia. ***The areas of agriculture which are expanding most rapidly are generally those which are most heavily export oriented. They include dairy products, wine, beef, sugar and cotton.***

World Population Growth



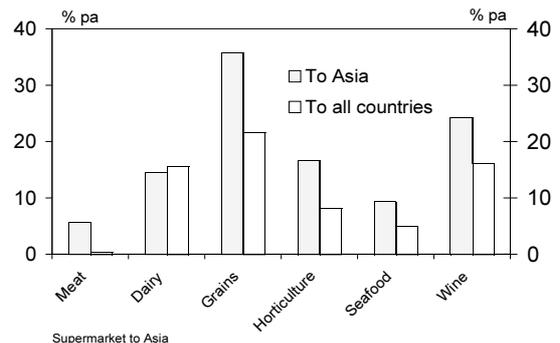
Cereal Projections to 2010

Future 1991-2010	Percent per annum increase		
	Region	Past 1970-80	Past 1980-91
FSU	—	—	0.2-1.5
Developed	2.9	0.2*	1.0-1.3
Developing	3.1	2.7	1.8-2.1
World	2.7	1.6	1.5-1.7

*influenced by the 1985 US Farm Bill which reduced US cereal area by 19% over a two year period.

Source: Duncan R, World Food Markets into the 21st century, ANU

Export Growth to Asia by Sector, 1992-1997



Developments in Marketing

Consumers are more discerning

Consumers are walking into the supermarket looking for increasingly highly processed and convenient foods; are eating more fast food; and are expecting their food to be uniform, safe, and (sometimes) green. The need to guarantee uniformity and safety puts more stringent requirements on processors, and in turn, producers. Therefore, producers are focussing more on market requirements. Meeting these requirements entails adoption of management practices designed to produce goods of the required type and quality; supply contracts between producers, processors and retailers; and participation in the appropriate quality assurance programs. ***Opportunities exist for producers to obtain premiums for the right quality, and contracts for the right quantity.***

Diversifying, Branding and Value Adding.

Farm output is diversifying away from the staple commodities of beef, wool and wheat and towards other products such as horticultural crops, cotton, canola and aquaculture. The proportion of the staple commodities has fallen from 50% to 40% since 1980. The industry is moving towards finding niche markets and adding value to raw materials by specific branding as opposed to generic advertising. ***Producers must be aware of the final market for their product and be able to produce desired quality, finding niches where appropriate.***

Business relationships are getting closer

The need to satisfy market requirements as efficiently as possible (with absolute control over the final product) is leading to greater vertical ownership, where one company may have an investment in production, processing and exporting. The cotton, wine and beef industries have relatively high rates of vertical ownership. For example: the third largest meat processor, Nippon Meat Packers, is a Japanese owned company which is involved with exporting, processing through five abattoirs, and production through two feedlots. However, ownership is not the only way to achieve marketing efficiency. In most agricultural industries, other forms of alliance such as supply contracts between producers, processors and retailers are becoming increasingly common. Joint ventures are another way to achieve closer business relationships. ***Success will come from close ties between producers and those further down the marketing chain.***

Consumer tastes

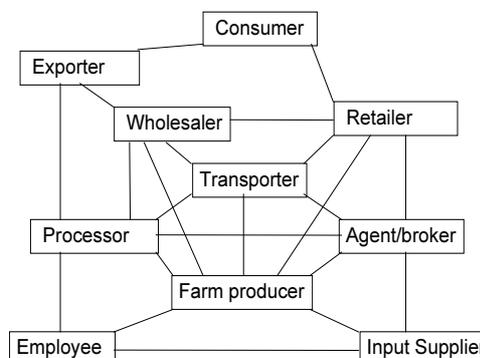
"The key factor in ensuring repeat business is the delivery of consistently safe, high quality, fresh hot food... the second important factor is the quality of raw materials when delivered to the back door. To put it in perspective, if McDonald's provides a perfect product 99.9% of the time and a substandard product just 0.1% of the time, they would sell a substandard and unacceptable product more than once every three seconds around the world. In Australia they would not meet customers' expectations one thousand times every day"

Stephen Jermyn, Exec. Vice President, McDonald's Australia 1995.

Branding & Niche Marketing

Traditional Approach		Branding Approach
Beef	→	Woolworths Scotch Fillet
Cheese	→	King Island Brie
Milk	→	Dairy Farmers Lite White
Lamb	→	Illabo Lamb
Apples	→	Batlow Apples
Wheat	→	Australian Prime Hard

Relationships in the marketing chain



Economic Pressures on Farms

Pressure on the terms of trade will continue

For the last two decades farm costs have risen much faster than farm prices, putting a lot of pressure on farmers to increase the volume of output relative to inputs. The terms of trade (ratio of prices received to prices paid) has been on a downward trend since the mid 1970s, falling from just over 180 index points in 1973/74 to a low of 80 points in 1990/91¹⁰. While we expect the terms of trade to continue to decline in the longer term, for the rest of the 1990s, downward pressure on the terms of trade is likely to ease because rises in farm costs (and general inflation) are likely to be lower than in the 1970s and 1980s. **While adjustment pressures are likely to continue over the next decade, in the short term the rural sector will benefit from a low inflation environment (including relatively low interest rates).**

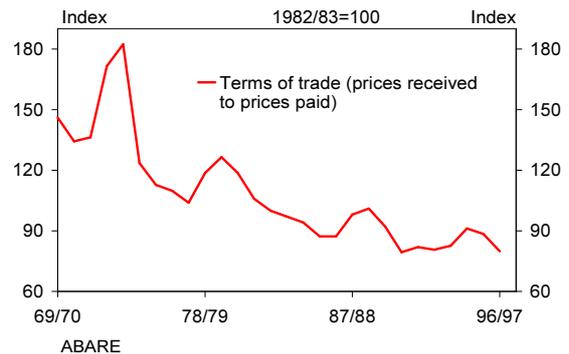
Productivity is rising rapidly

The rural sector has shown a high propensity to adapt and improve. Productivity (total factor) in the rural sector increased by an average 2.7% a year in the seventeen years to 1993/94 – a rate which compares favourably with the rate for the general economy of around 1% pa. The sustained increase in productivity has kept Australian agriculture internationally competitive across a range of products. Productivity growth was much faster in broadacre cropping farms (4.6% a year) where advances in plant breeding and technology have been most rapid, than in the livestock industries (1.6% on beef farms, 1.0% on sheep farms). Productivity was also much higher on larger farms (3.1% a year) than on medium sized (1.9%) and smaller farms (0.9%), mainly due to their ability to benefit from new technology^{11,12}. **Larger farms have an advantage over smaller farms when it comes to staying competitive. Using capital (particularly machinery and structures) efficiently is crucial for success.**

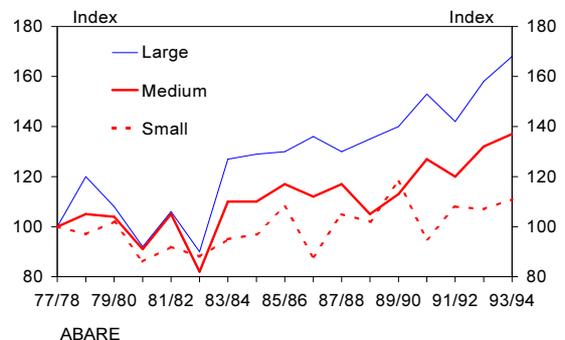
Farms are becoming fewer and larger

The factors outlined in the preceding paragraphs are putting downward pressure on incomes and causing some producers to leave the industry. Farm numbers have fallen by 18% since 1980 and the average farm size has risen by a similar amount. Larger farms are better able to cover overheads and lift productivity. In fact, the largest third of farms produce 72% of total output, while the smallest third produce only 8%^{13,14}. **Strategies to obtain scale and/or greater efficiency will be rewarded. Leasing, sharefarming and contracting are alternatives to buying the neighbour.**

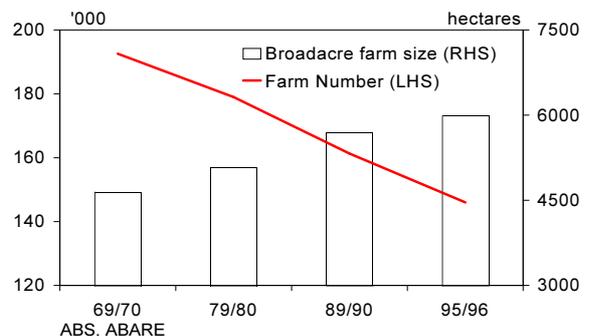
Farm Terms of Trade



Broadacre Productivity by Farm Size



Australian Farm Number & Size

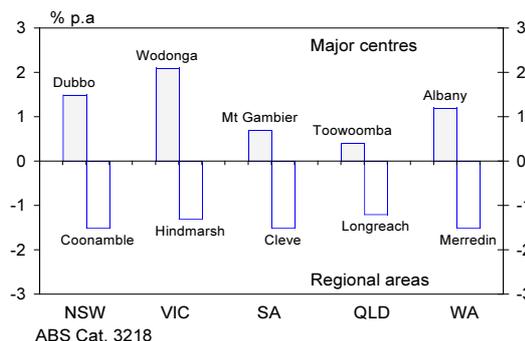


Community & Industry Trends

Rural populations are moving around

Contrary to popular opinion, the rural population has been growing, not shrinking. Rural population growth of 1.06% pa between 1991 and 1996 was not far below the national average of 1.18% pa. However, growth has been concentrated in coastal areas and in major rural towns. Significant population flows are occurring from small country towns to larger centres, and this is particularly pronounced in regional areas (see chart)¹⁵. The population loss/gain in regional areas has been associated with a fall/rise in services and in economic prosperity. The farm workforce declined from 456,000 in 1959/60 to around 380,000 in 1979/80 but over the past seventeen years has been steady in the 380-400,000 range¹⁶. **Service providers will continue to adapt to growing/contracting markets in rural areas. Local communities will be increasingly active in attracting investment to their region.**

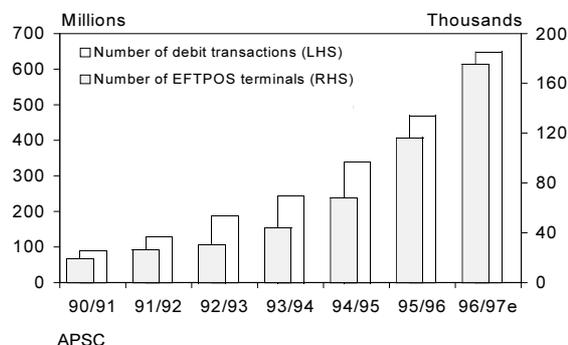
Population Growth in Selected Areas



Banking services are changing rapidly

Growth in transfers of funds by automatic teller machines, EFTPOS, and telephone banking has been nothing short of remarkable. More and more these services are spreading into regional areas. Now, only about a third of all transactions are carried out within the four walls of a bank branch, and this is estimated to fall to 10% by 2000. The number of EFTPOS outlets has grown by 35% a year over the last five years. In 1980 there were 25 ATMs in the country, and the number has grown to more than 7000¹⁷. **Technology will continue to revolutionise relations between bank and customer by broadening the range of services and making routine transactions easier. PC banking is catching on quickly and electronic records will make accounting simpler.**

Growth in EFTPOS Transactions



Rates of return are diverse

Over the past 10 years the average annual return on assets for broadacre farms was only 1.3%, and roughly double this if capital gain is included. However, there is wide variation in rates of return between different farms. As the table shows, the top 25% of producers have an average rate of return far in excess of the average, which is quite respectable compared to other investments¹⁴. The reasons why some farmers do not require a strictly commercial return on their investment include lifestyle; the close fusion of management with ownership; savings in family living expenses; off-farm income; and tax-biased bookkeeping. **Rates of return vary from very high to very low. It is not appropriate to just view the farm sector in terms of average performance.**

Rates of Return - by Turnover (%pa)

	<\$100k		\$100-200k		>\$200k	
	Av	Top 25%	Av	Top 25%	Av	Top 25%
Dairy	-2.7	0.7	0.9	5.8	4.1	9.7
Sheep	0.7	1.0	-0.4	2.5	2.1	8.7
Beef	-2.9	0	-0.6	2.6	2.0	7.4
Sheep/Beef	-3.2	1.2	-0.9	3.5	1.8	7.0
Mixed	-0.7	3.1	3.6	11.1	7.0	17.6

	<\$100k		\$100-200k		>\$400k	
	Av	Top 25%	Av	Top 25%	Av	Top 25%
Wheat	4.4	14.3	11.8	21.7	15.7	31.7
Sugar	-0.5	3.3	4.4	10.4	6.0	11.0

ABARE

Profound Changes in Management

Farms are polarising into lifestyle and commercial/family

While pressures are resulting in farms increasing in size, the situation is not as simple as 'get big or get out'. Farms are polarising into (small) lifestyle farms at one end of the scale and medium to large family farms and agribusiness companies at the other. Each end of the scale has different objectives. Off farm income is vital for the existence of lifestyle farms but even family farms have increased their reliance on off-farm income over the last decade from 5.5% in 1984/85 to 6.9% in 1994/95^{4,5}. ***The farm sector cannot be talked about in totally commercial terms. Governments and service providers must consider the mixing of business and social objectives which occurs in the sector. Government policy needs to separate business support from welfare.***

Investment in sustainability is increasing

Land degradation such as erosion, salinity, compaction, weed control and chemical residues are crucial to the future prosperity of farming. Farmers and governments are increasingly adopting better practices to address these issues and this involves a significant investment of time and money. For example, farming practices are changing to include more tree planting, minimum tillage and soil works. Although community groups are now active all over the country and are making great progress, further legislative controls on freehold land use are possible^{6,7,8}. ***Problems are increasingly seen as community based, and community pressure on individuals to do something is rising. Investors need to allow for the environmental costs associated with any investment.***

Information technology is opening up new horizons

In 1990 an estimated 15% of farms had computers, now the figure is closer to 50% with modems, faxes and mobile phones in common use. The main benefits of this technology (besides PC literate kids) are instant market reports, improved contact with buyers, communication of research findings, use of accounting records for management, and decision support models⁹. The internet (now connected to 15-20% of farm PCs) can provide instant access to a range of information on almost any topic, and at least provide contact details of service providers. As time goes on more marketing will occur by PC and linkages will develop between banks, business accounts and accountants; making book keeping easier. ***Appropriate use of technology can provide a competitive edge.***

Classifying Farms According to Objectives

- A lifestyle farms where operators place lifestyle rewards above financial rewards and are often willing to supplement shortfalls in farm income with off-farm income;
- B family farm businesses where operators place financial rewards above lifestyle rewards yet often tend to underprice the input of family labour; and
- C corporate agribusiness where financial returns are paramount.

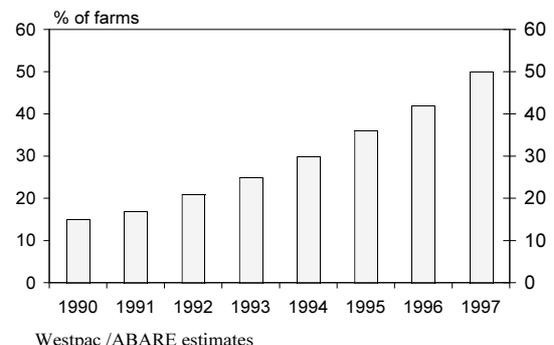
Westpac

Statistics on Landcare

- In a 1992/93 survey, around 62% of broadacre and dairy farms reported a significant land degradation problem on their land.
- A greater proportion of land care problems are stable or increasing in severity rather than decreasing. 39% of surveyed farms made some expenditure on land care in 1993/94, with average expenditure of \$3,500.
- The number of Landcare groups operating in Australia is estimated to have grown exponentially from around 100 in 1985 to 4250 in 1997.

ABARE

Computer Use on Farms



Key Financial Trends

The farm sector increasingly favours bank debt

The sources of farm debt changed markedly after financial deregulation. In the eleven years from 1984/85 to 1996/97 the major trading banks' share of total farm debt rose steadily from 41% to 58%¹⁸. While funds from banks were more readily available, banks were also supportive of the sector during periods when farm incomes were low and when other lenders such as pastoral houses pegged their exposure. Sheep, poultry, pig and fruit producers obtain the highest proportion of their funds from banks. ***Trading banks will continue to be the preferred lenders to the sector due to their diverse service range and widespread networks.***

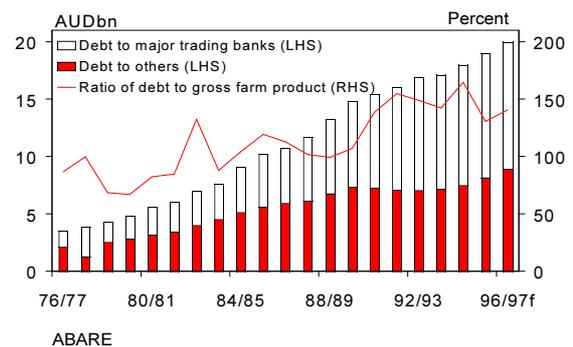
Farmers are adopting higher gearing levels

The equity profile of farms has changed over time with equity levels generally declining. For instance, since 1980/81, the proportion of broadacre farms with more than 90% equity has fallen from 69.5% to 58%. At the other end of the scale, the proportion of farms with less than 70% equity, (a figure below which problems with debt servicing often develop) increased from 5.7% to 14.7%. However, the equity profile of the broadacre farm population remains heavily skewed towards farms with better than 90% equity. The average equity level in 1994/95 was 87% with 22% of farms having no debt¹⁴. ***On the positive side farmers have adopted higher gearing levels, often to fund expansion or technical improvement. However, the coincidence of drought, and commodity price fluctuations over the last seven years have also contributed to increased gearing.***

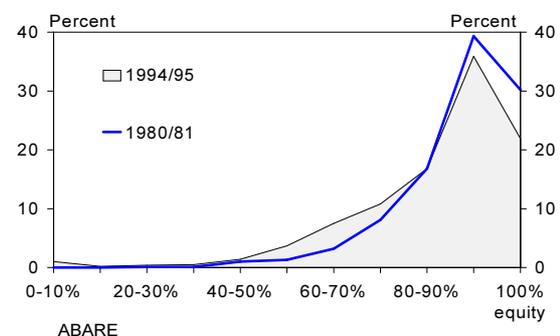
Debt has risen relative to the sector's capacity to repay

As a percentage of receipts, debt in the sheep industry has risen by an average of 5.3% a year since 1979/80. The extremely high growth of the ratio in the early 1990s was more due to falling wool prices than rising debt levels and a major correction is likely over the next few years as wool growers' incomes improve. The debt/receipts ratio has also trended upwards in the beef industry during this period, averaging 3.4% growth a year, while for wheat and other crops it has grown by 1.4% a year, falling sharply in recent years. Because of lower interest rates, the ratio of interest costs to total farm costs declined to 9.4% from a peak of 14.2% in 1986/87.¹⁴ ***The growing importance of debt as a source of capital creates the need for better financial management by farms and a more rigorous examination of the capacity of individual businesses to service debt under various profit scenarios.***

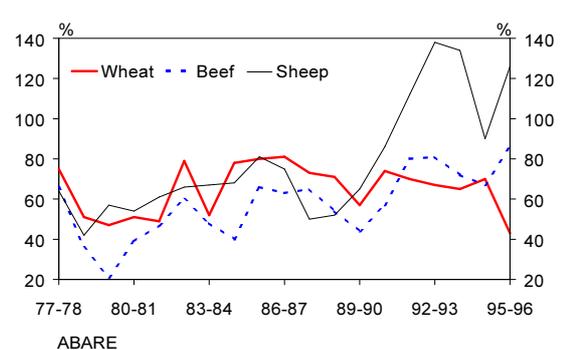
Australian Farm Debt



Farm Equity Profile - Change in 14 Years



Debt/Revenue Ratio for Broadacre Farms



More Intensive Production Systems

Agriculture is a small, but important, share of the economy.

Farm GDP has declined as a proportion of total gross domestic product (GDP) from 6% in 1959/60 to 3.8% in 1996/97¹. This is not due to a contraction in agriculture, but rather is due to a more rapid expansion in the service sector of the economy. While the volume of agricultural production has risen by 1.6% pa over the last 20 years (a similar result to manufacturing) the finance sector has risen by 2.6%, the business service sector by 4.3% and communications by a massive 8.4%. Farm output is more volatile than most of the other sectors and changes in farm output multiply through the economy by factor of 2. For example a 15% rise in farm output will add 0.6% to national economic growth directly and about 1.2% by the time the effect multiplies. **Because farm output is more volatile than most other parts of the economy, it makes a significant contribution to annual changes in economic activity. Further, farm exports comprise around 30% of merchandise exports, the level of which is important to both the balance of trade, and the value of the \$A.**

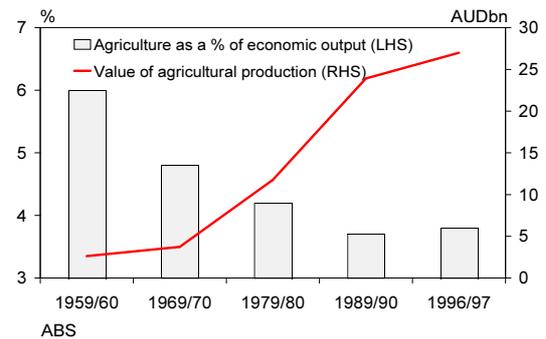
Production systems are becoming more intensive

Intensification in Australian agriculture is occurring through increased intensity of cropping (especially under irrigation), development of intensive pig and poultry industries, a trend towards grain finishing for beef, and greater use of high protein feed concentrates along with irrigated pastures for milk production². Australian production systems will continue to become more intensive, but the extent to which they do will depend on the availability of irrigation infrastructure and environmental considerations. Intensive livestock and crop production is a growth area requiring significant capital investment. **Intensification generally reduces production risk, but exposes business to fluctuations in input (feed) prices.**

Demand for feed grains is increasing

Continued rapid growth in the Australian intensive livestock industries (pigs, poultry and grainfed cattle) is expected to lift local demand for feedgrains, particularly barley, pulses and oilseeds over the next five years. Our total capacity to grow grain is expected to remain relatively flat, so in order to satisfy domestic demand for feed grains, exports are likely to slowly decline³. **Local demand for feed grains and meal is likely to strengthen, but export growth will be limited.**

Agriculture in the Economy



Examples of Intensification

- the total area irrigated in Australia increased by 28.5% between 1989/90 and 1993/94. The trend in area of all broadacre farms irrigated rose from 0.3% in 1983/84 to 1.4% in 1994/95;
- the number of cattle in commercial feedlots increased from 89,000 in 1983 to 480,000 in 1997;
- dairy farms in Victoria now spend around 18% of total costs on fodder, compared to 9% in 1987/88.

ALFA, ABS, ABARE

Australian Feed Grain Consumption

	Average 4 yrs to 1995/96	2000/01	Forecast	Change%
Coarse grains	4881	5292	8	
Pulses	766	800	4	
Oilseed meal	523	700	33	

ABARE Agriculture Outlook 1997, p.154, Crop Report 97

Developments in World and Local Trade

Domestic industries are deregulating

In 1994/95 the effective rate of assistance to agriculture was 11%, with support confined to the dairy, sugar, tobacco and dried vine fruits industries. Most of the major industries such as beef, cotton and grains receive little or no support²⁵. National competition policy is leading to deregulation of agricultural marketing structures, and in some cases this is coupled to reduced assistance. For example, milk prices post the farm gate have progressively been deregulated; and the sugar tariff is gone. Other forms of regulation such as single desk exporting for the wheat, rice and sugar industries, and farm gate pricing of milk remain²⁶. The winds of change are blowing against regulated markets, and industries need to show that present structures provide a net benefit. ***Overall, low levels of support ensure that for the most part investment in agriculture is competitively based and subject to little structural risk.***

World trade is (slowly) liberalising

In 1994 the GATT (now administered by the WTO) put limits on export subsidies and quantitative import restrictions, and decoupled support from production levels. Although these reforms were relatively modest (and from a high base) ABARE calculate a \$950 million benefit to Australia's exports over a period of years. The next multilateral trade negotiations are scheduled for 1999 and promise some more liberalisation. Meanwhile, the APEC countries agreed at Bogor in 1994 to remove all barriers to trade by 2010 for industrialised member countries and 2020 for developing countries. There is still discussion over whether food should be exempt from this undertaking²⁴. ***Greater trading freedom will provide opportunities for efficient export oriented sectors like the Australian farm sector; however, progress will be slow.***

Agribusiness is becoming more global

Due to advances in communications, transport and storage, Australia is no longer isolated. Companies are taking a more global view about where they do business, and where they source their raw materials. The idea of a local firm exporting local produce is giving way to a model where proximity to either market or inputs is not critical, and national borders are not an impediment. Australian food producers will increasingly look offshore and will benefit from partnerships with multinational companies²³. ***Literally, a world of opportunity has opened up for a nation 80% geared to export and with Asia on its doorstep.***

Effective Rates of Assistance, Australia

	%	
Wheat	5	declining
Sugar	14	declining
Wool	6	declining
Beef	4	
Manufacturing milk	21	declining
Fresh milk	200	declining
Dried vine fruit	11	
Winegrapes	20	
Total	11	

Source: IC1996

Support for Agriculture in Selected Countries (%)

	Crops	Livestock	Total
Japan	96	53	77
Europe	53	47	49
Canada	24	31	27
US	15	15	15
Australia	6	10	9
NZ	1	4	4
OECD	47	38	41

OECD (1996) Producer subsidy equiv. as % of production

Globalisation

"Proximity to market is no longer one of the essentials in the buying decision, thanks to advances in shipping and food processing,... combined with modern communication. The juicy chicken drum eaten by a KFC customer in Tokyo may be from a bird raised in Thailand or Arkansas. The cheese on the Pizza made in a Pizza Hut store in Rio probably came from New Zealand; and the beef on the taco offered for sale in a Taco Bell outlet in Moscow just may be top quality Australia stock!"

Bob Bothwell, Senior Vice President, Pepsico 1995.

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