



J D O Boyd

David Boyd is Chairman and C.E.O. of Clyde Agriculture. Clyde is a major cotton, wool, wheat and beef producer with holdings spread through north-western New South Wales and Queensland. He is a Director of Clyde's parent Company, John Swire & Sons Pty Ltd, Frigmobile Pty Ltd and Australian Wool Innovation Limited. He is a former Deputy Chairman of the cotton grower body, Cotton Australia.

Prior to joining the Swire Group in 1988, Mr Boyd spent 28 years with the Dalgety organisation, including six years as the national General Manager of that company's rural operations. He has also served on the Boards of Wool International and the Australian Wool Exchange.

He did his secondary education at Canberra Grammar School before spending three years as a jackaroo in south-western and central Queensland.

He is married with three adult children and lives in Sydney where he is an enthusiastic cricket and rugby supporter.

COMMERCIAL REALITIES IN MODERN AUSTRALIAN AGRICULTURE

Thank you for this opportunity to speak to such a distinguished audience on a subject close to my heart.

I would like to give you a broad picture of the agricultural "environment" (climatic, political and economic) in which I am involved, and provide you with an overview of its commercial realities.

I run a large-scale family farming business for UK owners, with investment spread across cotton, sheep, wool, cattle and dryland arable farming (grain, pulses and oilseeds).

These properties extend from Longreach in the central north of Queensland, west to the Channel Country and Cunnamulla, and to Bourke and Coonamble in western NSW.

I propose to discuss

- The vagaries of the Australian climate
- Recent trends in Government involvement in the agricultural sector
- Our export dependence, and its inherent price volatility
- Some characteristics of the sectors with which our Company is involved

Climate Vagaries

One of our most popular poets of old wrote:

"I love a sunburnt country a land of sweeping plains,
Of rugged mountain ranges, *of droughts and flooding rains,*"

Australia is almost as large as the USA (Alaska excluded); is 50 per cent larger than Europe, and 32 times larger than the UK. It's 3680km north to south and 4000km east to west.

It's the lowest, flattest, driest developed country on earth. Mean elevation is a touch over 200 metres. About 80 per cent of the continent has median rainfall of less than 600mm per year.

Two-thirds of the continent is arid or semi-arid, where it rains less than 50 days per year.

Seasonal air temperatures vary from 50 degrees centigrade (with surface temperatures embracing 80 degrees) down to below zero.

As an example of temperature extremes, from April to October in 1923, Marble Bar in the north west of Western Australia recorded 161 consecutive days (over five months) with temperature exceeding 100 degrees Fahrenheit.

Rainfall is irregular and unreliable. Evaporation is high. Less than 1 per cent of the agricultural land is irrigated. Only one-fifth of divertible water resources have been developed.

While just over 60 per cent of the land mass is used for agricultural pursuits, about 84 per cent of the population live on 1 per cent of the continent, along the south east and east coast.

Soils are subject to erosion and waterlogging, and generally deficient in phosphorous, nitrogen and some trace elements. Large areas are subject to salinity and acidification.

But with these resources, we manage to house 20 million people, 26.4 million head of cattle, 95.6 million sheep, and around three million pigs, and crop around 20 million hectares of grain, plus cotton, winegrapes, sugar, etc.

Australia is the world's largest exporter of wool, sheep and cattle, exporting around 6 million sheep and up to 1 million cattle annually.

We started our livestock industries in 1788 with just 6 cattle and 29 sheep imported from the Cape Colonies and later from India.

Live cattle exports began in 1844 and live sheep exports a year later in 1845.

Herefords were first imported in 1826 and first crossed with Zebus in the Northern Territory in 1931. In the late 1930s, some nine-tenths of the blood of NT cattle were Shorthorns, with some Hereford and Aberdeen Angus.

By the late 1990s, 50 per cent of northern cattle were of Brahman blood, and most of the remainder Brahman derived.

The resurgence of live cattle exports after the second world war, and the foundation of the modern live cattle export industry, comprised the export of Herefords to the Philippines in 1954-55.

There are around 70,000 grazing and broadacre properties, including 39,000 that grow wool and run sheep (including 8000 that specialise in prime lamb production), with about 40,000 properties running cattle.

One characteristic common to all sectors is the dominance of the family farmer. Among beef producers for example, only 1 per cent of all properties are owned by publicly listed companies.

Thus the top 20% of family farmer's "set the pace" in Australian agriculture, battling price volatility, the long-term downward trend in commodity prices, and the continual challenge to improve productivity.

In far-western Queensland we own a famous old property called "Thylungra". A colourful Irishman called Patsy Durack first settled this property and his granddaughter wrote a well-known Australian pastoral classic titled "Kings in Grass Castles".

The book takes its name from a quote attributed to Patsy Durack when he heard that he and his compatriot graziers were being referred to as "Cattle Kings". He apparently said in his Irish brogue.

"Cattle Kings ye call us, if we be kings then we are Kings in grass castles that may be blown away upon a puff of wind ..."

So quite early our pastoralists recognised the transitory nature of kingship or in other words, were already aware of the inherent climatic variability.

There are two words that loom large in developing strategies to deal with variability: "flexibility" and "conservation".

Flexibility, to adjust to ever changing conditions (but not over-react), and *conservation* to "put away" in the good times against the certain knowledge that they will not last. Cash, feed (in various forms), and water each lend themselves to conservation.

Government Involvement

Australian agriculture has a history of extensive Government involvement.

Statutory marketing arrangements, closer settlement schemes, extensive regulation and subsidisation, coupled with tariff regimes for secondary industries that had a deleterious impact on rural exporters, were features of the past.

With a small domestic market, farm product prices were generally set by global supply and demand shifts, yet costs were set in a closeted Australian economy.

However, over the past 25 years we have seen great change. The Australian dollar has been floated, assistance to manufacturing industry wound back, statutory marketing arrangements largely disbanded, and much regulation reversed.

As a consequence we have a much more flexible, innovative, competitive, globally exposed agricultural sector.

Albeit, a sector that in the last few years has suffered low prices from depressed global economies and has weathered the worst drought in our recorded history.

Assistance to Australian agriculture is now amongst the lowest in the world (See graphs)

Cotton

The Australian cotton industry is a prime example of an industry that has survived and prospered from the withdrawal of Government intervention.

Once highly dependent on Government support, the cotton industry has now eschewed Government intervention, particularly in marketing, and has adopted a relentless and open-minded pursuit of technological excellence.

Its research effort has been world class, as has been the sharing of information. So much so that yields have increased some 40% in the last 15 years and over one third of the crop is now genetically modified for insect and weed resistance, with a consequent dramatic drop in chemical usage.

Australia is the world's fourth largest exporter.

Over 95% of production is exported in its raw state and is renowned for its quality.

Major markets are in Asia-Indonesia, Japan, Thailand, South Korea and Taiwan, with the occasional foray by China.

In quantitative terms (not value) Australia actually produces more cotton than it does wool.

(I should mention that in the last two seasons we have had dramatically reduced quantities (50%) as a consequence of drought. But, this is surely a temporary aberration.)

The number of farmers is quite small with about 1300 growers, and the industry is mostly geographically concentrated in eight river valleys in northern NSW and Queensland.

The marketing system is a delight from a producer's perspective, with considerable volatility and the ability to fix prices forward when they are strong.

There are a number of competitive merchants (both local and international firms) always in the market and prepared to carry the quality risk, whilst they are able to offset their price risks by way of back-to-back contracts or on the very liquid New York futures market where most of the world's supply and demand is concentrated.

Wool and Sheepmeat

Wool is to Australia as cotton is to the US. It is probably our oldest industry and deeply embedded in Australian culture.

"Australia rides on the sheep's back" is an expression known to everyone of my generation. How things have changed.

The current Australian sheep flock of 95.6 million is at its lowest level since 1947-48. The flock has fallen by one-third over the past decade alone. We had more sheep in 1890 (97.8 million) than we do now.

More than 50 per cent of the sheep in Australia are grazed in just two States: NSW and Western Australia.

Australia produces some 70% of the world's *apparel* wool.

Over the last 40 years, wool's share of the world textile market has dropped from 10% to just under 3% of a total market which has tripled over the same time, with most of the growth going to synthetics.

Australia's finer apparel wools continue to hold substantial shares of niche markets like men's suits, jackets, women's outer wear and, amidst wild fluctuations, command a price premium (three to six times cotton and synthetics).

They need to, as the product is much more expensive to grow and to process. Its niche market positioning now makes apparel wool a specialist market product and less a commodity.

The industry has had a history of extensive collective action and considerable Government intervention, particularly in marketing. This has resulted in a lack of innovation and a poor productivity improvement record. Real effort is now being made to change this.

Australia used to convert about 25% of the clip into tops. However, competition from China has reversed this trend, and now 40 to 50 per cent of greasy wool production is exported to China, with the balance going to a range of markets from the Far-east to Europe.

The wool production/processing chain is long and complex with many changes of ownership, and it is notoriously difficult to get a clear picture of the state of the industry.

Historically, there has been almost no sharing of price risk along the processing pipeline, with the majority of growers' wool sold at spot auction when it is ready for delivery. Processors are thus fully exposed to price risk.

The prices for different types of wool vary considerably, with the price differentials also subject to considerable change, depending on ever changing supply and demand levels for particular categories.

Climate, rainfall, and vegetation variations, to a large extent, dictate the type of wool that can be grown in a particular area. Whilst scientists are now questioning this conventional wisdom, it is deeply embedded in the industry psyche.

The industry is fragmented, with over 40,000 growers and an average clip size of fewer than 50 bales.

Over the last twelve years the industry has laboured under the weight of a massive stockpile, which was slowly sold in competition with newly produced wool.

This stockpile was the result of some excessively aggressive intervention in the market by a statutory empowered grower body (hobbled by Government edict and agro-political infighting) which was insufficiently flexible to adjust to a dramatic demand change in the early 90's when Russia withdrew from the market.

In recent years China (including H.K.) has emerged as the dominant buyer of raw wool and the largest final consuming country.

Over the years of low wool prices, sheepmeat sales, whether direct or indirect, have been the major driver of sheep prices.

For most Merino sheep, wool prices, along with seasonal conditions, have historically been the major influence on prices.

Around 66 per cent of all mutton produced is exported, as well as about 32 per cent of lamb production, hence our vulnerability to global market access, prices and currency changes.

Beef

With 26.4 million cattle, Australia has half the Argentinian herd, one-quarter of the herd in the US and China, and about one-sixth the herd in Brazil.

Between 1976 and 1984 the herd fell about 10 million to 19.4 million, but most of that decline has now been recovered, although it has taken 20 years to achieve.

But Australia is the world's largest beef exporter, with two-thirds of its production exported to major markets such as the USA, Japan, Korea and Canada.

The industry has made good productivity gains, turning off younger animals at higher slaughter weights than in the past.

Whilst there is a growing feedlot industry (about 27 per cent of cattle slaughtered are from feedlots), the major proportion is grassfed, thus low cost.

The relatively low cost of land and transportation, together with recent improvements in abattoir productivity, means that the industry is now highly competitive in world terms.

It also has the great advantage of Australia's high disease-free status and high food safety standards.

Trade barriers to export growth remain extensive, particularly in Europe, but are progressively being reduced in Japan where per capita consumption remains tiny compared with western nations.

The industry is widely dispersed throughout Australia, with most of northern Australia being cattle dominant (now mostly *Bos Indicus* breeds), but at quite low stocking rates (one beast to 37 hectares in parts of the Northern Territory).

Two-thirds of all cattle reside in northern Australia. Queensland is the largest cattle producing State, holding 40 per cent of the national herd, almost double the number of cattle grazed in New South Wales.

Queensland runs about 11.5 million cattle and has been a major producer since the late 1800s, when the herd jumped from less than half a million head in 1860 to almost 7 million by 1895.

Prices in recent years, with the help of the weak \$A, have been attractive to Australian producers. They are determined by a range of factors, including the production cycle in the US and the rate of turnoff relative to slaughter capacity in Australia. The latter is largely dictated by variations in seasonal conditions.

As mentioned earlier, Australia exports more live cattle than any other nation, with the major markets being Indonesia, Egypt (until this year), the Philippines and Malaysia.

Around 80 per cent of live cattle exported are from northern Queensland, the Northern Territory and the north west of Western Australia. We export from 17 ports to 22 countries.

Grain, Oilseeds and Pulses ("Dryland Winter Crop")

Dryland (non-irrigated) cropping in temperate Australia is dominated by the production of wheat. In the areas Clyde currently operates this includes high protein wheat (prime hard) which allows a degree of differentiation and which can attract significant premiums.

The Australian industry has been notable for its productivity achievements, particularly over the last 15 years when productivity growth has averaged 4% per annum, compound. Major contributing factors have been: -

- the advent of larger scale machinery, allowing country to be worked very quickly after rain, taking full advantage of surface moisture;
- the development of moisture seeking and conservation methods, including minimum till, which has allowed arable farming on a large scale to move into lower rainfall areas once regarded as suitable for grazing only;
- developments in the understanding of root and soil diseases and how they can be contained by the use of rotational crops, which can also contribute to soil nutrition;
- the advent of "precision agriculture" utilising global positioning systems (GPS) to precisely carry out farm operations with minimum wastage (overlap) and containing soil compaction.

Future developments will be the use of soil mapping and variable rate applications so that fertilizer and weed controlling chemicals can be applied to different parts of a paddock on an "as needed" basis.

Australia is usually the world's second largest wheat exporter (after the US), with 16% of international trade in 2002. Its main markets are the Middle East, Indonesia, Japan and South Korea. China is an occasional substantial buyer.

The marketing system is dominated by AWB Ltd, the former Australian Wheat Board, which has a monopoly over wheat exports.

This monopoly is coming under increasing pressure with the domestic market freed up in recent years and the flexibility in the marketing of oilseeds and pulses demonstrating to growers that “big brother” is not necessary.

A significant disadvantage of the export monopoly was the insulation from competitive pressure that the monopoly gave to the transport and storage system participants. There is now increasing price pressure on these sectors, which will increase as the system is further deregulated.

General: Exports and Volatility

You will have noted the export dependence-

Cotton over 95%

Wool (including early processed) over 95%

Wheat over 80% (??)

Beef around 65%

With wool, cotton, beef and wheat Australia is a major world exporter, the largest for wool and beef the second largest for wheat, and the fourth largest for cotton.

With cotton, beef and wheat only a small proportion of world production is actually traded internationally.

The biggest producers are generally also the biggest consumers, so only small changes in the supply/demand balance in the major producing countries can have a huge impact on volumes traded internationally and thus on the world price. This is a recipe for price volatility.

The unreliable rainfall means that there can be periods where lack of rain for grazing pasture, dryland arable farming, and water for irrigation can create quite impossible conditions for profitable operation.

Throw this in with volatile commodity prices and a long- term adverse cost/price ratio and the challenges facing Australian farmers are significant!

Corporate Farmers

Except in circumstances where they can acquire large amounts of capital that are not available to even the bigger family farmers, or where they can command technology that is otherwise difficult to acquire, there is little room for corporate farming operations.

With the industry dominated by family farmers who are generally more focused on asset growth than annual returns on shareholder funds, conventionally funded corporations find it very difficult to compete.

Family farmers simply bid the price of land to a level where the returns necessary to competitively service equity capital investment are simply not achievable for corporations.

This problem, combined with the inconsistency of returns flowing from the variability of seasons and prices, has resulted in a consistent exodus of corporations from Australian agriculture over the last 25 years.

Marketing

We believe that the Australian cotton marketing system described earlier should be a model for Australian agriculture.

By quite clearly separating the functions of pricing and physical delivery, living with volatility becomes much easier.

Often prices can be fixed when markets are strong providing there is a longer period in which the price can be established.

This is best done before “harvest”, as afterwards cash imperatives often demand quick action.

Care needs to be taken that unbearable production risks are not incurred.

The existence of a liquid futures market is an enormous benefit.

We are now selling our wool in the same way we sell our cotton, utilising a mixture of forward physical sales and derivatives.

Conclusion

I have attempted to provide, from a farmer's perspective, a broad overview of the conditions under which Australian agriculture operates.

I have attempted to describe some domestic economic changes of recent decades, which I believe place the general industry in a strong position to grow.

I have further attempted to give you a broad picture of the particular agricultural sectors-cotton, wool/sheep, beef and arable farming- with which my Company is involved.

Finally let me say that it is my view that there are substantial market opportunities ahead for agriculture, in the growing markets to our north, and particularly in China.

However competition will always be intense and individual enterprises will need to adopt a long term view, be clear on defining the business they are in, and be in a position to quickly adopt and apply relevant technological developments.