

Agribusiness Perspectives – Paper 54

The Agri-food sector in Australia; Where is it going?

Some thoughts on the future of the sector.

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1. The Agri-food Sector – At Home.³

It is estimated that 57% of Australia's 2000-01 food production was exported.

Agriculture.

This sector (including fibre, horticulture and other primary production such as aquaculture) contributes around three per cent of Australia's gross domestic product (GDP), with a value of approximately AUD \$29 billion. There are about 100 000 farmers in Australia and the sector employs over 310 000 people and since 1989-90 the sector has grown by an average 3.3% per year.

According to the Australian Food Statistics 2002 the growth in this sector has been due to increased production of higher value added crops such as horticulture, wheat and canola, increased value of meat production and a swing away from wool production.

Food Processing.

The gross value of the processed food and beverage sector is worth approximately twice that of the agricultural sector at around \$50 billion per year, employing around 165 000 people – earning 22% of the sectors value from exports. There are approximately 4000 food manufacturers and the sector accounts for just under one-fifth of all manufacturing value in Australia.

The total value of domestic food sales is over \$60 billion per annum, with two-thirds of that amount being spent in supermarkets. Food makes up around 40 per cent of total merchandise sales in Australia.

When the production, transformation, wholesale and retailing of food is combined into one sector it represents between a gross value of \$130 and \$140 billion per annum and is the single largest industry sector in Australia.⁴

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³ All figures taken from Agriculture Fisheries and Forestry – Australia, Australian Food Statistics, 2002 – ISSN 1444-0458.

⁴ Business Review Weekly and IBIS statistics, Agriculture Fisheries and Forestry – Australia, Australian Food Statistics, 2002 – ISSN 1444-0458.

The total chain.

When added together the food production, processing and retailing / food service sectors are the single largest sector of Australian industry, worth in excess of \$150 billion PA.

AUD \$ (billion)

| Food Production | Food Processing | Retail / Food Service | Total |
|-----------------|-----------------|-----------------------|-----------------|
| \$28.8 | \$55.0 | \$71.0 | \$154.8 billion |

Exports and Imports.⁵

Australian food⁶ exports exceeded \$24 billion in 2000-01, while Australia's food import bill is about \$4.8 billion per annum – the most important supplier being New Zealand, and the most important customer is Japan.

While many criticise the Australian Agri-food sector for being too 'commodity' focused, nearly two-thirds of Australia's food exports undergo some form of transformation or value adding – although the total percentage of elaborately transformed food exported from Australia is very low. (See Value Adding – A matter of how much?)

Food accounts for about 13 per cent of all Australian exports, with about one-quarter of the total food exports destined for Japan, making the sector very sensitive to the health of the Japanese economy. The next largest food export destination for Australian food products is the United States, taking about 15 per cent of total food exports.

Australian food exports make up four per cent of the global unprocessed food trade and around three per cent of global processed food trade. The top six food exports from Australia are – in order – meat, grains, dairy products, wine, sugar and seafood.

2. Agribusiness and the agri-food chain

Its always advisable, when writing this sort of paper, to define for the reader terms used by the authors, to avoid possible confusion over what the authors are actually referring to!

The terms used regularly in this paper, to which we refer here, are agribusiness and agri-food.

The term Agribusiness.

In 1956 Professor Ray Goldberg of Harvard University in the United States coined the term 'agribusiness' to describe the business of agriculture and related activities inside and outside the farm gate, including transformation of commodities into food.

The term 'agribusiness' is widely used in North and South America and to a lesser extent in Europe, to describe food production, transformation and the associated input or support sectors.

'Agribusiness' is a term that helps to psychologically bind the food production, transformation and retail sectors together and has important ramifications for the way in which the separate parts of the agribusiness or agri-food chain interrelate, providing a sense of common identity.

The term 'agribusiness' has only come into common usage over the last decade in Australia.

Significant sections of the food chain in Australia are still reluctant to identify themselves as 'agribusinesses', preferring instead to identify themselves as being in separate industries, e.g. the 'food industry', 'agriculture', 'dairy industry', etc. Why is this the case? One reason is that agricultural production has its own special risks and that many of these risks (environmental factors included) are not well understood outside the sector.

There may be a perception on the part of many who insist on avoiding the term agribusiness that being called an agribusiness (thus being associated with agriculture through 'agri') could mean that an agricultural level of risk assessment is applied to their business, (unfairly as risk exposure and the types of risks facing businesses change as one goes further up the value chain toward the consumer).

⁵ All figures taken from Agriculture Fisheries and Forestry – Australia, Australian Food Statistics, 2002 – ISSN 1444-0458.

⁶ Food, in this context, refers to commodities, minimally transformed and elaborately transformed foods and food ingredients.

If this were to happen it would have a major impact on the manner in which investors treat these businesses, possibly impacting on the amount of finance available or the cost of that finance.

Unfortunately such a fear may be well-founded and as such represents a failing on behalf of the financial and investment community to properly understand the characteristics of the whole of the food chain – particularly where risks vary.

Reluctance on behalf of some in the agri-food chain to identify themselves as part of a cohesive industry is unfortunate, as it creates an impression of separation that actually belies the close ties in existence between the production, transformation/processing and food wholesale/retail sectors.

Using terms such as agriculture, horticulture, agribusiness and so on imply a separation from the finished product and from the ultimate consumer. Agriculture refers more to the process of production than it does to the produce. The end product of growing grain and oilseeds, harvesting fruit and vegetables, growing cattle and other livestock is not the process of their production, but the product - food that eventually is consumed.

Similarly, using the term 'food industry' creates the impression that the end product (food consumed by consumers) is separate from the sector that produces food in its untransformed state.

Terms like the 'agri-food' sector and the 'agri-food chain' are used in this paper to better describe the breadth of the sector and to include those industries reluctant to identify themselves as agribusinesses⁷ (and to bring the sectoral definition into line with the definition used in North America).

So perhaps we should be talking about agri-food rather than *agribusiness* as means of addressing this issue. The whole agri-food supply chain should adopt terminology that provides a clear focus on what it actually does – produce food.

3. Constraints on the Development of the Australian agri-food sector.

Degrees of transformation.

Growth in *processed* food exports from Australia is lagging behind global growth averages. Many commentators use this as a basis for criticising the 'performance' of the agri-food sector.

The logic used is thus; because the growth of highly transformed food exports from Australia is lower than the world average the sector in Australia must be 'under performing' in some way and thus needs to lift its game.

This argument is ill-informed. Apart from overlooking the unique character of each country (and accounting for comparative advantage where it exists) it ignores two important counter-arguments:

- i. That the export of 'traditional' Australian food exports (commodities and minimally transformed foods) continues to increase and the total value of food exports from Australia has increased above world growth averages.
- ii. There is a strong element of 'comparative advantage' in the current make up of Australian food exports, i.e. Australia is 'good' (profitable and competitive) at what it currently does and is able to increase its share of the world food market profitably without the risks associated with changing the basic nature of the sector in Australia (a point that will be discussed later in the paper).

The 'food bowl' vision.

Successive State and Federal governments have promoted the Australia food sector as a potential 'food bowl' for Asia, with an emphasis on transforming the sector into one that is dominated by elaborately transformed food exports⁸.

On cursory examination, one could think that the 'food bowl of Asia' vision is based on the following simplistic notion - there is a lot of spare land in Australia for farming, so if it was farmed we could feed Asia with the produce.

There are several critical factors that have a large impact on the future growth and viability of the Australian food sector including;

- i. Access to capital for expansion and re-investment.
This is a critical factor. The industry cannot expand without capital and as discussed in the next

⁷ In Canada the Federal government has recognised the power of terminology to influence behaviour, they have a Department of Agriculture and Agri-food.

⁸ This is another reason for the hand wringing over the lack of growth in exports of elaborately transformed foods.

section, that capital can either be hard to find or it comes at a cost that makes investment in agri-food ventures unviable in the eyes of many investors.⁹

- ii. Environmental resource availability.
Arguments rage over the 'carrying capacity' of Australia and the long term sustainability of food production in this country. The resources used for food production (soil and water) in Australia are limited and need careful management.
- iii. The current capacity of the sector in Australia.
By world standards the Australian agri-food sector is quite small and our capacity to supply significant quantities of food into large markets is limited without a major expansion of our production base.
- iv. Capital and Risk.
Over the last 15 years a great deal of time and money has been spent (and continues to be spent) on investigating why the Australian Agri-food sector has not better fulfilled its theoretical export potential. This 'potential' is generally expressed in terms of available production resources and a general reference to demand - principally in Japan and other parts of Asia for products that are seen as 'clean and green'.

Under the previous federal Labor government - when Senator Bob Collins was the Minister for Agriculture - an export market target of \$1 billion PA by the year 2000 was being promoted, with our proximity to Asian markets, Australia's 'clean and green' image and the availability of production resources cited as drivers of this export expansion.

Horticulture exports are now in the region of \$720 million PA, with an impressive growth rate over the last 10 years, but only ¾ of the targeted figure, mainly because the problems associated with funding the development of an industry with the capacity to supply the markets mentioned were never seriously addressed in setting the 'target'.

Many 'reasons' for the perceived inability of the Australian agri-food sector to increase the volume of non-commodity or transformed exports have been put forward, including the rather dubious 'lack of an export culture'.

Rather than there being a 'cultural' problem, many potential exporters cite lack of available and affordable funds for expansion or other logistical difficulties as their reason for not exporting – rather than a lack of willingness or interest in exporting on their part, as is implied by the 'lack of export culture' observation.

The conclusions of many reports have missed a fundamental shared by all businesses – firstly the ability of an enterprise to attract finance or investment for establishment or expansion of activities, followed by the ability of the business to successfully service debt or provide acceptable returns for investors (compared to alternative investments).

Significant investment will be required if Australia is to simply expand its production base, let alone create 'new' value adding opportunities. Returns on investment in the agri-food sector are often such that market expectations cannot be met, meaning investor interest is low or non-existent or the cost of finance is too high to be economically viable.

The valuation of 'investment opportunities' against returns from venture capital funds – a common practice – where the targeted return on venture capital is more than double that from the stock market. This is a major problem for those wishing to attract investment into a sector that just can't compete with the returns generated in other sectors and where realistic allowance for *actual* risk is not made.

Natural resources

On cursory examination, Australia seems not well-suited to modern agriculture¹⁰. Soils are poor, the level of available nutrients is generally low (when considering the requirements of modern agriculture), and water, on this the driest continent, is also limited in its availability.

⁹ There is a competitive market for investment funds and investors are attracted to maximum return over minimum time (adjusted for risk). Unfortunately many agri-food related investment just don't deliver the quick 'bang for the buck' that the market is by and large looking for.

But remarkably, Australia's food producers have applied innovation and technology over the last 200 years to become highly efficient, producing significant surpluses for export. If we continue to be innovative, there is nothing to stop the sector in Australia maintaining or enhancing its current productivity, in essence making a silk purse from a sow's ear.

However, there have been unintended environment costs from food production that are starting to impact on economic viability, chief among them increasing salinity of water and soils and decreasing water availability / competition for water¹¹.

Resource availability, that is the availability of suitable land (of required fertility) and adequate water, will be a major factor determining the ability of the sector to expand (and indeed maintain its current productivity), unless new ways of managing resources and producing food are found or new technologies adopted.

(For a more informed commentary on these agricultural and economic issues, the reader is referred to the Agribusiness Associations' *Connections* publication at <http://www.agrifood.info/Connections/index.htm>)

Thankfully many of the solutions to the resource availability problem already exist. (See Attachment 1 – a news report outlining the application of existing technology to solve a major environmental problem).

But there is a cost for all human activity...

The natural resources and innovation that underpin the agri-food production sector in Australia have facilitated a reduction in the real cost of food, helped our society to become prosperous and well fed and allowed Australia to derive significant income from food exports.

Australians are lucky to have such skilled farmers, but the time to pay the ferryman is coming and the whole community will have to contribute to the fare, because it's the whole community that has benefited from the trip.

Fixing the problem – if there is a problem...

If it is accepted that the natural resource base has become rundown and that the rate of run down is increasing (as is the contention of many commentators), then two broad options confront Australia.

One option is to let the natural resources run down to a point where they (ultimately) cease to function economically. This would be unfortunate and run counter to the best interests of society and the environment.

The second option is to continue to apply innovation and to become better and maintaining these resources, allied to a commitment to invest in the rejuvenation of the areas that have suffered decline.

Proponents of rejuvenating degraded lands point to the huge resource repair bill that faces Australian society. How is this to be paid and who is responsible?

One innovative suggestion has been to apply the current GST of ten per cent to fresh foods (these are currently exempted from the ten per cent consumption tax). The money collected from this consumption tax (in the region of \$6 billion annually) could be used solely to address the salinity, water availability and other problems that are currently recognised as natural resource issues.

Such a move would not only make application of the GST simpler, it would raise funds directly from the ultimate users of the natural resources employed in the production of food and fibre, the consumer of food. There would be no fairer way of funding the cost of repairing resource degradation than in this direct 'user pays' fashion.

¹⁰ Or indeed to 'traditional' or primitive agriculture – See Jared Diamond – *Guns, Germs and Steel* pp 295 – 321.

¹¹ There is increasing tension between the allocation of water for industry (including food and fibre production) and 'the environment'.

This suggestion raises a whole raft of questions relating to the division of monies raised, the impact on food consumption of the rise in food prices and so on. Like many broad based taxes, money raised from one area of the economy often finds its way into another area, so 'cross subsidisation' is not a new issue.

It could be forcefully argued that, as the experience from the introduction of the GST across the rest of the economy in Australia suggests, the impact on consumption of food from the imposition of the 10% environment tax (GST equivalent) would be insignificant.

Indeed a perverse outcome may be that consumers (or significant sections of the consuming public such as those who have strong environment beliefs) will be attracted to the notion of contributing directly to both enhancing and rejuvenating the environment and thus the effect on consumption may be positive rather than negative.

Countering this argument is a valid body of opinion suggesting that, as the cost of rejuvenating much of what has been degraded is so high (and the economic return from the investment on a cost benefit basis makes the investment unviable) we should accept that environmental degradation is something we have to live with. This argument contends that resources are better focused on the development of more effective land use systems to better manage the resources that we currently enjoy.¹²

Proponents of the latter argument would dismiss the ten per cent environmental levy as an unnecessary cost to the economy and a poor investment. Undoubtedly in economic terms this is the case, but if significant funding from such a source were diverted into environmental enhancement – ensuring that existing resources are protected from degradation – a balance between the two arguments could be found.

Perhaps we have to accept that, for mainly political reasons, more money is going to be spent on trying to 'fix' environmental 'problems' in the future (allocation of funds to programs is a well known political past time, especially when there is the hint of an election in the air). Given this political reality, it may be best to at least have a transparent source of these funds.

Big – but not big enough?

Expansion of the food sector in Australia is not a simplistic calculation of 'space available to grow things' or a bet that our 'clean green' image will give us unfettered access to emerging and established consumer markets.

Australia has the luxury of a population approaching 20 million, providing the agri-food sector with a domestic market large enough to sustain a sector that can take advantage of economies of scale to compete successfully with imports. But the domestic market is not large enough to grow 'global' companies – capable of operating in international markets, with economies of scale and most importantly, appropriate supply capabilities to meet large international market demand.

It is instructive to look at the scale of enterprises and industries and to look at the following comparison. The global turnover of Nestles' dairy business was reported in 1999/2000 as approximately US\$15 billion. Compare this with the total value of Australian primary production (slightly less than this figure) and we can get some indication of the size of the global food market and the companies that dominate it.

The current structure of the Australian agri-food sector is not only an factor of the size of our domestic market, other factors such as the number of small producers and value adders¹³, geographic dislocation between production and consumption (both domestic and export), distance to export

¹² See Loving, *Losing and Living With our Environment*, David Pannell, Connections, Autumn (May) Edition at <http://www.agrifood.info/Connections/Autumn2002/Pannell.htm>

¹³ Value adders are defined, for the purposes of this paper, as individuals or enterprises who enhance the value of a product through the supply of a service or the transformation of a good beyond the commodity stage – including finance, advisory, logistics, wholesale, retail, first or second stage processing. For the purpose of this definition, a commodity is a product that is valued at cost of production (COP). Commodities only develop a value higher than COP as a function of market supply and demand factors.

markets, communication bottlenecks, transport technology and cost of serving a population of 20 million.¹⁴

All of these factors contribute to a Catch 22 – the domestic market is big enough to sustain a viable sector that doesn't need to export, but the market is not big enough to support the growth of global sized companies that can be 'heavy hitters' in the global food market.

A distinction here is made here between *individual enterprises* and *industries* (a collection of enterprises). Our two biggest agri sector exports, meat and grains, rely on the coordinating efforts and intervention of industry bodies (MLA and AWB - which both grew out of government) to facilitate exports.

Would these industries export as much without the involvement of these bodies?

Would exports be higher if there were more large enterprises acting as exporters without the intervention industry bodies?

Do these quasi regulatory bodies restrict and stifle marketing innovation?

Does their presence corrupt effective value chain relationships?

Perhaps we will only know the answer to these questions when the roles of both of these organisations diminish in the future.

4. The Future – What it could look like – Some Scenarios.

Lets look, for the sake of argument, at three scenarios.

Scenario 1 - Incremental Change.

One realistic option is to maintain the status quo (current composition of the sector), allowing it to expand at its current rate.

Putting aside the domestic market, the sector would continue to be dominated by minimally transformed food / food ingredients and commodity exports, supplemented by the higher value added exports such as dairy and wine, high value niche exports like seafood and small exports of horticultural produce and a small percentage of elaborately transformed food exports.

This is not to criticise the current performance of the sector, far from it.

Value Adding – A matter of how much?

Value adding is the enhancement of a product, beyond its raw material or commodity state. For example, milling wheat into flour is value adding, as is cutting up a lamb carcass and packaging it. However value adding need not involve physical transformation. One can add value through product description, identity preservation and quality systems, objective measurement of product characteristics and other 'knowledge' based inputs.

Most commentators, when talking about increasing the value of the agri-food sector in Australia, imply a desire to increase the sophistication of the sector, principally by increasing the level of elaborate transformation that takes place in Australia.

This is a very understandable aim, based as it is on the economic philosophy that transformation of relative low value commodities into high value food or ingredients will lead to an overall expansion of the Australian economy.

The basic thesis is that there is more monetary (economic) value extracted from elaborate transformation and export than from primary production or minimal transformation and export.

¹⁴ This observation is at the core of one side of the Australian population debate. Growth economists argue that the only way Australia can grow globally competitive companies (other than by acquisition) is if we grow the domestic market with a larger population – cause and effect.

Risk, Sophistication and Returns.

However there are a number of important factors that need to be considered, factors that make the somewhat simplistic aim of moving from a commodity / minimal transformation exporter to an industry based around elaborate transformation into finished foods more difficult in practice than in theory.

These factors include;

- i. Existing competition from established value adders in target (export) markets and the attendant socio-political and economic factors (entrenched interests¹⁵) of established industries.
- ii. Changes in the demands of consumers in developed economies.
- iii. Advances in technology including transport, packaging and information technology.
- iv. Changes in global food trade brought about by the WTO rules and other political/economic factors

The increased risk facing a food manufacturer or marketer, when compared to a commodity producer or processor, is one factor that is often overlooked in comparisons between these two sectors of the food system.

The 'in market' risk from the activities of competitors, regulatory authorities, consumers, technology, transportation and so on increases along the food system from commodity production through minimal transformation and eventually up to elaborate transformation and eventually consumer food production and marketing.

As we noted earlier, two-thirds of all Australian food exports undergo some form of transformation (or value adding). For example

- Meat exports (beef, sheep, pork) from Australia (excluding live cattle) are transformed and value added from a minimal level (carcass) to higher levels of sophistication (boxed cuts, vacuum packed).
- Cotton is exported in a semi or part processed form (i.e. not as harvested).
- Cleaned and scoured wool is exported.
- Increasingly, raw wool exports are having 'value' added with the addition of testing and other product differentiating information.
- Horticultural exports are incorporating value-adding packaging, particularly through enhanced shelf life technologies, etc.

When one takes into account the cost of the risks associated with elaborate transformation and offsets them against returns, the margins on offer for minimally transformed food and ingredients *can* be comparable to or in some cases greater than, those for elaborately transformed foods.

Advances in Technology may be a key.

The margins on minimally transformed products can be significantly enhanced through the application of technology and adoption of innovation, to a point where the *actual margins* earned on minimally transformed products can be higher than those earned on elaborately transformed products, even before the abovementioned risk (discount) factors are taken into account.

Advances in processing technology, mechanisation, packaging technologies and increases in transportation efficiency open up a wide range of marketing opportunities for minimally transformed exports that have not existed in the past.

Any student of marketing will know that diversification of products away from ones competitors (product differentiation) is a key to marketing success.

¹⁵ Often political or social 'reality' is counter to economic theory or intension. A good example is the decision by the United States government in early 2002 to place tariffs on imported steel, aimed at protecting jobs in the US steel industry (and the electoral prospects of incumbent House and Senate representatives). This action will have the effect of increasing the cost of steel to US steel consumers, but serves the socio-political interests of the government of the day. Similarly, the massive increases in crop subsidies and other income support programs for the US farm sector in the 2002 Farm Bill. 2003 is an election year in the US, a number of critical House and Senate seats will be decided in the 'farm belt'. The decision facing the US administration was simple in both cases. Live up to 'free trade' rhetoric, or pork barrel voters in the hope that they will give you their vote at election time. Basic human nature 1 - economic philosophy 0.

Advances such as those referred to above provide an opportunity for Australian agri-food exporters to increase product diversification, add more customer or consumer¹⁶ value and to make products *different* from those of the competition.

So – should the Australian agri-food sector be heeding the calls for greater involvement in elaborate transformation of foods or instead be concentrating more of our efforts on developing technologies that enhance our current domestic and export market activities?

Creating ‘Global’ Enterprises.

The minimal change scenario may well include rationalisation of the number of companies operating in the Australian agri-food sector and encompass the removal of the final vestiges of government or quasi government influence in exporting and other market activities.

The recent (2001) transformation of the New Zealand dairy sector provides us with a case study of one method of tapping more effectively into global markets – via the enterprise size route.

With a domestic population of only three million, the NZ dairy industry (because of a small domestic market) has had to be focused on exporting for survival.

The merger of the New Zealand Dairy Board and Kiwi Cooperative Dairies in 2001 to form the Fonterra Cooperative Group has brought about the formation of one of the world’s largest dairy companies¹⁷.

This amalgamation has massively strengthened the position of the NZ dairy sector in the global dairy export market, enabling it to extract greater value from its business operations by streamlining business practices, reducing transaction costs¹⁸, increasing R&D innovation and capacity, increasing marketing muscle, etc).(See Endnote 1)

Importantly the amalgamation of the two domestic and global market competitors gives Fonterra the critical mass (size) to allow it to enter into strategic alliances with other major global dairy players.

Evidence of this quickly emerged with the entry by Fonterra into the US\$13 billion Mexican dairy market through acquisition and the formation of an alliance with Nestle – the worlds largest food company and number one in the global dairy sector – to develop, produce and market products into the rapidly expanding North and South American dairy markets, currently worth US\$94 billion PA.

In an Australian context, a similar consolidation process may reach a logical conclusion in the dairy sector when there are two main players (with several small operations operating in niche sectors) – one Australian owned (resulting from domestic mergers) and the second being foreign owned (likely to be Fonterra).

Alternatively, we may see the emergence of an ANZAC dairy company, made up of Fonterra and one or two current export focused dairy processors (such as Bonlac and Murray Goulburn), dominating dairy exports, leaving the domestic consumer market relatively untouched.

Scenario 2 - In Pursuit of Global Integration.

If we are considering a way of spurring the Australian agri-food sector into a ‘great leap forward’ another scenario to consider is to actively pursue greater integration with established global agri-food enterprises, by seeking higher levels of value chain integration with international processors or retailers, to better ‘lock’ Australia into global food markets.

This scenario envisages increased integration into global food value chains by the Australian food sector, not just as a supplier of commodities or minimally transformed foods, but as a partner in developing and producing minimally and elaborately transformed foods for export into established supply chains.

¹⁶ If you are located on or near the bottom of the food transformation chain there is a difference between customers and consumers. As a primary producer or product transformer ones customers are those with which you trade – the consumer is the last purchaser of a product and is generally the customer of a retailer and not a producer or product transformer.

¹⁷ Various quoted as being the 4th largest global dairy company.

¹⁸ Fonterra aim to save in the region of NZ\$200 million in internal transaction costs by standardising platforms and practices across the company.

More foreign investment is a key.

A study carried out for the Rural Industries Research and Development Corporation in 2000¹⁹ indicated that foreign or part foreign owned companies have a greater propensity to export than wholly Australian owned companies, who tended to be more domestic market focused.

Foreign ownership facilitates access to export markets and reduces the cost of entering a market as a 'new player', as the company will already have established relationships, facilities or expertise that Australian owned companies lack.

Indeed one could argue, on the basis of the evidence collected in the RIRDC study, that if the level of foreign investment in the Australian food sector increased, then exports would increase and that if the reverse were to occur, exports would fall, to the obvious detriment of the Australian economy.

A key to addressing the investment risk is to remove marketing uncertainty and finance risk by having retailers and their suppliers as strategic partners.

This strategy is not about selling off the farm, but is about gaining strong strategic access to consumer markets that will allow our industries to expand in a low risk and sustainable manner.

But rapid expansion of the sector's capacity is required and this can't be achieved with the current capital raising structures that exist in Australia today.

Promoters of the Australian agri-food sector's 'export potential' maintain that there are 'big' markets for commodities and increased production of elaborately transformed foods from Australia. While Australia has many qualities and products of interest to international markets, in many cases we don't have the capacity to supply the quantities required to interest the major players²⁰, where the requirement of one processor or retailer may be equal to a significant proportion of total Australian market and this brings us back to the investment Catch 22 mentioned earlier.

Attracting the investment required for production expansion depends, to a large degree, on managing the risk and cost associated with entering what are already crowded and highly competitive markets, effectively from a standing start.

All marketing students know that entering an established market as a new entrant or with a new product is an extremely expensive and risky business. Fewer than one in ten new market entrants or new products actually succeed, particularly in the area of consumer goods (including food) where competition is intense.

One of the simplest and most effective ways of addressing this market entry risk is to attract foreign partners for export oriented expansion, but one with a special caveat, that the investment partnership is tied to market access.

The key to reducing the investment risk is to involve supply chain players in strategic investment alliances – alliances or partnerships that come with established market access, relationships and supply chains already in place.

Getting into existing value chains is one answer.

Here is a hypothetical (but realistic) scenario in which the desires of European or North American consumers and the aim of expanding Australian agri-food exports coincide.

Imagine a European or North American supermarket chain requiring a range of products for market segments that desire a particular set of social or environmental qualities that can be met by production and transformation (minimal or extensive) in Australia.

¹⁹ "Foreign Investment in Australian Food & Fibre: It Improves Productivity, Exports and Access to Capital and Global Markets", Mr David Michael RIRDC – see the following for details.

http://www.agrifood.info/Congress/Congress2000/Congress_Sessions/Papers/Michael.htm

²⁰ By referring to 'major players' recognition is given to the business relationships that exists between wholesale suppliers and customers. Studies of these relationships indicate that, once successfully established, the bonds that tie supplier and customer are remarkably strong, with a degree of interdependence developing. The process of 'breaking into' established relationships, supplementing or replacing an existing supplier of a particular good or service, is extremely difficult, time consuming and costly. The 'new' supplier will have to offer all that the current supplier does – and more – to successfully attract and retain the business.

It is harder to get a new customer than it is to retain an old one.

While the Australian industry may have the 'product qualities' required, production capacity to meet annual demand may not exist and as such the production capacity would have to be created.²¹

To meet the required demand, significant investment will be required. But, in this case, the investment risk is minimised through the market access that is 'guaranteed' through the partnership with the international retail partner (i.e. the supply chain exists and access to the retail market assured).

This integration of retail into the supply (and risk) chain removes much of the speculative nature of the investment and should increase its attractiveness to potential investors (and also should reduce the cost of finance).

It also allows for the involved parties to extract greater value from the supply chain, reducing transaction costs, increasing coordination, better quality control and ensuring identity preservation.

Such a development would require the creation of supply/transformation models reminiscent of the automotive industry, where alliances between suppliers and auto makers are extremely close, long term and not ad-hoc like so many relationships in the agri-food sector (where relationships may be year to year propositions only).

To accomplish the 'through chain' interdependence suggested here, there would have to be a major shift in the psychology of the Australian agri-food sector to encompass a greater degree of interdependence and cooperation.

But how does this integrated presence emerge?

If, for example a major Australian supermarket were sold to a foreign organisation, greater linkages between Australian and European or North American operations would emerge.

This would represent a tremendous opportunity for the Australian Agri-food sector, by providing more aggressive competition in the Australian retail market and opportunities of entry into European or North American markets for Australian products.

What would be the likely reaction to this scenario?

A predictable (but hopefully not inevitable) reaction from entrenched domestic interests, possibly with 'isolationist' tendencies, would be vociferous opposition and individual antagonism, including cries of 'selling off the farm' and 'subservience to foreign powers'.

Opposition from domestic competitors would also emerge, because they would see the marketing and ownership arrangement as a very real threat to their current market position. The success of a few major Australian enterprises with international connections will make competition more intense for organisations that do not have, or will not create, the same synergies.

However, careful examination of the issue should lead to the opposite reaction and the response from larger business focused agribusiness would (should!) be positive, in light of the investment and market access opportunities that would arise. The benefits of such arrangements would outweigh the costs as the model proposed in this paper is one of joint venture rather than branch office.

New structures and approaches to through-chain relationships will be required.

The Australian Agri-food sector will have to re-examine the use of organisational structures such as cooperatives to act as vehicles by which smaller producers can organise to provide the supply side critical mass required when dealing with vertically integrated supply chains.

²¹ This assumes that the market(s) in question are not replacing those supplied from Australia already, that they are 'conquest' (new) markets for Australia.

There are many examples of cooperative structures in North America and Europe that seem to have avoided the problems that have plagued similar structures in Australia. Cooperatives have to avoid being run as a means by which shareholder suppliers are insulated from market forces. They have to be focused, like any other business, on maximising ROI for shareholders and importantly, shareholders have to share these expectations.

Cooperatives in Australia have tended toward being run as market insulation for producer shareholders rather than as a business that is interdependent with the businesses of shareholders. This is subtle but extremely important difference.

Cooperative structures that filter market signals do so at their own peril.

In the case of our hypothetical European or North American retail chain investing in Australia, traditional models of supply may not work, because the market sector being serviced may require a different level of transaction sophistication to that demanded by the domestic market.

Supply of products may not come from a single source, but from a collection of suitable producers via coordinators (charged with the coordination of supply, logistics, quality systems, identity preservation, supply of market intelligence, etc), with all parties holding an interest in the 'joint venture'.

In the Netherlands, producer 'associations' exist that serve a similar purpose to cooperatives, but are structured along different lines, allowing management of the coordinating business – a joint venture between a retailer and producers – to focus more on the collective interest of all parties, rather on the interests of one group over another.

Such a venture would require a group of enterprises committed to the values dictated by the market segment, an investment in management systems that would exclude speculative players and significant enough investment to ensure that partners in the joint venture are there for the long term.

Scenario 3 - Leading the Agri Biotech Revolution.

This is a rather controversial scenario, given the current attitudes of some groups in the community toward agri biotechnology and involves the Australian agri-food sector taking a decision to lead the world in the development and adoption of Agri-biotechnology.

First Wave Agri-biotech.

The 'first wave' of agri-biotech (GM plants) has, like the introduction of many technologies, suffered from a relatively crude, unsophisticated and clumsy introduction.²²

For comparison, we can look at the first IBM PC²³ – its efficiency, capabilities, reliability, price, etc and then compare it with current PC. It is remarkable how crude, expensive and market un-friendly the first waves of these technologies were.

The personal computer only became widely accepted after the technology was developed to a point where it was more relevant to its intended market. Once the software and hardware became more market relevant (user friendly), success for the personal computer was guaranteed.

The same will apply to agri biotech. The agri-biotechnologies of the future will offer producers and consumers a much more attractive suite of benefits.

The most common GM crops being grown today – soy, canola, cotton and corn, have been developed with a focus primarily on productivity and 'input' traits. They have in effect been developed as

²² The distinction here is between the *introduction of the technology* and *the technology itself* – the introduction being far less successful than the technology.

²³ If you compare the 1985 IBM PC with the first generation Apple Macintosh, you can see why the Apple was a hit with consumers – it was easy to use – and why Windows eventually copied the Apple user interface layout. However, after a bad start the PC format now dominates in the computer market.

complimentary technologies to the existing agri-chemical business of companies such as Monsanto/ Pharmacia, Syngenta, Aventis, et al.

Like the first PC, this first wave of agri biotech is the product of thinking driven more by science or technologists, rather than by developers with a focus on end consumer requirements.

In fact the introduction of GM crop technology has more in common with the unfashionable 'supply driven' paradigm – focusing solely on the requirements of producers – than on an 'ultimate consumer' approach that has at its core an awareness of the requirements and sensitivities of the consumer. The mistakes that have been made with the introduction of GM technology show a clear lack of 'chain thinking'.

The initial technology does not appeal to the mass market and in fact fails to live up to the 'hype', but it does pave the way for successive waves of more refined and market relevant technologies.

If a chain approach were taken on board during the development and initial introduction of the technology, many of the issues that have arisen could have been addressed *before* they became 'issues'.

The Second Wave.

While the issues of environmental sustainability, resource conservation are important to consumers, they are still only secondary concerns – the ultimate consumer concern is to themselves – What's in it for me?

When Sainsbury in the UK introduced tinned GM tomatoes, one of the promoted benefits was that, because the new variety was higher in solids it required significantly less energy to process, reducing greenhouse gas emissions. However the benefit was too remote from consumers immediate concerns – themselves – to be a market winner

One characteristic of the second wave of agri-biotech will be the 'functional foods', developed to provide a specific benefit to consumers. Functional foods that demonstrate direct customer benefit will succeed – particularly if they can address secondary concerns (such as concern for the environment) as well.

'First wave' GM crops have failed to capture the attention (in a positive way) of consumers because they offer no direct benefit to an individual consumer. Reduction in chemical use or an increase in yield is an indirect benefit that doesn't enter the consciousness of a consumer. In effect, consumers are unwilling to accept technology that has no direct benefit for them.

Second wave of agri-biotechnology will offer consumers benefits they can experience, such as cholesterol reducing margarine, omega-3 enhanced vegetables, vitamin and mineral enriched grains and pulses, flavour enriched varieties of fruits, better shelf stability and so on.

Think of a range of fruits and vegetables with better flavour, longer shelf life, have enhanced vitamin or anti-oxidant levels, that can be grown in salt affected soils - helping to reverse land degradation - that also incorporate natural defences against insect pests and fungal diseases - reducing the need for chemical applications - and you should have a winner, because there are factors that appeal directly to consumers, rather than to someone else in the chain.

The Third Wave.

The third wave of agri-biotechnology will deliver to us foods that will help us to combat common diseases and will help to reduce the effects of ageing help to reduce associated health costs.

In the western world, we are, as a society, eating our selves – if not to death – then into a state of ill health and potential disease.

Consider these startling facts - One in ten Australian boys are clinically obese - 45 per cent of Australian women are over weight – and 55 per cent of Australian men are overweight.

Unfortunately, affluence leads to over indulgence in food (that is an excessive intake of fat, sugars and a lack of fibre) the effect of which is seen in increasing incidence of diet related health problems. Diet related illnesses, such as vascular disease, heart disease, bowel and other cancers and diseases such as late onset diabetes and its associated health effects, have become the biggest killers in western society.

This worrying trend is common across western society (headed by the US and followed a close second by Australia) and the situation is particularly concerning when combined with an ageing population. We just don't know what the full cost of treating illnesses precipitated by lifelong poor diet will be. The levels of food related illness in western society today, are unprecedented.

Human history tells us more about what happens when there is too little food, not too much. We can only predict what the cost of treating these illnesses will be, but it is predicted to be potentially ruinous to western economies.

Today the world has about 800 million starving people and about 350 million people suffering from diet related illnesses. The World Health Organisation has recently warned that diabetes is going to become the greatest killer in the western world, which is unfortunate because the major cause of this disease is diet related.

Unfortunately some proponents of GM technology continue to use the fallacious argument that agri-biotech is required to 'solve world hunger' – presumably in the hope that western consumers will soften their resistance toward the technology.

However it has long been established that the world produces more than enough food for all peoples; that starvation and famine caused by politics, disputation, and restrictions on trade and other societal factors – not from a lack of food!

Because food is the problem, food may well be the answer to the health problems facing the western world. We may well have no other choice but to turn to agri-biotechnology to help us to manage the cost of treating diet related illness – and in the very near future.

Other benefits of second and subsequent waves of agri-biotechnology will be the ability of crops to actively enhance the environment, such as crops developed to grow in heavily saline soils that could be used to reverse salinity, other qualities may include the incorporation of nitrogen fixing properties into non-legume species (reducing the need for fertilisers), improving the way in which plants transpire (reducing irrigation requirements) and so on.

The level of technological sophistication in the global agri-food sector will continue to increase.

If Australia positions itself in the vanguard of the advancement of agri-biotechnology, we can not only take advantage of being 'first to market' with innovative foods or in the application of natural resource saving species, but we could also develop significant exports of intellectual property.

Australia could, under this option, expand its current links with global biotech leaders, become more active in jointly funded research, develop institutions for experimentation into agri-biotechnology and take a lead in commercialisation of second and subsequent waves of agri-biotechnology.

Becoming the leader in the new world of functional / medical foods is a high reward / high-risk strategy. Like many similar technology and market developments, we know that someone will take the lead – so why not Australia?

5. So what will happen?

Whatever happens over the next few decades, there will be two key issues that have to be addressed.

- i. The availability of funds to invest into the agri-food sector – the way in which investors think about the sector has to change.
- ii. Resource management will become increasingly important – in maintaining current levels of productivity and industry viability, but also as a key to accessing investment and export markets (our environmental maintenance record may become a trade issue).

Whatever happens, the author believes the sector has a bright future; but only if we are brave enough to turn on the light.

Endnote 1

The formation of Fonterra created a domestic market monopoly for dairy products in New Zealand. The amalgamation of the companies to form Fonterra was initially opposed by NZ regulators on domestic market impact grounds.

(See Dairy Mergers and the National Interest, Johnson. R, Agribusiness Perspectives Papers 45 www.agrifood.info/Review/Perspectives/Johnson_Dairy/Johnson_Dairy.htm)

There are two schools of thought on the formation of globally competitive companies and the effect this may have on competition in smaller economies such as Australia and New Zealand.

Supporters of the 'global enterprise' argument maintain that domestic market issues (such as those over ruled in NZ with the creation of Fonterra) are secondary to the benefits to be gained from the formation of a truly global enterprise, and that any issues arising from a domestic monopoly can be managed successfully via regulation. They maintain that the macro benefits for the economy as a whole are greater than the micro effects of the domestic monopoly.

Opponents of this rationale (among them the noted management writer Michael Porter) maintain that an organisation (in smaller economies like Australia and New Zealand) doesn't need a domestic monopoly (and the implicit size and critical mass this implies) to survive and prosper as an international company, if they are innovative and adaptive. Indeed, Porter maintains that a domestic market monopoly is a disadvantage, principally due to the psychological factors that being a monopoly tends to bring to management.

The latter argument appears, however, to discount the ability of a company to transfer its global competitiveness practices (and management culture) to the domestic market.

There is no reason why a competitive and innovative global company cannot transfer competitive practice to a domestic monopoly. After all, management should always be looking for ways to increase productivity, innovate and adopt best practice to maximise return on investment, regardless of market share.

Sitting somewhere in the middle of these two schools of thought is the example of a small company in New Zealand, Kapiti Cheese. (See Attachment 2) Management of this company has made the most of domestic deregulation despite the fact that 95 percent of the milk supply in New Zealand is controlled by Fonterra.

Farmers' salt victory no drain on WA purse

By Peter Trott

The West Australian

15 April 2002

<http://www.thewest.com.au/20020415/news/state/tw-news-state-home-sto52693.html>

ONE of the world's biggest privately funded drainage schemes is turning thousands of hectares of salt-wasted land back into productive ground, according to Wheat belt farmer John Hall.

But he says that it is no thanks to government agencies, which spend millions of dollars having conferences and doing more and more research.

Mr Hall and about 20 other farmers around Narembeen have joined forces to establish an 80km arterial drainage scheme across the shire.

It began in 1996 with a 2m deep channel, which drained westwards through the Narembeen townsite to the headwaters of the Avon River.

Since the drain was cut, fortnightly pumping of hotel cellars and garage pits has ceased, flood damage has been cut and up to 10,000 kilolitres a day of brine flows into a lake system west of Narembeen. Dying trees in low-lying areas along the channel have come back to life and abandoned fields have been reclaimed.

The productive land is worth about \$700 a hectare.

Wheat crops yielding four tonnes a hectare have been grown on land which earlier could produce less than a tonne.

And land cropped for the first time in 30 years has yielded 1.5 tonnes, almost the district average, only two years after the drain was built across the barren scald of dryland salinity.

This scourge of the Wheat belt has claimed 1.8 million hectares or 10 per cent of agricultural land since the deep-rooted perennial native vegetation was replaced with shallow-rooted annual crops.

But, according to Mr Hall, agencies including Conservation and Land Management, Agriculture, Water and Rivers and Environmental Protection have failed in their duty to achieve results.

At the same time they have put big obstacles in the way of using drainage to combat salinity.

"The trouble is, they each have their own little piece of territory to protect and there's no one to see the big picture and achieve real outcomes," Mr Hall said. "How many acres have they made productive again? One? Ten?"

"We have done thousands, and without a dollar of government money. The results speak for themselves."

But not loudly enough to get full support from the State Government.

While the State and Federal governments continue to negotiate over the stalled \$1.4 billion national action plan for salinity and water quality announced in 2000, the Narembeen farmers have found nearly \$3 million and, according to Mr Hall, have got their money back.

Up to 300 people a year visit Hall Farms, 11km east of Narembeen, to see the project and details of it are posted on a Web site.

Initial findings of a CSIRO-Department of Agriculture evaluation have found that the project is working effectively.

The study was sponsored by the 60 per cent grower-funded Grains Research and Development Corporation.

Trees not the answer to salinity: hydrologist

TREE planting has failed to perform as expected as a tool to combat dryland salinity, according to Department of Agriculture hydrologist Richard George.

Recent evidence showed that tree planting was not a viable way of preventing rising saline water tables, the basic cause of dry land salinity, he said. Interest was shifting to engineering solutions such as deep drains.

Dr George said that drains had been studied since 1975 and results had been poor or mixed.

But some new schemes put in by farmers, such as the Narembeen project, had achieved surprising results using 20-tonne excavators which penetrated into the porous cemented subsoil.

It was not fair to criticise agencies for not promoting drains.

They had been shown to work in some places but in other soil types recent results were poor.

Other obstacles to landscape drainage were getting agreement from downstream landholders, including those whose land would act as sumps for the highly saline water.

The saline water at Narembeen was acidic. This could kill aquatic life and carry dissolved metals. There were problems designing drains to avoid silting up and collapse, Dr George said.

CSIRO hydrologist Tom Hatton, who is heading the evaluation of Narembeen and other drainage schemes, said options could not be measured against what the landscape was once like.

Recovery depended on having people making a viable living from the land.

Abandoning the land would lead to further degradation.

Attachment 2

Cheese-maker aiming for growth

New Zealand Herald 22.04.2002

<http://www.nzherald.co.nz/storydisplay.cfm?thesection=business&thesubsection=&storyID=1592595>

By PHILIPPA STEVENSON

Award-winning Kapiti Cheese is thriving without the heavy hand of dairy export regulation and expects even more growth from the appointment of high-flying Fonterra executive Tim Gibson.

Ross McCallum, co-founder of the 18-year-old Paraparaumu company, will next month become executive director concentrating on market and product development.

Gibson, a 14-year Dairy Board veteran and formerly Fonterra director of international trade, will take over as managing director of the specialty cheese company, whose turnover is expected to nudge \$19 million this year, up from last year's \$16 million.

In the past year Kapiti's exports have doubled, the share price has risen sharply and a new \$5 million plant has expanded production capacity 400 per cent.

Fifteen months ago Kapiti, one of the country's largest independent buyers of dairy products, was nervous about the formation of Fonterra, which would control 95 per cent of the milk supply.

McCallum urged the Government to impose tight controls to ensure transparency in the relationship between Fonterra's manufacturing arm and supply to the local market.

Today, he is pretty happy with the outcome of lobbying by Kapiti and other companies and the legislative provisions made for them under the Dairy Industry Restructuring Act that enabled Fonterra's formation.

For the past three years Kapiti had been constrained by lack of production capacity but the new cheese packaging and ice cream plant at Paraparaumu, opened by Prime Minister Helen Clark in December, put paid to that. Kapiti now has two cheese plants and 160 employees.

The possibility of being free to control its own destiny gave the company the confidence to expand, McCallum said.

It also got a boost from Wellington investment company Rangatira, which took a 40 per cent shareholding in December 2000.

The removal of the "perceived impediment" of Dairy Board export licences heartened the company.

"[Deregulation] removed a risk factor ... of discomfort over the regulatory situation. There was always the thought that you were

beholden to the Dairy Board for gaining export permits."

While the company probably had more licences than any other, uncertainty remained.

"It was more a psychological thing as much for us as our overseas customers. Many could never understand that we needed to apply for a permit and they perceived it as a threat that we needed to renew permits after their expiry. [Deregulation] has just removed that whole situation."

While 85 per cent of sales are in New Zealand, exports nearly doubled last year, largely into Asian airline catering kitchens.

The appointment of Gibson, who has wide experience in overseas markets, was part of the plan to realise more opportunities, McCallum said.

Kapiti had a good relationship with Fonterra, from which it sources its cows' milk.

"We can do things as a small company that is reasonably fleet of foot that are perhaps more difficult for them to do. We see that we can work very well with Fonterra in this new environment."

Kapiti's major markets are in Japan and Singapore, but through the flight-catering network it is also active in Bangkok, Hong Kong, Beijing and Shanghai. It also handles flights in Los Angeles for Air NZ.

"We are focusing on the top end of the hospitality industry in those markets and others like Korea, Bali and widespread through east Asia."

Kapiti was established in 1984 after McCallum left cheese making at Kiwi Dairies in Taranaki and Neville McNaughton left a similar position with Eltham's Rennet Co.

"In those early days, the wine industry was just starting to grow, the restaurant industry was starting to bloom and we saw an opportunity to do similar things with cheese. It has been a success," said McCallum, who sees good reason for the company's fortunes to improve.

"We're in a part of the market, even in the domestic market, which is growing strongly - specialty cheese, ice creams - and that's pretty much of a worldwide trend."

New Zealand's clean, green image was helping, particularly its freedom from the scourges of foot and mouth disease, and BSE or mad cow disease.

"And as our brand profile grows, it is opening doors for us and we can network through the airline and hospitality industries and to some extent through retail as well."

The unlisted public company has about 160 shareholders. While stock trading is minimal share value has risen to \$4 from about \$2.20 a year ago.

"I think people are seeing what we're doing [with the] new plant capacity, we've got a brand that is very well recognised now not only in New Zealand but increasingly throughout Asia because of our airline catering and things like that."

The new man agrees. Despite finding it a wrench to leave Fonterra, whose formation he was closely involved in, Gibson was attracted to Kapiti by its possibilities after deregulation.

"When I was [Dairy Board] group director of strategy, I used to chair the export permit application committee. Although we tried to speed up the process, to facilitate things for smaller companies like Kapiti who weren't competitors, it still took time notwithstanding our best efforts.

"Now wearing the Kapiti hat, not having to go through the rigmarole of applying takes at least

a month, or probably two months out of the planning horizon. So it just gives a lot more freedom, a lot more ability to respond quickly to initiatives."

Kapiti was a very innovative company with a great brand and a great team of people, Gibson said.

"They are not really a competitor of Fonterra as such, they operate in a different part of the marketplace, and I think there are some significant opportunities for the company."

The former NZ Milk managing director in Europe has also been group director of the board's global strategy team, the Japan-based regional chief executive for North Asia for four years, and general manager of the milk protein division.

"The particular attraction for me [in Kapiti] is the whole New Zealand food story.

"Having just spent two years in the UK, I've developed a much better perspective of just how important and potentially valuable the New Zealand imagery around clean, healthy, natural, premium food can be. Kapiti is ideally positioned to capitalise on it."
