Agriculture's economic performance

Ross Kingwell
IMPORTANT DISCLAIMER

This document has been obtained from DAFWA's research library website (researchlibrary.agric.wa.gov.au) which hosts DAFWA's archival research publications. Although reasonable care was taken to make the information in the document accurate at the time it was first published, DAFWA does not make any representations or warranties about its accuracy, reliability, currency, completeness or suitability for any particular purpose. It may be out of date, inaccurate or misleading or conflict with current laws, polices or practices. DAFWA has not reviewed or revised the information before making the document available from its research library website. Before using the information, you should carefully evaluate its accuracy, currency, completeness and relevance for your purposes. We recommend you also search for more recent information on DAFWA's research library website, DAFWA's main website (https://www.agric.wa.gov.au) and other appropriate websites and sources.

Information in, or referred to in, documents on DAFWA's research library website is not tailored to the circumstances of individual farms, people or businesses, and does not constitute legal, business, scientific, agricultural or farm management advice. We recommend before making any significant decisions, you obtain advice from appropriate professionals who have taken into account your individual circumstances and objectives.

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia and their employees and agents (collectively and individually referred to below as DAFWA) accept no liability whatsoever, by reason of negligence or otherwise, arising from any use or release of information in, or referred to in, this document, or any error, inaccuracy or omission in the information.
By Ross Kingwell
Acting Manager
Economic Management Branch, South Perth

Changes within and outside of agriculture have affected the nature and economic performance of the industry. Some clear trends have emerged and they are discussed here.

As the Australian economy grows and increasingly diversifies, agriculture will become a less important sector.

However, so long as agriculture fulfils its economic role, it will support and promote economic development elsewhere in the economy.

The economic role of agriculture

The main economic role of agriculture is to be a low-cost source of food and raw materials for consumers and processors. Supplying food cheaply to local markets enables consumers to more easily afford the foods they prefer. Consumers can also spend more on other goods and services, thereby stimulating economic activity in these other industries.

If processors have access to local raw materials supplied cheaply, then they are better able to compete against imported processed goods by profitably transforming the local materials. Local processors and exporters also are better able to compete on international markets if local raw materials are supplied cheaply.

Export revenues provide foreign exchange needed to pay for imported goods, which cannot be produced locally or which are too expensive if produced locally. As long as agriculture remains a low-cost source of food and raw materials then it can maintain its ability to compete on export markets.

The low-cost supply of food and raw materials involves use of natural resources of soil and water, in combination with purchased inputs, technology and management.

Increasingly, farmers and society see a further economic role for farmers as stewards of natural resources and producers of countryside amenity. There is increased interest in soil conservation, catchment planning, salinity control, and preservation of native species, and remnant environments.
Another role of agriculture is a net supplier of labour to other industries. This is now a minor role because the agricultural workforce forms a small share of the total workforce. However, decades ago when a larger proportion of the workforce was directly engaged in agriculture and farm mechanisation was rapidly boosting labour productivity, then agriculture was an important source of labour for other industries.

A further economic role of agriculture is the consumption of farm household and farm business goods and services.

The introduction of mechanisation and technologies involving chemicals have transformed farm businesses such that they increasingly depend on production inputs coming from off-farm sources. These can be physical inputs such as fertilisers, fuel or new crop varieties; hired labour such as contract shearers or seeding labour; and information or advisory services such as farm management consultants or Department of Agriculture services. By depending on all these goods and services, agriculture is an important market for industries keen to supply its requirements.

**Economic trends**

For decades agriculture has been fulfilling its economic roles against a backdrop of changing economic conditions. Changes within and outside of agriculture have affected the nature and economic performance of agriculture, and some clear trends have emerged.

**Fewer farms, larger farms, fewer people**

Farm businesses to remain viable have needed to alter their farm practices. Over the decades this has meant increased mechanisation, increased labour productivity and increased farm size. These changes have led to fewer and larger farms. The displacement of farm families and casual and permanent farm workers has in turn caused some town-dwellers, whose livelihoods directly or indirectly depended on the size of farming population, to shift to other larger population centres.

Many parts of the inland agricultural area of Western Australia are now characterised by depopulation (Kingwell, 1992).

Between 1976 and 1990 the population declined in 50 local government areas in the south-west of Western Australia. Many inland rural local government areas, particularly those in lower rainfall regions, have experienced marked depopulation, losing over 30 per cent of their populations since 1976. This is a phenomenon of some agricultural regions in many developed economies. When a region is almost solely dominated by agriculture, farmer adoption of labour-saving technologies and increasing farm size reduces on-farm and ultimately off-farm local employment.

In combination with the general social trend of smaller families and more years of schooling away from the farm locality, local towns and businesses suffer and ultimately become fewer.
Fortunately, economic growth in other economic sectors has often provided production and employment opportunities for families leaving agricultural areas. Often these sectors have been located in metropolitan areas. However, families remaining in depopulated agricultural areas often face a decline in the diversity, quantity and often quality of goods and services available locally.

A maintained emphasis on exports and productivity
Traditionally, Australian agriculture has derived most of its income from export sales. The emphasis on export markets continues because domestic markets remain small and because Australian agriculture has remained internationally competitive.

In the past two decades Australia has experienced a modest growth in population and reasonably high living standards. As real incomes have risen there has been a decline in the proportion of disposable income spent on agricultural products. Consequently, expenditure patterns have favoured growth of non-agricultural industries and have resulted in employment prospects in agricultural industries being fewer and less varied than those in other urban-based industries.

Rather than rely on the slowly growing domestic market, agricultural producers have maintained their focus on export markets. As world economic conditions have changed, Australian exporters have looked to emerging markets in the Middle East and Asian regions.

Supporting the export emphasis has been a commitment to productivity improvement. Australian agriculture has achieved relatively high rates of productivity improvement (see Table). Relative to other sectors

![Figure 1. Agriculture’s terms of trade, 1965 to 1990.](image)

within and outside of Australia, the agricultural sector in Australia has performed well in the productivity stakes. The estimate of the annual average total factor productivity growth rate for the main broadacre industries of Australian agriculture since 1977–78 is 2.2 per cent (Males et al., 1990).

Through research, experimentation, innovation and education, improvements are constantly occurring in agricultural technology, farm practices and management. Farmers are often on the look out for new varieties, better breeds, new techniques and market opportunities that improve the productivity of their businesses and bolster their farm profits.

A maintained cost-price squeeze and slimmer profit margins
A strong stimulus to agriculture’s productivity record has been the squeeze on farm profits owing to a deteriorating terms of trade. The terms of trade is a ratio of output prices to input prices (see Figure 1).
Farm profits are squeezed by prices of agricultural inputs increasing at a greater rate than prices received by farmers for their produce. This is also known as the cost-price squeeze.

For Western Australia’s wheat-sheep industry, input prices increased 8 per cent per year while output prices increased by only 3.7 per cent per year from 1952–53 to 1987–88. Hence, the industry’s terms of trade fell by 4.3 per cent per year. These price changes have reduced the per hectare profit margins of most farm businesses and often made debt-servicing difficult.

To combat the declining terms of trade farmers have:

- adopted new technologies that enable more production from the same or fewer inputs;
- improved their management and knowledge to ensure their decisions are better or more timely;
- used economies of scale (for example larger farms) to lower unit production costs;
- reduced ownership costs by sharing equipment;
- supplemented farm income with off-farm income and other investments; and
- diversified their farm enterprises.

Many of these actions have raised farmers’ productivity and enabled more farmers to stay farming longer, enjoying larger farm profits than otherwise would have occurred without such actions.

A declining relative importance for agriculture
In spite of the productivity performance of agriculture, its relative importance in the Australian economy is diminishing. Figure 2 shows that agriculture’s share of exports at the State and national level is diminishing.

In Western Australia in the 1970s agriculture’s share of State exports was about 37 per cent — now its share is about 15 per cent. Nationally, agriculture’s share of total exports has declined from about 50 per cent in 1970 to about 25 per cent in the early 1990s.

The value of rural production in Western Australia now only accounts for less than 8 per cent of the State’s gross domestic product. Nationally, agriculture currently accounts for about 8 per cent of Australia’s gross domestic product.

Reduced protection
Successive governments have adopted policies requiring industries to be less protected, less dependent on government support and more responsive to market conditions. These policies have affected agriculture, manufacturing and service sectors.
Overall, as shown in Figure 3, the effective rate of assistance to agriculture has declined from about 30 per cent in 1970 to about 10 per cent currently.

For agriculture, fertiliser subsidies are gone, quotas and tariffs on many agricultural imports are less and government underwriting arrangements and statutory marketing boards are fewer.

These changes ensure farmers increasingly receive prices less influenced by government action and more determined by market forces. A greater exposure to commercial pressures means more farmers undertake their own risk management and marketing strategies.

**Corrupted international markets**

The laudable economic performance of Australian agriculture is against a backdrop of corrupted international markets. Australian agricultural exporters face two difficulties:

- Their access to some markets is restricted by tariff and non-tariff barriers such as import quotas.
- The produce of some of their competitors is heavily subsidised.

Hence, the export performance of Australian agriculture is severely lessened by such corruption of international markets. Europe’s Common Agricultural Policy and the export subsidy policies of the USA are examples of foreign government policies that erode the profitability of Australian farming.

Although some changes to Europe’s Common Agricultural Policy and the resolution of the Uruguay round of GATT (General Agreement on Tariffs and Trade) may eventually lessen the degree of corruption of markets and widen access to markets, such changes will occur gradually.

---

**Further reading**


---

Ross Kingwell can be contacted on (09) 368 3689

---

**Diversification is the name of the game. This shearing shed at Three Springs is full of smokebush.**

**Increased resource protection**

The greening of Australian politics, in combination with a growing awareness of the extent of land and water problems in rural areas, sparked interest in soil conservation, catchment planning, salinity control and preservation of native species, and remnant environments.

The Landcare initiative, along with its funding and formation of land conservation districts and committees, has enabled land, water and environment protection and rehabilitation to become important tasks for groups of farmers.

Farmers and scientists increasingly are challenged to devise land use systems that are profitable and yet facilitate farmers’ role as stewards of the natural resources at their disposal.

**Agriculture’s economic future**

Many of the economic trends that have emerged over the past two decades are destined to continue in the 1990s. Many rural regions will experience further increases in farm size and further population decline. The emphasis on technical innovation and productivity improvement will remain and profit margins per hectare will remain slim.

The desires for smaller government and a move away from a handout mentality will see greater self-reliance required by farmers. Improved marketing and risk management decisions will be required of many farmers. The benefits of international agricultural trade reform will appear gradually.

Overall, as the Australian economy grows and increasingly diversifies, agriculture will become a less important sector. However, so long as agriculture fulfills its economic role, it will support and promote economic development elsewhere in the economy.