

AUSTRALIAN NUFFIELD FARMING SCHOLARS ASSOCIATION

Future trends in the global Agri-Food industry and strategies for Australia to remain competitive

Report prepared by John Foss

122 Grantham Street
FLOREAT WA 6014
Email: johnwfoos@hotmail.com
Ph: 08 9284 9111
Fax: 08 9284 9122

2000 Australian Nuffield Farming Scholar



Sponsored by Wesfarmers Landmark



CONTENTS

	Page
Executive Summary.....	3
Acknowledgments	5
Aims Of The Study.....	6
Introduction	7
Future Trends	8
1. Concentration of Multi National Food Processing and Marketing Systems.....	8
1.1 Vertical Integration	8
1.2 Horizontal Integration	8
1.3 Globalisation.....	9
2. Consolidation of Retailers.....	10
3. Focus on ‘own’ brands.....	11
4. The New Consumer	12
4.1 Consumer Health and Wellbeing.....	12
4.2 Convenience	12
4.3 Pleasure and Status Indicator.....	13
5. The Role of Media and Special Interest Groups	14
Strategies to compete in the new environment.....	15
6. Strategic Alliances and Supply Chain Management	15
6.1 Strategic Alliances	15
6.2 Supply Chain Management	17
6.3. Case Study - Bernard Matthews Lamb.	19
7. Quality and Environmental Assurance	24
7.1 Quality Assurance.....	24
7.2 Environmental Assurance.....	26
7.3 Environmental Programs.....	29
7.4 Case Study- Sainsbury’s and Shaw’s Supermarkets.....	30
8. Genetically Modified Organisms (GMO’S)	35
Conclusion.....	39
Appendix One.....	40

*“Future Trends in the Global AgriFood Industry and Strategies for
Australia to remain competitive”*

By: John Foss

2000 Australian Nuffield Farming Scholar

Executive Summary

The agrifood sector has faced significant change in recent years and the impacts of these changes are being faced by all participants in the industry. Many of these changes are driven by factors far removed from Australia making it hard for people to understand why they are taking place.

This report is the result of a study program that included travel to Singapore, Malaysia, Thailand, UK, Europe, Canada, USA and New Zealand. It focuses on the trends that are occurring in the global agrifood market and explains why they are important to the Australian industry. The concentration of multinational food processing and marketing systems, the consolidation of retailers, the branding strategies of these retailers, the rise of the ‘new’ consumer putting greater demands on the food suppliers and the increasing role of the media and special interest groups are all influencing the way the agrifood industry produces, processes and markets its food.

Some of the strategies for competing in this new global environment, and meeting the demands of the ‘new’ consumer are then analysed. The use of strategic alliances and supply chain managed systems are a method of connecting producers with the firms that market to consumers. Quality and environmental assurance programs will increasingly be demanded by marketers of food to ensure the safety of the food and the sustainability of the environment from where it was produced. Biotechnology offers significant advances in the production of food, however the use of this technology, with patented plant genes, will create a very different and more restrictive system of farming.

Messages for the Australia Industry

It is clear that the consolidation and rationalisation will continue to occur in the global food market. There will be less companies, with increased power, dominating the food chains and working in clusters. There will be increased competition from supply chain against supply chain rather than from individual companies. For Australia to continue to operate and remain competitive in the future we have to become integral parts of these global supply chains. There will have to be a cultural shift away from the individualistic and isolated business approach of farming to more of a collaborative and co-ordinated system. This same cultural shift has to occur right back along the chain from the consumer to the producer. Agrifood companies that now buy products from Australian farmers will have to evolve into supply chain managers rather than commodity traders. There will have to be increased levels of trust and transparency in the system and greater flows of information back along supply chains from the consumer to the producer. The size and scale of the markets we supply will make it necessary for us to work closer together and collaborate with each other, rather than being competitors, to guarantee the consistency of supply to future markets.

It is clear that now, and even more so in the future, that assurance of product quality is not negotiable if we intend on supplying the high value markets of the globe. If Australia is to continue to position itself as a guaranteed supplier of quality food products, then documented quality assurance will be a necessary component of the production and processing system. For producers of commodity products such as wheat, who haven’t yet been exposed to the direct market pressures, will have to begin to adopt QA protocols as it will be inevitable in the future that it will be required. The message to the industry is to try to keep QA programs as rationalised, aligned and farmer friendly as possible to reduce the cost of compliance. The

most effective QA witnessed were ones that were part of a market focused strategy, where producers could realise a tangible benefit for supplying a high quality assured product to a specific market.

After assessing environmental programs and their roles in the agrifood supply chain, I'm not convinced that there are any real benefits to producers accrediting their farming system to ISO 14001. The cost of compliance is high and the market is not yet prepared to pay any more for food that is produced in this way. As Australian producers we certainly have a long way to go to guarantee that we have an environmentally sustainable agriculture system, I believe we need to expand on what has been started with Landcare. The next step is to move to a system called Agrifood where we aim to implement sustainable practises on farms and meet targeted benchmarks. There is a large pool of talented people who have worked in Landcare that have lost direction and motivation due to the perceived lack of tangible benefits to the businesses and properties they have worked on. Broadening the scope of the Landcare work to sustainable farming systems, as has been put in practice by various farmer groups in Australia, will have a greater impact on the sustainability of our industry.

I believe the use of biotechnology and genetically modified organisms will have a valuable and important part to play in the future sustainability of Australian agriculture. They will not be a 'silver bullet' that will fix weed control, crop pests and diseases, or salinity. They will not make all farmers that adopt them suddenly rich.

GMO's will be a valuable tool, and will be part of the progression of science and technology. Currently the world markets are confused about genetically modified food. While consumers can see no real benefit to them they will remain sceptical about buying them.

While there may be opportunities for Australia to supply both GM and non GM products, the lack of market information and directions, and directions on the cost of segregation and product identification is continuing to frustrate producers in their efforts to weigh up potential agronomic and other production benefits.

I believe that the moratorium of commercial release of GMO's is a good thing. While there are some excellent projects being developed, the technology available to us immediately is limited to canola and some other pulse crops. We probably have a couple of years to make gains into markets by remaining GM free and so I believe the moratorium should stay in place. What needs to happen is that the trials and research that is currently under way needs to be conducted in specified "GMO incubation research stations that are properly designed and secured for GM research. If the life science companies and government work together to invest in the incubation centres and make them accessible to farm tours and field days, it will help both the policy makers and the farmers that will adopt them understand the technology, with increased knowledge.

The key learning that I received from scholarship study was best summed up by a statement from Ross McLaren, the President and CEO of Shaw's Supermarkets in USA. When asked what strategies he would advise for Australian producers he said,

"Producers have to get closer together. To often the only communication they have in the market is when the price is being negotiated. Producers have to be able to walk back with their products from the store shelf and understand the system and chain the produce takes from their farm. Producers have to have greater understanding of their customer".

Australian agriculture and the agrifood industry are entering exciting times. It is great to be a part of it knowing that the potential is only bound by the aspirations of those people who are engaged in it.

Acknowledgments

Thank you to the Australian Nuffield Farming Scholars Association for selecting me as a Nuffield Scholar. It has been an amazing learning experience, and being part of such a strong network of talented and influential people has already had its benefits. Thank you to Wesfarmers who were the sponsors of my scholarship, and to Qantas, BTI and all other supporters of the Nuffield Trust.

A special thanks to my family, who managed my business for me while I was travelling. I could not have done any of it without their fabulous support and encouragement. Thanks also to my local friends and neighbours who helped with the farming operations.

To the Beer family who hosted me in the UK, and to all the other Nuffield's who made me welcome to stay in their homes, especially with the foot and mouth problems in England, thank you for your hospitality. Thanks also to the Canadians and Americans who hosted and met with me on my North American tour. Your hospitality was much appreciated, especially with the tense mood following the September 11 terrorist attacks.

Thankyou to the Grain Pool of W.A., MLA, AWB, Genevieve Carruthers, Neil Gow, David Sparling at the University of Guelph, Castricum Brothers, WAMMCO, Meat New Zealand and the Agribusiness Association of Australia for assisting me with international contacts. Thank you to all of the business and individuals who made time in their busy programs to meet with me, and for sharing their information and knowledge.

SEE APPENDIX ONE List of people and businesses met with.

Aims Of The Study

The aim of this study was to take the opportunity to remove myself from the current, day to day production and marketing issues I've faced as a farmer and to look at the macro issues that drive the industry. The agrifood industry is in a period of substantial change and I wanted to have a greater understanding of the drivers of this change so that I could be influential in positioning both my business and the Australian industry to make best use of these changes in the future. I wanted to use the "Golden Key" of a Nuffield Scholarship to get inside the offices of major global food retailers, food processing companies, academic researchers and farm input suppliers. I also wanted to speak to policy makers to understand the rationale behind their future policies that will affect the agrifood industry. My aim was to travel and study with an open mind and speak to key people on both sides of emotive arguments such as environmental issues, genetically modified organisms, farm subsidies and global trade. I wanted to speak to participants right along food supply chains from farmers, to marketers, food processors, retailers and consumers. I wanted to know if the issues we face in Australia are relevant in other parts of the world, and if I could learn lessons from them.

My objective was to identify successful value chain models and study them in depth so that I could understand the philosophy, culture and management of systems that provided equitable distribution of profits to all participants in the chain while meeting requirements of customers, stakeholders, the environment and the communities in which they operate.

To be a successful producer in today's environment you have to look at every part of your operation through a "microscope". You have to have excellent knowledge and understanding of technical issues such as agronomy, animal health, genetics, pesticide management, mechanical and computerised technology, financial and taxation management. This study was the process of taking my eye away from the "microscope" and looking at the global agrifood industry through a "telescope" so that I see the direction we are heading, and if it is the right way to go.

"What is the use of running if we are on the wrong road?" Bavarian Proverb

Introduction

Agriculture and the agrifood industry is an important sector of the Australian economy with a gross value of approximately \$33 billion. (1) Food products incorporating processed foods including meat, dairy, processed seafood, beverages and ingredients, fresh and horticultural products account for 43% of total retailing turnover in Australia and around 20% of Australia's merchandise exports. Exports of these food products have averaged nine percent growth per year over the past decade to reach \$16.9 billion in 2002 – 01. (2)

The global food product system is undergoing significant change and the pace of change is accelerating. This change is fuelled by the removal of barriers to the flow of information and capital and driven by rapid technological advancements in information and communication technology, transport and financial services.

While global economic and trade developments present opportunities for the Australian industry, they will increasingly test its competitiveness. The first section of this report takes a look at the key trends that are occurring in the global agrifood industry and how they might effect the way we operate our businesses in Australia.

The second section of this report analyses some of the strategies we can employ in the Australian agrifood industry to remain competitive and operate in a sustainable system.

-
1. Rabobank, Australian Agriculture in Focus. Feb 2002
 2. National Food Industry Strategy. 2002

Future Trends

1. Concentration of Multi National Food Processing and Marketing Systems

The restructuring of agriculture that began taking shape in the middle of the 20th century continues to evolve. In essence it is a process that replaces a decentralised agro/food system, best characterised by the family farm structure and the accompanying decentralised infrastructure needed to support it, with a centralised system of ownership and control best described as an industrialised system. The food system restructuring continues as we begin the 21st century. This restructuring of the industry is the combination of three processes:- vertical integration, horizontal integration and globalisation.

1.1 Vertical Integration

Vertical integration first began in the US in the late 60's and early 70's in the poultry / broiler sector. The social process behind this structural arrangement separated labour from management, and this was starkly articulated by the change from the term 'farmer' to the term 'grower'. In this case the language makes all the difference. The grower usually provides the land, buildings, equipment and labour. The integrating firm provides the birds, feed and veterinarian supplies. In addition the integrating firm makes all the major management decisions involved in producing broilers. The firm decides the genetics of the birds, the feed ration, timing of the production schedule, the weight of the birds at processing and the standard operating procedures of the growers.

The whole process links the hatching with the feed processing and with the grower and processors of the birds in the food chain by a single firm. Personal specialisation was giving way to task specialisation, a characterisation of industrialisation. Vertical integration soon moved to other sectors of the poultry industry such as turkeys and eggs. In the 1980's it began to emerge in the pig industries, the major change when Smithfield became the largest producer and processor of pigs in the US and around the world in the 1990's. Representatives of the beef processing firms and agricultural economist often use the broiler industry as a model the beef sector should emulate.(3)

1.2 Horizontal Integration

The driver of economics of scale has seen continuing increases in horizontal integration at both farm level and processing level. This had led to the increase in farm size and the decline in farm numbers in most agricultural regions of the world. In the US the processing sector has seen horizontal integration via both organic growth, and purchasers, acquisitions and mergers of companies on the same level.

3 Heffernan W, and Hendrickson M. Multinational Food Processing and Marketing Systems and the Farm Crisis. University of Missouri. 2002

In the past 15 years the “four firm concentration ratio” (the percentage of market share of the top 4 firms) has increased substantially. Today the four largest beef processors slaughter 81% of the cattle. In pork processing the concentration ratio is 59:1, up from 37:1 in 1997. Today the top four firms process 50% of the broilers, up 15% from 1987.(3)

Grain processing in the United States has also become very concentrated, the largest four processors of wheat have 61% of the market compared with 40% in 1982. In soybean processing, the largest four firms have 80% of the market. The dominant players are Cargill – Continental Grain, Con Agra & ADM.(3)

Concentration has also been taking place in those agribusiness firms providing inputs for the production stage. As bio-technology began to look like the future in the seed industry, many of those seed firms that did not compete, were eager to be merged into seed firms with such access. Monsanto, for example, acquired many seed firms in the late 1990’s, including well known brands such as Asgrow, Holden Foundation Seeds and Jacob Hartz Seeds (Pioneer Hi-Bred International, 2000). Today Monsanto, Dupont, Syngenta, Dow AgroSciences and Bayer have access to the intellectual property rights for biotechnology in the Crop Seed market (Farm Journal, Feb 2002). All of these firms, plus BASF have over US\$2 Billion worth of agro chemical sales. As in the seed and chemical sectors, the concentration was also occurring in the farm machinery sector. From dozens of farm equipment manufacturers a couple of decades ago, there are now three major farm machinery firms worldwide, John Deere, Case International / New Holland and AGCO.(3)

1.3 Globalisation

Reg Clairs, former Chairman of Woolworth’s spoke about globalisation impacts in the food industry at the International Food and Agribusiness Management Associations Forum. He stated, “Globalisation is not a recent phenomenon. Globalisation is a process, a geographical spread. It is the logical extension of the specialisation of technologies. It is magnified by both the value and affect of communication. Globalisation has been slower in the agrifood sector than other sectors but will advance rapidly because we can now move perishable goods further, consumers are demanding food from other countries and packaging technology is improving. Globalisation will advance the current trends in agrifood industries of :-

- An historical downward trend in agrifood prices
- Less profit in small scale agriculture
- Increased profit in large scale agriculture
- Growth in national and per capita income in better and more varied diets in these regions.
- Increased communications technology will continue to lower transaction costs
- A decline in agrifood trade barriers
- Increased people movement around the globe will expose more people to other diets and brands.

3. Heffernan W, and Hendickson M. Multinational food processing and marketing systems and the farm crisis. University of Missouri 2002.

2. Consolidation of Retailers

Concentration in the retail sector has increased globally. Mergers between French retail giants Carrefour and Promodes, and US company Wal-Mart with Asda had strengthened their position as the two largest global retailers. Other retailers are also expanding the reach of their business to the point where the top ten global retailers are operating in at least seven, and up to twenty eight countries. Other global retailers, Aldi and Pick 'n Pay, have recently entered the Australian market.

The globalisation of retailing is an extension of the domestic consolidation of retail in various countries aimed primarily at reducing costs of procurement and administration, and leveraging or 'buying in' knowledge, talent and innovation. Six retail chains, including the US chain Wal-Mart, control about 80 per cent of food retail outlets in the UK. In Australia, over 70 per cent of sales are realised through two major retailers. If the current trend continues, it is likely that the majority of global retail food sales be controlled by only a handful of global retailers in five to ten years.(2)

The trend towards food retailers operating outside their traditional national markets is well established. Carrefour, Tesco, Ahold and other European chains are now pursuing ambitious expansion strategies in Asia. Ahold has established a strong business in the USA and now achieves more than half of its profit in North America, outside its home continent. The advent of the American group Wal-Mart in Europe, first in Germany and now in the UK, heralds the incursion of American retailing in Europe. The strategic approach to expansion can also be seen in the South American market. It is striking that there is an ambitious push to cover all the countries of the continents. The trend is clear. It is forecasted that a 'super league' of global retailers will develop.(4)

In the US the top five food retailers, Wal-Mart, Krogers, Albertsons, Safeway and Ahold USA, account for approximately half of total retail food sales. In 1997 the top five retailers accounted for only one quarter of retail sales. Wal-Mart, which had virtually non existent food sales in 1993 is now the largest. Wal-Mart is forcing many changes in retailing at the global level through its massive scale and market power.(5)

Ahold, the Dutch retail giant has 28% of the Netherlands food retail market and stores in Brazil, Argentina, Chile, Peru, Paraguay, Ecuador, Portugal, Spain, Poland and the Czech Republic. Ahold also has a 50% stake in the ICA group, the number one food retailer in Sweden, with 35% market share, and number two in Norway with 28% of the market (Nutrition Today, 2000). Ahold is the largest foreign retailer in China, with a 50/50 joint venture with Yaohan Liancheng Co. (Supermarket News). Some analysts predict there will be only six or so global food retailers in the near future – Wal-Mart, and the European firms of Carrefour, Ahold and Tesco (UK) are the likely contenders. (Supermarket News 2000)

4. Getting Fresh With Europe. New Retailing Trends- New Opportunities. AFFA 2000

5. Hendrickson, Heffernan, Howard and Heffernan. Consolidation in food retailing and dairy. University of Missouri. 2001

3. Focus on 'own' brands

In UK and Europe the growing trend is for retailers to 'own brand' the products they sell eg, Sainsburys Cheese or Tesco Bacon.

Retailers carrying private labels can generate an advantage by offering 'own' branded products across similar markets. The offering of private label products gives the retailer the ability to take margins at several points along the value chain and provides greater control over quality, price and range. This is particularly the case for 'generic' private label products. Global sourcing and retailing of large volumes of branded products is limited by the consistency of product demands of consumers in different countries and reduces the need to tailor products to individual country requirements, there by supporting global sourcing in very large volumes.

The convergence of consumer demands has also allowed a number of retailers to market 'premium' label offerings in direct competition with processor brands. This strategy provides opportunities for smaller food processor to manufacture under contract for the retailers.

International manufacturers are increasingly focussed on developing a smaller range of stronger global brands. Maintaining fewer brand lines allows for reductions in overheads, marketing and distribution, and reduces marginal costs through longer production runs. This rationalisation has begun in Australia, with a number of the larger firms consolidating their major brand lines and divesting themselves of minor brands. (2)

4. The New Consumer

Consumers in many countries are becoming more affluent, sophisticated and discerning, driving innovation and differentiation in products and services. In addition global deregulation and advanced technologies have encouraged the convergence of consumer tastes and demands across national and cultural borders.(2)

Professor David Hughes, from the University of London's Imperial College of Science, Technology and Medicine, and a noted commentator on food industry trends says there are three mega-trends that characterise the 'new consumer'.

4.1 Consumer Health and Wellbeing

- New consumers have improved knowledge of the relationship between diet and health.
- They are part of an aging population and search for elixir.
- They are a 'look good' society.
- New consumers are faced with a rising cost of health care, and understand their health is their responsibility.
- They have concerns about food safety.
- They are concerned about the impact of food production and the environment.
- They are receptive to new products that are lifestyle versus medical eg. Nutraceuticals, natural and organic, food plus or minus eg, high fibre or low fat, and vegetarian.

4.2 Convenience

- New consumers are not from traditional house structures i.e., only 19% of households in Australia have two parents plus children.
- New consumers have an increased pace of life.
- They have blurred eating occasions eg, breakfast – snack = “deskfast.”
- They have blurred mode of food purchase i.e., food service and retail, eg, takeaway from the supermarket.
- They have a desire for meal solutions eg, ready to make (raw ingredients), ready to prepare (pasta and sauces), ready to heat (ready meals) and ready to eat (takeaways, hand held).

4.3 Pleasure and Status Indicator

The new consumers;

- Have a debit and credit philosophy
- Are income rich and time poor, or income poor and time poor.
- Have increased travel.
- Have high exposure to TV celebrity chefs and other media.
- Have a lot of access to ethnic population and restaurants.
- They are receptive to new products that have exotic flavours, ethnic flavours, traditional tastes, premium products and premium look alikes.

Research in the UK shows that apart from price, the following are the factors that influence consumers' purchase decisions the most: - Convenience and ease of preparation, taste, appearance, sell by date, brand, healthy version, non GM, home grown, free range ingredients, assurance and organic.(6)

5. The Role of Media and Special Interest Groups

While it is true that much of the demand for enhanced standards for food safety and ethical production practices can be attributed to consumers, in reality it is not as simple as that. There are a number of influential players, particularly in the UK, who have an important role in shaping public opinion.

In the UK, barely a day passes when a major food story, usually negative – does not appear in the daily newspapers. The media are a dominating influence and are viewed by many in industry and government circles as a “real problem”. It is commonly accepted that the whole GM issue was fuelled in that country by the media in concert with pressure groups, with consumers becoming concerned only in response to the negative media campaign.

In an environment in which the news is considered to be ‘anything someone, somewhere, doesn’t want published’, UK retailers are increasingly developing large media departments to facilitate positive relationships with this influential opinion maker. Industry organisations also recognise the importance of maintaining good relationships with the media – with a significant proportion of time dedicated to ‘winning and dining’ journalists.

Pressure groups, including consumer groups, special interest groups such as Greenpeace and the RSPCA, and other non-government organisation (NGO) lobby groups certainly have a strong influential presence in Europe compared with Australia and North America. There is no doubt they have collectively played an important role in elevating issues such as food safety, animal welfare, environmental management and biotechnology into the consciousness of consumers. The calls of these groups for food that is low residue, GM free, animal friendly and locally produced are being reflected in government policies and private sector responses to meet these ‘consumer’ demands.

Regardless of whether consumer concerns are genuine or whether they are simply echoing the voice of media and pressure groups, the end result is the same – industry must recognise these concerns and react accordingly. In some cases, the concerns may have no scientific or logical basis. For food companies to protect their brands and maintain customer loyalty, they must pay constant attention to consumer perceptions, because perceptions become reality.⁽⁷⁾

7. Lussier G. Global Food Trade and Consumer Demand For Quality Symposium. Montreal Canada. 2000.

6. Strategic Alliances and Supply Chain Management

6.1 Strategic Alliances

The structure of the agrifood sector is evolving rapidly in response to internal and external pressures. The nature of relationships among agri-food organisations at levels of the food system, from plant and animal genetics through to retail and food service organisations is changing. Firms are attempting to reduce transaction costs, improve food safety and other risks, relying less on spot markets, and developing closer ties with suppliers and other partners.

Strategic alliances and joint ventures play an increasingly important role in inter-organisational relationships, allowing firms to capture benefits from new markets more quickly and at lower risk than through horizontal or vertical integration strategies. The rapid rate of change in competitive markets means that companies may not have the time to develop necessary resources and capabilities internally.

Market and industry changes have encouraged the evolution of interfirm relationships away from simple product exchanges, towards strategic alliances focussed on coordinately and delivering a bundle of assets, including, new products development, year round supply, quality / food safety assurance and risk sharing. These require much greater exchange of embedded information and technology.

Alliances vary depending on the strategies, capabilities and objectives of participants, but to persevere they must continue to offer value to all partners.

What is a strategic alliance?

Strategic alliances are defined as co-operative relationships between organisations that meet the following criteria:

- Partners share resources, capabilities and / or knowledge on a continuing basis.
- The alliances have strategic intent for the partners, and exchange of products, services, knowledge and profits.

Why form an alliance?

When a firm's corporate strategy includes entry into new international markets, one of the first decisions to be made is whether the expansion should be undertaken independently or in co-operation with an external partner. In making this decision several factors come into play.

An initial motivational assessment for alliance is based on whether the primary motivators for alliance are political or resource related. Political decisions and government regulations shape many international business arrangements. Restrictions on foreign ownership and participation in local economies, financial incentives, rules on knowledge acquisition or relationship preferences of government and quasi government agencies for domestic partners all play a role in encouraging and coercing foreign firms to partner with local companies.

Companies also enter alliances to secure resources needed to meet strategic objectives. Resources' needs may be:

- Financial
- Production
- Distribution
- Managerial (including technical, managerial and local knowledge related to R & D design, production and distribution in the new market.)

Objectives / Drivers for Strategic Alliances

Agrifood companies enter alliances to secure market access, supply assurance and resources. Firm's enter strategic alliances as part of corporate strategy and that strategy is being driven by several change in the current operating environment.

- Globalisation
Reduced trade barriers, improved logistic capabilities, multiculturalism and increased interest in international food have all stimulated agrifood trade and alliances.
- Information Systems Capabilities
More flexible and powerful information systems allow easier integration of information systems of different organisations, reducing the barriers and transaction costs between them.
- Quality / Environmental Systems
HACCP, ISO 9000 and ISO 14000 alter the way organisations think about internal operations and their relationships with partners. The drive for product identity and traceability in food chains provides an added incentive for alliances.
- Supply Chain Management
Maximising performance across the network of organisations making up a supply chain requires high levels of commitment and co-operation among chain members. As organisations seek to differentiate their products and move away from price dominated competition of commodities, they inevitably create longer term and closer relationships with both their customers and suppliers. Advances in biotechnology will allow agrifood products to be designed and produced for specific niche markets that will require precise management of the supply chain.
- Understanding Core Competencies and Competitiveness
Managers have developed a greater understanding of the role of core competencies in Corporate success. With this awareness has come the realisation that competitiveness can be enhanced by combining complimentary capabilities and competencies of different organisations in close, long term relationships.
- National Culture, Policies and Preferences
Although political obstacles to ownership and market entry are diminishing, there are still national and cultural differences that make strategic alliances attractive vehicles for entering new markets.(8)

8. Sparling D and Cook R. Strategic Alliances And Joint Ventures Under NAFTA. Concepts and Evidence. University of Guelph. 2000.

6.2 Supply Chain Management

Supply chain management is the integration of key business processes from end use through original suppliers that provides products, services and information that add value for customers and other stake holders.

The 'supply chain' or 'chain' is that series of interlinking steps which collectively define the nature, character and value of the product at the time of receipt by the end consumer. The chain therefore includes all of the scientific, production, commercial, technical, structural policy and related activities involved in the matching of the product to a consumer need, its production, storage, packaging, marketing, sales and transport, including in-chain and in-store quality management. Typically the steps in the chain might include the processes, activities and participants (customer, producer, consultant, private or government research agency, industry body, auditor, government regulator, advisor, chemical supplier, agent). The success of the chain however depends on more than these component parts, rather on the way they are assembled to provide the most efficient and effective mechanism for product or service delivery.⁽⁹⁾

There are a number of factors that will determine the success of any chain. Zcurbier and van Rosekal (in KPMG 2000) defined the following 'critical success' factors as necessary to successful chain outcomes :

- Trust
- Good selection of suppliers and / or buyers
- Good supplier / buyer performance (logistic and flexibility)
- Openness and reliability
- Balance in power
- Communication, and
- The competence to manage the partnership

In addition to these there must be a strong focus on customer needs, usually articulated by a recognisable and acknowledged, but not necessarily dominant, chain leader who frequently is also responsible for co-ordinating chain activities through a whole chain planning approach. Based on sound knowledge of the external environment and competitor performance, the outcome will be the integration of independent businesses throughout the chain, which will willingly share information in their united attempt to drive chain success. Individual businesses are selected and remain in the chain, on the basis of their skills and knowledge, and ongoing commitment to the success of the chain. The chain should be the most efficient to meet customers needs.

9. Peterson J, Cornwell F, Pearson C. Chain Stocktake in Australian Agriculture And Fishing Industries. AFFA 2000.

The European approach to supply chain management has traditionally been based on building positive and close relationships between chain partners, which includes ongoing efforts to maintain product integrity at each link in the chain. However there is clear evidence that the approach to supply chain management typified by North America – that is, improving supply chain efficiency through cutting costs along the chain – is increasingly being embraced by European retailers, in particular by UK firms.

For example, Tesco searches for quality value and availability – and has now included simplicity to these criteria. The company is seeking better cheaper and faster ways of working to remove waste, and needless expenditure and effort. It's cutting costs through innovative approaches such as new product packaging that is lighter, cheaper, reusable and will preserve product quality and reduce waste.

Another strategy increasingly being employed by UK retailers to improve chain efficiencies involves taking responsibility for more functions along the supply chain. Tesco, for example has now taken control of haulage, which has resulted in major cost savings. Tesco has also set up its own specialist currency-trading unit, using volume to win the best exchange rates. While there seems to be a trend emerging in the UK towards the US approach to logistics and price driven supply chains, these strategies serve to compliment, not replace the traditional relationships focussed chain management approach.⁽¹⁰⁾

10. From Paddock To Plate – Turning the tables. Consumer Driven Demands On Global Food Chains And Implications For Australia. AFFA 2000

6.3. Case Study - Bernard Matthews Lamb.

Introduction

The study program gave me the opportunity to follow a successful supply chain in the lamb industry from the consumer in UK to the producer in New Zealand. It was a unique opportunity to speak to consumers of the lamb product, store managers at Tesco and Safeway, and the marketing team at Bernard Matthews while I was in UK. I was also able to visit the Bernard Matthews turkey business, which is one of the biggest and most advanced in the world.

A few months later I was able to travel to New Zealand and meet with the managers of the meat processing business, Advanced Foods Limited. I then spent time on specialist lamb feeder operations and visited a lamb breeding property.

Finally I met with the key people at Rissington Breediness, the NZ company that supplies composite bred genetics to the lamb breeders.

This case study shows how a successful supply chain can work in the agrifood industry, even across continents and hemispheres.

Background: The Turkey Business

Bernard Matthews Ltd is a UK based company that is the biggest supplier of turkey meat to the European market.

The business began in 1950 when a young Bernard Matthews started turkey farming with 20 eggs and twelve pullets. In 1955 he purchased an unused mansion on a property called Great Witehithem Hall and used it for turkey housing. (It is now the magnificent head office of the company). In 1959 Bernard purchased WWII bomber airfields and developed breeding programs for 'oven ready' birds. In 1976 he purchased another turkey company Armour Le Grys which was a 'bargain buy' and included farms, a hatchery and a processing plant.

In the early 80's Bernard Matthews Ltd develop the 'Self Basted Turkey' brand, and supported the brands with TV advertising. This is when the business boomed.

In the nineties the company continued to expand by purchasing turkey companies in Hungary, Germany and the UK.

Bernard Matthews Ltd now produce over thirteen million birds annually and are now the biggest farmer of turkeys in the world with 59 farms on 800 hectares of land.

The company has two 'cooked meat' factories producing 800 tonnes of cooked meat a week. The latest technology in genetics, breeding, feeding and bird management has been employed in the production of the turkeys, and they are now producing turkeys that are achieving 91% yield of meat, with dressed weights of up to 20kg.

The Bernard Matthews brand has achieved the position of being one the most 'recognised' food brands in the UK. Despite retailers moving towards own branding products, the Bernard Matthews brand remains on all of their products due to this high recognition.

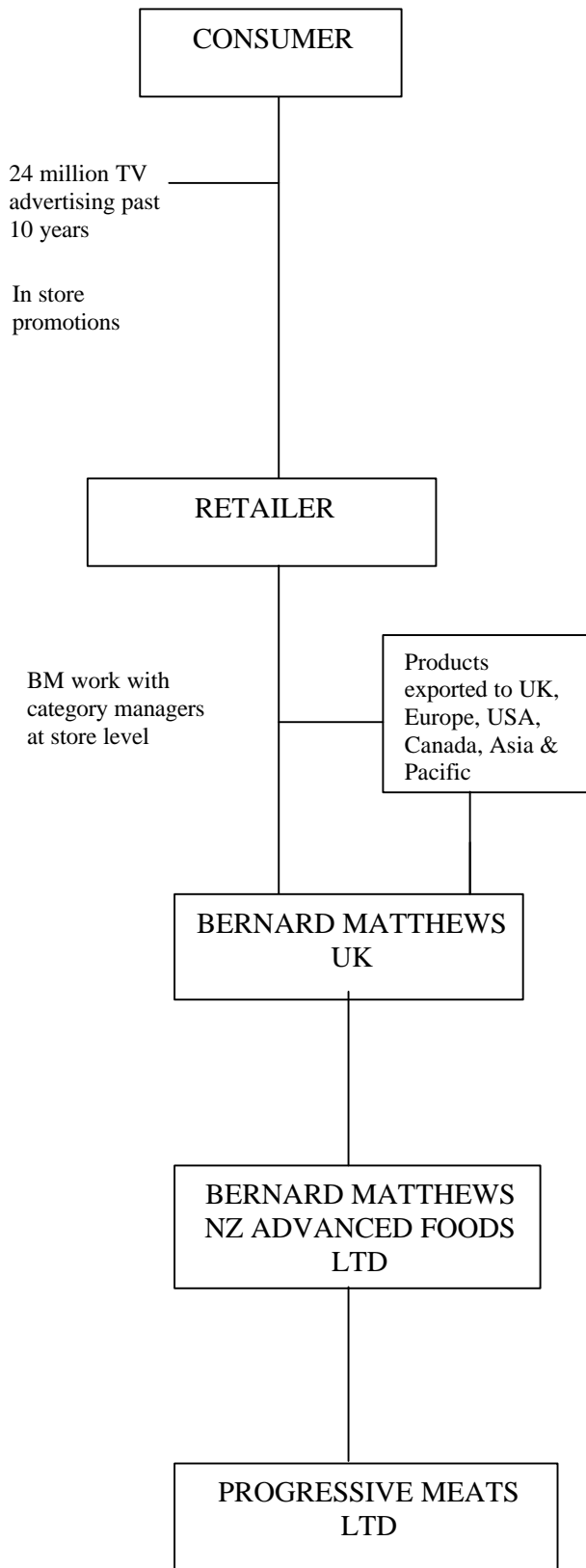
Bernard Matthews Lamb

In the mid 80's Bernard Matthews Ltd looked for another type of meat that it could process and brand as it had done successfully with turkey.

The lamb industry in the UK was fragmented with numerous breeds no real scale, lack of uniformity, consistency of product or supply. This drove Bernard Matthews to form a partnership deal with the New Zealand Meat Producers Board, to obtain supply of lamb from NZ. In 1984 Advanced Foods Limited built a state of the art processing facility in NZ. This was purchased by Bernard Matthews in 1994.

Bernard Matthews spent six million dollars in the period from 1994 to 2000 on upgrading the plant at Waipukurau making it one of the largest and most sophisticated lamb processing operations in the southern hemisphere.

Bernard Matthews Lamb Supply Chain



24 million households in UK

26% buy frozen lamb

56% buy fresh lamb

70% of people who buy lamb are 45 + y. old.

75% of people don't know what they are going to buy when they enter the supermarket.

Exclusive supply arrangement for lamb to Tesco since 1998

Exclusive supply arrangement with Safeway since 2000

Distribution, logistics, marketing, market research

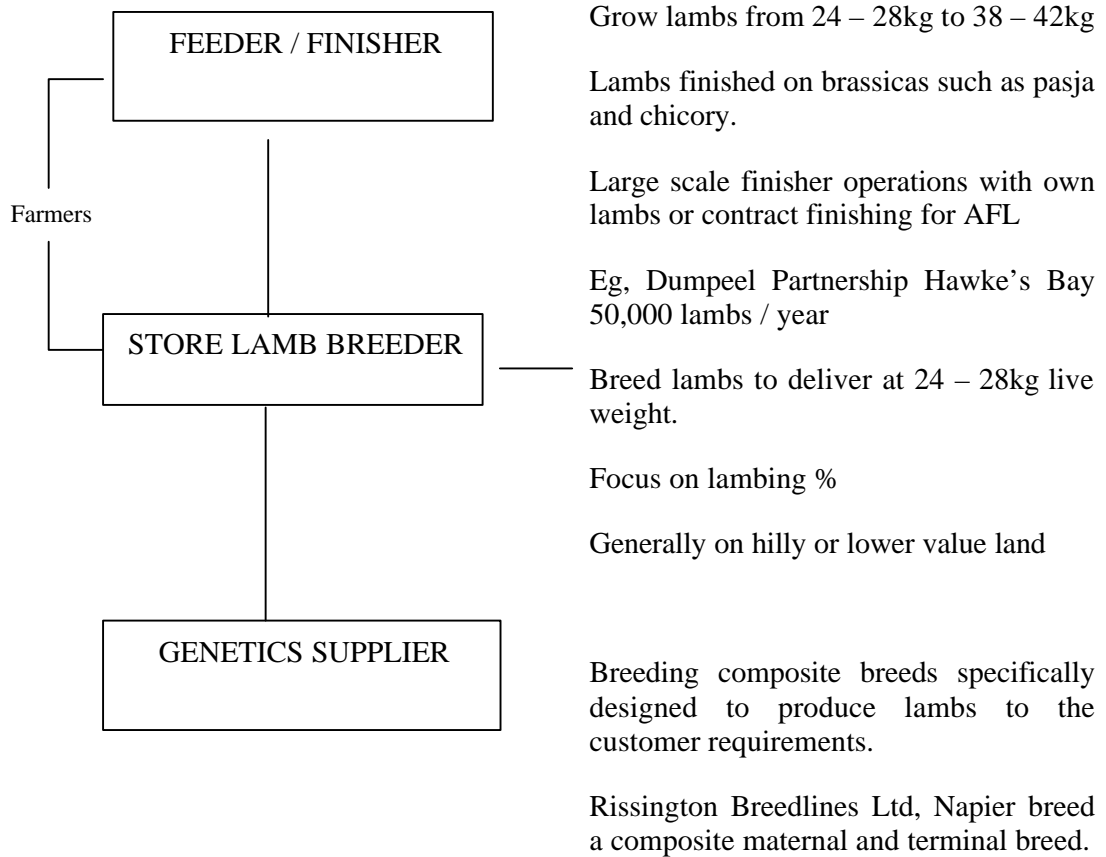
Value adding cheaper cuts to new 'ready to eat' products

Specialist Fabricators High Care processing

Capacity to process 1.2 million lambs annually

Contract Procurement and slaughter for BM

Three plants Hasting, Fielding, Gisborne



Highlander TM is the maternal breed made up of Romney, Finn and Texel genetics. The economically relevant traits bred for are number of lambs born, lamb survival, carcass eight and maintenance energy requirement.

Primera TM is the terminal breed made up of Poll Dorset, Suffolk, Australian White Suffolk and Landcorp Supreme genetics. The economically relevant traits selected for are carcass weight, and value of cuts (loin EMA, leg) and \$ value of fat weight.

CRITICAL SUCCESS FACTORS

The critical success factor of the Bernard Matthews lamb supply chain is that it is driven from the consumer back to the producer. It is a reversal of the ‘paddock to plate’ cliché.

Bernard Matthews Ltd drives the lamb supply chain from its Norwich UK base. The person who manages the lamb business, Duncan Evans, has personal contact with the store managers at Tesco and Safeway, as well as with the food service companies they supply, such as Little Chef. This means he is getting direct feedback from the stores sales figures, results of promotional campaigns, or quality issues.

He is originally from New Zealand and had years of experience in the lamb industry so he understands both the meat processing and lamb production aspects of the business. A good measure of the success of a supply chain is the feedback and attitude from the various participants.

The following quotes are from participants I questioned about Bernard Matthews Lamb;

- Customer in Tesco Store, Bournemouth, Dorset, UK

“I buy Bernard Matthews lamb because it good quality and a reasonable price. I think it is from New Zealand.”

- Store Manager Tesco, Norwich, UK

“We like the Bernard Matthews product because it sells. We get great support from BM for in the store promotions”

- Gerard Hickey, Commercial Director, AFL, NZ

“They are a great company to work with. I have a good relationship with the crew in the UK and travel there regularly, and they are down here a lot”

- Hugh Ritchey, Principal ‘Drumpeel’ Lamb Feeding Operation, NZ

“We know that we are producing Bernard Matthews lambs. We can fix our prices in advance so that we know what to pay for stores. We breed and feed our lambs to meet BM’s specific requirements.”

The culture of the people in the Bernard Matthews supply chain is very consumer focussed. The farmers adopt the stringent quality assurance procedures as they know it is critical to the success of their market. When I spoke to the suppliers of Bernard Matthews lambs they didn’t refer to themselves as lamb breeders, or sheep farmers, but rather Bernard Matthews lamb producers. It is a system where the participants are not ‘told’ to breed, feed or manage their lambs to a certain system but are rather ‘encouraged’ to do so. They are rewarded for producing the product to the correct specifications so the farmers adopt the techniques to ensure they receive the premiums. They are not ‘told’ when to join the ewes, or what months to supply but are rewarded by being paid a premium in the ‘out of season’ period so that the supply to AFL is regular and they can operate 52 weeks a year.

The message from Bernard Matthews to the producers is “we need you to produce this quality product, and we will all be rewarded if we keep getting it right, so we will help you do it, and we will all be winners.”

Messages for the Australia Industry

It is clear that the consolidation and rationalisation will continue to occur in the global food market. There will be less companies, with increased power, dominating the food chains and working in clusters. There will be increased competition from supply chain against supply chain rather than from individual companies. For Australia to continue to operate and remain competitive in the future we have to become integral parts of these global supply chains. There will have to be a cultural shift away from the individualistic and isolated business approach of farming to more of a collaborative and co-ordinated system. This same cultural shift has to occur right back along the chain from the consumer to the producer. Agrifood companies that now buy products from Australian farmers will have to evolve into supply chain managers rather than commodity traders. There will have to be increased levels of trust and transparency in the system and greater flows of information back along supply chains from the consumer to the producer. The size and scale of the markets we supply will make it necessary for us to work closer together and collaborate with each other, rather than being competitors, to guarantee the consistency of supply to future markets.

7. Quality and Environmental Assurance

As stated in the aims of this study, the focus was on macro issues and trends in the agrifood industry. The analysis of quality assurance and environmental assurance programs was aimed at understanding the drivers of these programs and the attitudes of the participants, the likely future outcomes of being involved in such programs and the culture that surround them. This study was not an attempt to dissect every quality assurance(QA) or environmental management system (EMS) that has been adopted to understand the intricate details of the programs.

As the world becomes more populated, many people are becoming increasingly concerned about the way food production occurs. Intensive or high tech production systems (such as cattle feed lots, piggeries, battery hens, genetically engineered produce) are all causing debate currently. Increasingly the focus is broadening to all food and fibre production systems.

The terms 'clean and green' are increasingly being used for marketing purposes. 'Clean' means that the food is produced free of contamination (eg, chemical residues), while 'green' means that the food is produced and processed through environmentally acceptable means and can be extended to packaging and distribution of products, freedom from genetic engineering and to ethical considerations.⁽¹¹⁾

7.1 Quality Assurance

The increase in the number of quality assurance programs, and the pressure for producers to adopt them, has been driven from the retail and food-processing end of the supply chain. As retailers brand more of the food on their shelves under their 'own brand' they assume greater responsibility of providing safe, clean food and assume the risk that any negative issues arising from a product not only affects the reputation of the particular line of food, but also the retail firm's name that it carries.

Many producers in the UK, where quality assurance programs are prolific, are very antagonistic about the quality and environment regulations imposed on them by the processors or retailers they supply. They believe that the QA document is a way of the retailer/processor shifting their responsibility back to the grower. The costs of compliance, particularly for independent auditors, which many of the schemes require, are regularly stated as one of the major negatives of quality assurance. Another negative was the fact that most UK retailers have their own QA standards. This means that if a producer supplies numerous companies they must be accredited to all of the schemes.

David Clarke, Chief Executive of Assured Food Standards explained the initiative to me. "Assured Food Standards is the body which will foster the development of the whole British Farm Standard initiative. It is a coalition of assurance schemes and provides a forum for cooperation and to ensure that all schemes supporting the British Farm Standard (BFS) logo are equally strong and credible.

11. Ridley AM. Towards Environmental Management Systems In Broadacre Agriculture: Rhetoric, Reality And Future Possibilities. Australian Agronomy Conference. Hobart 2001.

All multiple retailers are adopting the logo on food packaging. And the prospects are bright – recent research by Taylor Nelson Sofves for the NFU reveals that for 60% of consumers, the logo will help tip the balance in favour of choosing products from assured schemes. Assured Food Standards (AFS) is the organisation charged with the administering of the BFS Logo and assurance schemes in most major food sectors have signed up to be allowed to use it. The existing schemes that come under the BFS are:

- Farm Assured British Beef and Lamb (FABBL)
- Farm Assured Welsh Livestock (FAWL)
- National Dairy Farm Assurance Scheme (NDFAS)
- Assured Chicken Production
- Assured Combinable Crops (ACC)
- Assured Produce (AP) (fruit, vegetables and salad)

At the heart of the whole British Farm Standard is the logo – the little blue and red tractor. Because it is visual representation of all that BFS stands for, it has to be distinctive. It also needs to be easy to spot by consumers scanning for foods on crowded supermarket shelves and in well-stocked chiller cabinets. The tractor is a symbol easily recognised as being associated with farming. It has an image forged in childhood that makes us think of farmers, the countryside, animals and crops. That is why was chosen – after exhaustive consumer research – as the symbol to represent the BFS. Red, White and blue are strong colours and conjure up a positive spirit. Together, the colours and the tractor create a image which is unique and own able and will promote a quality image for assured food and farming.”

The following are a list of comments from a selection of retailers, food processors, grain marketers and producers on the need for QA programs and lessons for the Australian industry.

Adam DeJong, Rotterdam, Marketer of peas, lupins and beans from Australia to Europe.

“Quality assurance schemes are more of an administrative issue than a production issue. As buyers of grain for human consumption and stock food it is a necessary requirement. Really, for the majority of Australian grain growers it will just be a matter of documenting what they already do. In the scheme of things on a farm scale the cost of implementing QA to ensure market access is pretty small.”

George French, Sainsburys Supermarket, Quality and Environment Department, London

“The produce we buy has to be quality assured. It is a prerequisite. It is a duty of care to our customer to provide safe, clean food”

David Peck, Tesco Meat Procurement, Cheshunt, London.

“Customers expectations are getting higher and higher. We have to aim for higher standards at both retail level and production level. Some of the assurance schemes in place were not of a high enough standard for Tesco. We had to bridge the gaps. Consumers will not pay more for QA products, its an expectation that the quality is right. What customers say, and how they purchase over the till give two different results. They say they don’t want GM, they do want British grown food and they do want organics, but when it comes to buying it they usually buy on price, price is the major driver.”

Neil Kerr, Managing Director, Kerringdale Field Fresh Culinary Herbs and Lettuce, Rangiora NZ.

“The biggest fear for supermarkets is the food safety issue. We have to adhere to and pay for accreditation to quality and environmental standards. We are HACCP registered. Sure it costs us money but if you want to have access to the main players then it’s part of the business. But high QA standards are good for us. It is not too hard for us to adhere to them, and it keeps us ahead of other countries or smaller players here who cannot meet the standards. Grain farmers in Australia should have the same attitude. You have the highest quality grain in the world, so by having to meet strict QA standards you will be able to stay ahead of regions like South America and Eastern Europe.”

7.2 Environmental Assurance

Quality assurance (QA) schemes address food safety and product specifications of the consumer. Thus in terms of ‘clean and green’, QA only addresses the ‘clean’ aspect of food production. Environmental Management Systems (EMS) can be used to help address the ‘green’ aspect by helping to answer the question ‘Is the product or food produced in an environmentally acceptable manner?’ Addressing the second question can be many times more difficult than QA. Truly ‘green’ food must honour the design rules for ecological sustainability such as nature of land and water resources, preventing loss of biodiversity, using energy from renewable resources, minimising pollution and re-using resources. Whilst the terms clean and green are bandied about a lot in Australia agriculture, most farming systems are a long way off being acceptably ‘green’ at present.

What is an EMS?

An EMS (environmental management system) is a methodical approach to organisational structure, planning activities, implementation and review of organisations’ or businesses’ attempts to manage its impacts on the environment. The focus is on the environmental impacts of production, not on the end quality of the product. EMS aims to achieve “continuous improvement” of the system (which will hopefully lead to continual improvement in environmental management performance). EMS is a management tool for managing day-to-day environmental hazards that are occurring or may potentially occur. Documentation, record keeping, and assessment are crucial components of both EMS and QA systems so that a business can manage itself better and also prove it does what it says it does. A regular process of self-assessment is a critical part of EMS implementation, to determine progress towards environmental objectives and targets. A business using EMS can progress auditing if this is useful for marketing or the consumer demands it. External auditing is however, not essential if the business chooses not to do so.

There are many frameworks for EMS, however the ISO 14000 series of standards is the major internationally recognised approach and has been adopted by Australia and New Zealand as the preferred standard. ISO 14001 specifies the components of EMS that are required for ISO 14001 certification and ISO 14004 provides guidance and interpretation to ISO 14001.

Although many industries successfully use ISO 14001, it has not been widely adapted to agriculture because of lack of necessity, perceived complexity, cost and time consuming requirements. In Australia some simplifications of an EMS and certification framework for agriculture based on ISO 14001 have been proposed by both NSW Agriculture and Agriculture WA, and are already being used in NZ. In WA this framework is likely to become a voluntary component of the SQF (safe, quality food) quality management codes).
(11)

Although the ISO system was designed for non-farm industries, its proponents claim it can be applied to any or all types of organisations. Critics find it a very expensive procedure and one

not suited to agricultural operations. The costs to an individual farm depend upon the availability of an environmental management system and the extent of the changes required under the system. Net benefits to ISO 14001 certification will be greater for producers marketing food products than for firms selling a bulk commodity far removed from final consumption. (12)

Interest in ISO 14001 accreditation appears to be increasing even though the take up in the agrifood sector has not progressed too far. Studies in Sweden and France regarding the potential of ISO 14001 for farming operations also identify major barriers to adoption of ISO standards. These are best summarised by growers themselves, as the following list of concerns from an ISO 14001 workshop for Ontario, Canada growers indicates:

- The potential costs it will add to farming enterprises
- There are no obvious economic (or for that matter environmental) benefits to offset the cost
- The inability to control or influence new regulations
- The negative effect it may have on small to medium “family” run operations
- The potential negative exposure of farming activity to a critical and uninformed public
- The inability of most agricultural producers to be fully aware or informed about the complexities of such initiatives. (12)

11. Ridley AM. Towards Environmental Management Systems In Broadacre Agriculture. Hobart 2001

12. Wall E, Klupfel E, Weersink A, Swanton C. Processed Vegetable Production in Ontario. A review of sustainability issues. University Of Guelph, 2001.

Why Adopt an EMS?

The reasons for adopting an EMS may vary between enterprises, landholders and Communities. These may include the need to:

- Improve profits and protect the environment
- Become more sustainable
- Differentiate their products
- Maintain or improve access to markets and natural resources
- Reduce environmental and financial risks
- Gain respect, pride and enhanced reputation from taking action to improve the environment. (13)

Drivers for EMS in Australia

There are three major reasons that will drive the adoption of EMS in Australia.

Community Concerns

There is increasing community awareness and concern about the degradation of natural resource as a result of agriculture. Concern is increasing in both Australia and overseas. In Australia this concern is reflected in current policy debates at both Federal and State level. Governments want increasingly accountability with regard to agriculture's impact on the environment, but do not want the cost of increased regulation. This makes adoption of more responsible management a preferred option for governments and also meets the requirement of industry to manage their own business responsibility.

Market Pressure

Retailers are reacting to pressure for 'clean and green' products by requiring food from their suppliers that is verifiably safe and increasingly produced in an environmentally sustainable manner. This trend is most apparent in Europe and Japan and is being led by large supermarket chains (such as Sainsbury's and Tesco's)

13. Environmental Management Systems in Australia. AFFA 2002.z

WTO

The World Trade Organisation (WTO) is increasingly focussing on the broad relationship between trade liberalisation and the environment, and how trade rules relate to environmental protection policies and to international agreements:

Canada, the US and Europe are leading the debate. The US stresses that members should have a high level of environmental protection and Canada want an environmental review for the next round of trade negotiations The Federations of German Industries highlights the spreading of EMS as a key issue. The United Nations Environment Program, the World Bank and the World Conservation Union are also becoming proactive in the environment and trade debate.

7.3 Environmental Programs

Various environmental programs exist in Europe, North America and New Zealand, (Not necessarily EMS):

LEAF UK

Linking Environment and Farming (LEAF) is a farmer driven, not for profit organisation based in Warwickshire UK

Roley Puzey, Executive Officer with LEAF explained the program when I met with him at the Stoneleigh office. LEAF started in 1991 after bad press about agricultural practices motivated some individual farmers into documentation of their farming methods. Originally it started as a 3-year project, but the enthusiasm of the individuals kept it going. It is a concept based around demonstration farms that have Best Farm Practice. LEAF is a charity, and it has about 1300 members who pay an annual membership. It is 30 a year for less than 300 acres and 50 year for more than 300 acres. LEAF is about self -assessment via the LEAF audit. It is about setting targets, awareness of the issues and ongoing improvement. Leaf does not have external auditing and is not progressing towards ISO 14001”

Jeremy Boxall works with LEAF on a project to take the LEAF logo to retail level. He said “to get the LEAF marque to a retail level it has to have external auditing. Waitrose supermarkets are keen to try the LEAF marque on their products. We just have to get the suppliers audited to the LEAF standard.” It will be an interesting trial because most retailers say no – customers will not pay more to buy food that has an environmental logo.”

ONTARIO ENVIRONMENTAL FARM PLAN.

The Ontario Environmental Farm Plan commenced in 1993. It is run by farmers and is administrated through the Ontario Soil and Crop Improvement Association, and works in partnership with government. In 2001 it had over 15000 participants (43% farmers).

The first step in participating in the EFP is to attend a workshop where farmers receive an EFP workbook. They then go away and complete their own self-assessment of their operations through separate modules. And develop an action plan for confidential review by an appointed group of fellow farmers. They get feedback from this review and implement the action plan.

Each plan is eligible for \$1,500 from the government as an incentive following peer review by farmers. Like LEAF the restriction of taking EFP to a retail level is that it does not have an external auditing process. Critics say that it is ‘just farmers patting each other on the back.’ Retailers I spoke to in Ontario said “it’s a great system, but it means nothing to us until it gets third party audits.”

7.4 Case Study - Sainsbury's and Shaw's Supermarkets.

“Quality Products from Environmentally Sustainable Farms”

J Sainsbury P/L is a leading UK and US retailer with interests in financial service and property. The group comprises the Sainsbury's Supermarkets and the Sainsburys Bank in the UK and Shaws Supermarkets and Star Market in the US. Group turnover in 2002 was 18.2 billion.

Sainsburys Supermarkets

John James and Mary Anne Sainsbury established Sainsbury's Supermarkets in 1869 and is Britain's longest standing major food retailing chain. A typical Sainsbury's Supermarket offers over 23,000 products with 40% of these being 'own brand'. Sainsbury Supermarkets employ 145,000 people and serve 11 million customers a week.

The mission of Sainsburys and Shaws is to be the customer's number one choice for food, delivering products of outstanding quality and great service at competitive costs through working faster, simpler, together.”

Sainsburys is a company that has marketed its environmental and social responsibility policies as a method of differentiating itself from other retailers in the UK. Their market is in the middle to upper class sector and therefore they can focus on issues other than the cheapest prices. See Diagram 2

Geoff Spreigal of Sainsbury's says that the big issues for their customers are food safety, a reduction in pesticides, healthy eating, organics and additives in food. To tackle these issues Sainsburys have implemented a number of initiatives.

Distribution of Target Markets on UK Retailers

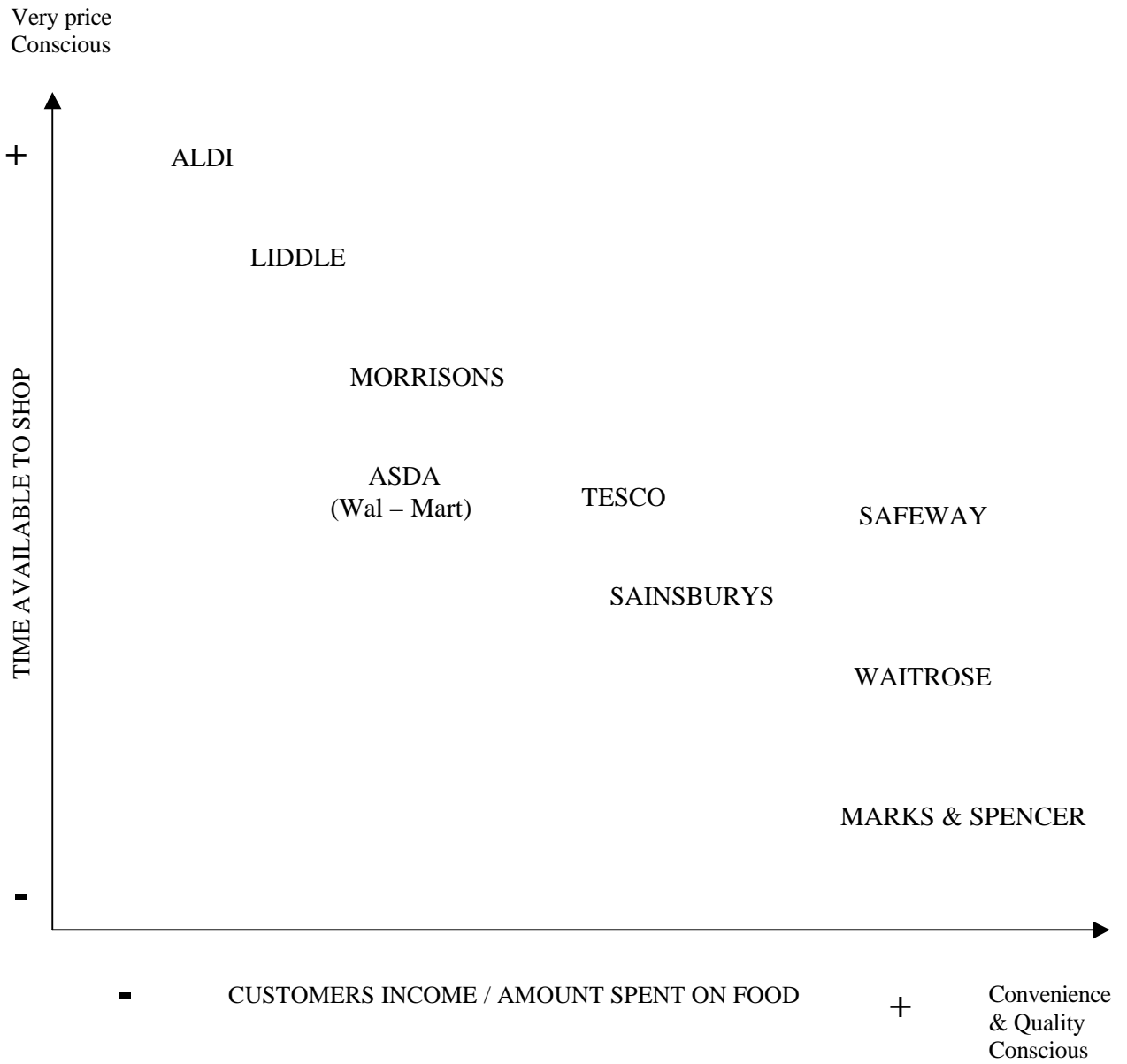


Diagram 2

Sainsburys, like most UK retailers have implemented stringent quality assurance programs back through the supply chain to their suppliers. The Sainsburys Biodiversity Action Plan, implemented by FWAG (Farming and Wildlife Advisory Group), is required for each farm. Sainsburys pay for FWAG to coordinate the plan. The aim is for the suppliers to not only have auditable quality programs but also positive environmental outcomes that are documented.

The Blue Parrot Café is a line of children's food that has been established by Sainsburys as additive free foods. It includes 140 lines of food and is on its way to becoming a 100 million brand for the firm. Sainsbury's "Be good to yourself" brand is another that is based on healthy, high quality food and is now worth 200 million. Organics are an increasing sector of the shelf space with Sainsbury's selling of 400 million worth of organic food annually.

Sainsbury's has established relationships with the Marine Stewardship Council and attempts to source seafood from sustainable fisheries, and likewise with the Forestry Stewardship products. To achieve the environmental record reputation that Sainsburys has in the UK, being the leading retailer on the Business in Environment (BIE) index, has relied on five main factors.

- Board Champion

The board believe that environmental sustainability is good for its business and makes a real business case for it. Ian Coull who is on the board is a champion for its cause.

- The board has a sub group that focuses on all of the environmental impacts of the business
- Sainsbury's targets all of its stakeholders to be engaged in the process of environmental sustainability
- Sainsburys use independent verification to measure their performance against the key indicators.

*Sainsbury's has also been involved in the 'Race to the Top' program.

'Race to the Top' is an alliance of farming, conservation, labour, animal welfare and sustainable development organisations which is running a benchmarking exercise that is aiming to track the social, environmental and ethical performance of UK supermarkets on an annual basis and bring about change within the UK agricultural and food sectors and beyond.

"The 'Race to the Top' program for Sainsbury's will recognise how we have identified our customer concerns and are constantly working to improve the environmental and social performance of our business, as well as influencing our suppliers around the world to seek improvements in these areas themselves" Sainsburys Annual Report 2002.

Sainsbury's has been working with the 'Race to the Top' initiative since 2001, after being approached by the International Institute for Environment and Development. The supermarkets will be reporting against seven groups of indicators –

- Animal welfare standards
- Biodiversity and landscapes
- Labour standards
- Regional sourcing and local development
- Public health
- Sustainability management and reporting and
- Terms of trade with primary producers

Shaws Supermarkets

Shaws Supermarkets has been a wholly owned subsidiary of J Sainsbury P/L since 1987, and part owned since 1983. Shaws serves over four million customers per week and as June 02 had 185 store in New England, USA. In June 1999 J Sainsbury P/L acquired the entire share capital of Star Markets for a total consideration of \$497 million US. Star Markets operate in the metropolitan Boston area. The acquisition took Shaws Supermarkets to the market leader in Massachusetts.

At a meeting with Shaws President and CEO, Ross M^cLaren, at the firm's Massachusetts headquarters, he explained the reasons behind Sainsburys moving into the North America market and the differences between the US and UK market. "Sainsburys original plan to step into the US market was to get access and exposure to the latest technology. The two businesses share ideas, and management have moved from both sides of the Atlantic.

Shaws have implemented the UK strategy of own branding. Approximately 40% of the product lines are own brand. The 'own brand' concept is strengthening, but probably will not reach the point that it is at in the UK" he said.

The difference with America is that consumers are great believers in public health and food safety. They trust that the authorities achieve compliance for food safety in the system.

In the US, food is quite clearly separated from agriculture. Agriculture is remote to the vast majority of North Americans, so there is not the consumer pressure to know how the food is produced.

Organics is a growing market; it does have an environmental link. The natural food market rather than organic is where we see the growth. The Wild Harvest stores have been developed for natural foods. They stock non-GM products. The US has a completely different attitude to GMO's. Greenpeace have targeted GMO's in UK and Europe but had a lot less of an impact in the US. Americans embrace science and technology. The British consumer is much more conservative. The American market has regional differences and cultural differences. Here we have Italian, Jewish, Portuguese, Chileans, Cubans. There is a massive Spanish speaking population. Because of this diversity you have to micro-market. The big trend in retailing is into the semi prepared or 'ready meal' segment. Food preparation time is seen as a waste of time. Of the total disposable income spent on food, 50% is consumed outside of the home. The ready meal market is edging back into the fast food market."

When asked about what strategies he would advise for Australian producers he said, "Producers have to get closer together. Too often the only communication in the market is when the price is negotiated. Producers have to be able to "walk back with their products from the store shelf" and understand the system and chain which the produce takes from their farm. Producers have to have greater understanding of their customer."

MESSAGES FOR AUSTRALIAN INDUSTRY

It is clear that now, and even more so in the future, that assurance of product quality is not negotiable if we intend on supplying the high value markets of the globe. If Australia is to continue to position itself as a guaranteed supplier of quality food products, then documented quality assurance will be a necessary component of the production and processing system. For producers of commodity products such as wheat, who haven't yet been exposed to the direct market pressures, will have to begin to adopt QA protocols as it will be inevitable in the future that it will be required. The message to the industry is to try to keep QA programs as rationalised, aligned and farmer friendly as possible to reduce the cost of compliance. The most effective QA witnessed were ones that were part of a market focused strategy, where producers could realise a tangible benefit for supplying a high quality assured product to a specific market.

After assessing environmental programs and their roles in the agrifood supply chain, I'm not convinced that there are any real benefits to producers accrediting their farming system to ISO 14001. The cost of compliance is high and the market is not yet prepared to pay any more for food that is produced in this way. As Australian producers we certainly have a long way to go to guarantee that we have an environmentally sustainable agriculture system, I believe we need to expand on what has been started with Landcare. The next step is to move to a system called Agricology where we aim to implement sustainable practises on farms and meet targeted benchmarks. There is a large pool of talented people who have worked in Landcare that have lost direction and motivation due to the perceived lack of tangible benefits to the businesses and properties they have worked on. Broadening the scope of the Landcare work to sustainable farming systems, as has been put in practice by various farmer groups in Australia, will have a greater impact on the sustainability of our industry.

8. Genetically Modified Organisms (GMO'S)

The topic of GMO's has received plenty of debate in recent years, and has been the topic of study for other Nuffield's, so this report just gives a summary of the issues from both sides of the debate. It includes feedback from grain marketers and retailers and the market's perception of GMO's and my recommendation for the Australian industry.

To get both sides of the debate I spent a day with Geert Ritsema, the head of the anti – GM campaign for Greenpeace, at the head office in Amsterdam. A few months later I had two days at the Monsanto offices at St Louis speaking to six of the senior executives.

GREENPEACE

The message from Geert Ritsema at Greenpeace was that there are three main reasons why farmers in Australia should not adopt GM technology. The first was market access, he believed that a smart marketer would ask “What do my customers want?” Consumers don't want GMO's in their food. He said that this is supported by the major retailers in Europe that do not stock GM products on their shelves. Geert believes that in time GM free products will command a real premium and Australia could be ideally positioned to capitalise on that market by branding themselves as a genuine and credible source of GM free products. He said the people that care are the people that have the money to pay for non GM food.

His second reason for not adopting GMO's was the impact it could have on the environment and the risk of the loss of biodiversity. “The technology is very new in scientific terms. How do we know what the outcomes will be in a few years time. This is so different from science in the past because in the case of transgenics, humans are playing God. They are crossing species that would not cross with each other in nature. There have been plenty of cases in history when mans' scientific advances have 'gone wrong'. With GMO's “you can't put it back in the bottle.”

The last main reason Greenpeace is against GMO technology is the shift of power in agriculture and food production that accompanies the patented gene technology.

“Three or four multinational corporations hold all the GM patents. We have already seen with the Percy Smeiser case in Canada that the precedent has been set. The judge said he didn't care how the Roundup Ready Canola carrying Monsanto's gene got into Percy's paddock, he hadn't paid for the technology fee so he was liable. This is going to create a whole new world of food producers. The trouble with the multinationals is they are all focussed on returns to shareholders and their bonuses. They don't really care about the long term impacts. They are under pressure to make money from technology before the patent expires. These companies say that without GM technology we will not be able to feed the world in the future. The reason that we already have people starving is not a food production issue.”

MONSANTO

In two days at Monsanto I spoke with eight of the company's executives about GM technology, its application in Australia and the benefits it would bring to the Australian agrifood industry.

The meetings were with:

Rob Fraley, Executive Vice President and Chief Technology officer

Tom Helscher, Director, Biotechnology Acceptance Programs

Mark Wells, Strategic Projects Lead

James Zimmer, Marketing Director, US Central & Plains Regions

Mike Frank, Marketing Director, Traits and Technology

Ron Schinnour, Vice President, Strategic Accounts

Mark Buckingham, Manager, Public Affairs

Nic Ayling, Director, Ecotill Agriculture.

The compelling message from Monsanto was that GM technology is safe, it is widely tested and it works. "It is the most rapidly adopted technology in the history of agriculture. Pesticide use has dropped 70% in cotton crops, 65% in soybean crops and 25% in corn. The issue is about facts versus perception. Pesticide residue is the biggest concern from food customers and by using GM we can significantly reduce the use of pesticides. No crops have ever been tested as much as GM crops. This technology has been in food since 1996 and there has not been so much as a headache or stomach ache from eating it.

The environmental benefits are massive. The environmental lobby groups are promoting organics but many of the organic farms are not very environmentally sustainable because they have gone back ploughing the land. With Roundup Ready technology farmers are leaving the green ground cover, sowing directly into it and then spraying over the top with Roundup when the crops emerge.

They say that we need to test more and longer to know of the effects. It's been commercial in the States for six years. How long is long enough? Fifty years?

The next stage of development of GM will be value adding crops. We are doing more with genomics than transgenics. It is about identifying the existing gene pool, and understanding more about the plants we already grow. Often the crops already contain the traits, we just have to identify them eg, high protein gene or corn with higher extractable starch. There are numerous benefits to farmers such as cost savings, simpler systems, yield increases, better weed management. The benefits to consumers are already there but harder to recognise eg, less pesticide residue, cheaper food. In the future the increase of functional foods will make the technology more consumer friendly."

"There may be a small window of opportunity for Australia to market GM free products but it will only last a couple of years. Markets might say they want GM free, but no one is prepared to pay a premium. The risk is that companies like Monsanto will pull their research and sales support out of Australia as it won't be worth investing in. The generic chemical marketers will be ok for a couple of years but they don't do any research or development. Also, your competing countries are adopting the technology, look at what's happening in India, China and South America."

INTERNATIONAL STANDARDS FOR GMO'S

As there are no international standards for GMO's, countries are assessing risks on an individual basis and applying a variety of measures. Some of the key market access conditions or restrictions for GM crops at present include:

- Brazil – Labelling requirements set down by Presidential Decree entered into force on 1 January 2002, but are subject to further legal challenge. The labelling requirements state that GM food must be labelled “GM” or “Containing GM” if the GM Component is greater than 4% by weight of packaged food.
- China – Labelling requirements set out that all food containing and GM ingredients shall be labelled and highly processed foods which contain no detectable GM DNA protein shall be labelled to signify the source material was GM.
- European Union – EU regulation 49 / 2000 establishes that materials derived from approved varieties of GM soybean and GM corn are exempt from labelling, under EU regulation 1139 / 98 when they represent less than 1% of the material. Proposed EU regulations, may require labelling if approved GM material exceeds 0.5% of the material.
- Japan – A finished food must be labelled as ‘GM ingredient used’ or GM non-segregated’ if it contains more than 5% approved GM product by weight. A finished food may be labelled as “non-GM” if it contains less than 5% approved GM product by weight and the vendor can show its production and processing used an “identity preserved” approach.
- Korea – Foods containing soybeans, corn or bean sprouts in the top 5 ingredients by weight must be labelled as “containing GM” if the level of one of these ingredients is greater than 3% by weight of final food.
- Taiwan – A finished food must be labelled as “GM” or “containing GM” if it is greater than 5% approved GM by weight.

While there may be opportunities for Australia to supply both GM and non GM products, the lack of market information and directions, and directions on costs of segregation and product identification is continuing to frustrate producers in their efforts to weigh up potential agronomic and other production benefits.

MESSAGES FOR THE AUSTRALIAN INDUSTRY

I believe the use of biotechnology and genetically modified organisms will have a valuable and important part to play in the future sustainability of Australian agriculture. They will not be a 'silver bullet' that will fix weed control, crop pests and diseases, or salinity. They will not make all farmers that adopt them suddenly rich.

GMO's will be a valuable tool, and will be part of the progression of science and technology. Currently the world markets are confused about genetically modified food. While consumers can see no real benefit to them they will remain sceptical about buying them.

I believe that the moratorium of commercial release of GMO's is a good thing. While there are some excellent projects being developed, the technology available to us immediately is limited to Canola and some other pulse crops. We probably have a couple of years to make gains into markets by remaining GM free and so I believe the moratorium should stay in place. What needs to happen is that the trials and research that is currently under way needs to be conducted in specified "GMO incubation research stations that are properly designed and secured for GM research. If the life science companies and government work together to invest in the incubation centres and make them accessible to farm tours and field days, it will help both the policy makers and the farmers that will adopt them understand the technology, with increased knowledge.

Conclusion

This study has highlighted the massive changes that are occurring in the global agrifood industry. Many of the new trends are being experienced with greater emphasis in part of the world other than Australia. Australian producers in the past have enjoyed the relative freedom of producing products they choose and implementing the system of production that they believe is right.

It is inevitable due to the globalisation of the agrifood industry that the production pressures that impact on the European and North American farmers will increasingly impact on Australian farmers.

If we can learn from the successes and mistakes from these regions, Australia has an unlimited potential to become the globe's 'preferred source of food and fibre.' To achieve this status we must be market focused and attempt to value add the products we produce. We have to work together to build strong supply chains to meet the demands of our global customers. Agrifood industries must have a supportive business environment in which to operate so that they can invest in the infrastructure and latest technology available. Australia has to build a culture of excellence and an environment that rewards and assists innovators. We have to continue to build an export culture, and finally we must increase our environmental sustainability. We have to improve the use of our material resource of land, water and air. The future of the Australian agrifood industry has enormous potential limited only by the enthusiasm and aspirations of those involved in it.

Appendix One

List of the people and businesses that I met with.

- John Nicholson, Trade Development Board, Trade NZ, Singapore
- Syed Abdul Aziz Othman, Director RM Livestock, Malaysia
- Dr Nasir Shamsudin, Professor, University Putra, Malaysia
- Prof Mohd. Yusof Hussein, Dean, Faculty of Agriculture U.P.M, Malaysia
- Peter Varghese, High Commissioner of Australia, Malaysia
- Richard Palk, Consulate General, Australian High Commission, Malaysia
- Paul Gibbons, First Secretary (Economic), Australian High Commission, Malaysia
- Mr Pempre, Agricultural Extension Officer, Bangkok, Thailand
- Rob Dempster, Manager Dimon Leaf Tobacco, Thailand
- Youn Tongkham, Factory Planning Manager, Dimon Leaf Tobacco, Thailand
- Sean Beer, Senior Lecturer, School of Service Industries, Bournemouth University, Dorset, UK
- Dr Christopher M. Brown, Technologist, Marks & Spencer, London UK
- Ian Newton, Head of Trade Policies, Ministry of Agriculture, Forestry & Fisheries, London, UK
- Jean Summers, EU International Division, Trade Policy, M.A.F.F, London, UK
- Vic Patten, EU & Agricultural Strategies, AG Policy, M.A.F.F., London, UK
- Ann Tarran, England Rural Development Program, M.A.F.F., London, UK
- John Colley, Senior Agriculture Manager, HSBC, London, UK
- Christine McCarthy, Manager, Marketing, HBSC, London UK
- Oliver Harwood, Land Management Advisor, Country Landholders Assoc, London, UK
- Prof Allan Buckwell, Director of Policy, Country Land and Business Association, London, UK
- Dr Marie-Helene Baneth, Rural Economy Advisor, Country Land and Business Association, London, UK
- Peter Fane, Eurinco, London, UK
- Betty Lee, Assistant Director, National Farmers Union, Brussels, Belgium
- Warren Frazer, NZ, Embassy to Belgium & Mission to EU, Brussels, Belgium
- John Corrie, UK Parliament Member, Scotland, UK
- Torben Kudsk, Danish Agricultural Council, Brussels, Belgium
- Marie Christine Ribera, Copa-Cogega, Brussels, Belgium

- Dr Canice Nolan, Administrative Principal, European Commission, Brussels, Belgium
- Linda Mauperon, European Commission, Brussels, Belgium
- Melinda Sallyards, United States Mission to European Union, Brussels, Belgium
- Miguel A. Naveso, Birdlife International, Brussels, Belgium
- Damien Reed Phillips, Assistant Director, Bureau De l'Agriculture Britannique, Brussels, Belgium.
- Frederic Thibault, Nuffield Scholar, Grain Farmer, Tauxigny, France
- Bridgette Carroll, Agronomist, Aubourn Farms, Lincoln, UK
- Phillip Wynn, Managing Director, Aubourn Farms Lincoln, UK
- Trevor Robinson, Business Development Manager, Cargills, Lincoln, UK
- Mark Aitchison, Banks / Cargill Agriculture, Lincoln, UK
- Ambrose Fowler, Nuffield Scholar, Farmer, Gainsborough, Lincolnshire, UK
- Dr David Nelson, Field Director, Branston Potatoes, Lincoln, UK
- Mike Cook, Operations Manager, Branston Potatoes, Lincoln, UK
- Chris Halmshaw, CEO, Healthfresh Foods LTD, Nth Lincolnshire, UK
- Richard Arundel, Arundel – Kerr Produce, York, Yorkshire, UK
- David Cousins, General Manager, Arable Farms, JSR Ltd, Yorkshire, UK
- Richard Fuller, Beed & Sheep Specialists, JSR LTD, Yorkshire, UK
- Stephen Fell, Nuffield Scholar, Lindum Turf Farm, Thorganby, Yorkshire, UK
- Henry Fell, Nuffield Scholar, Meat Inc, Yorkshire, UK
- John Robinson, Ritchey Tags, Yorkshire, UK
- Andrew Herbert, North York Moors National Park Authority, Yorkshire, UK
- Dorothy Fairburn, Nuffield Scholar, Thirsk, Nth Yorkshire, UK
- Duncan Evans, General Manager Lamb Marketing, Bernard Matthews, Norwich, UK
- Julia Mullen, Lamb Product Manager, Bernard Matthews, Norwich, UK
- Michael Woodhouse, Director, Farming and Wildlife Advisory Group, Warwickshire, UK
- Anne Heeley, Co-ordinator Farmland Biodiversity, FWAG, Warwickshire, UK
- Jeremy Boxall, Project Co-ordinator, Leaf, Warwickshire UK
- Roley Puzey, Technical Assistant, Leaf, Warwickshire, UK
- Caroline Drummond, Director, Leaf, Warwickshire, UK
- David Rose, Managing Director, Melrose Pigs, Melbourne, Yorkshire, UK
- Richard Pratt, Agronomist, JSR Farms, Yorkshire, UK

- Hazel Preece, Quality Assurance, JSR Farms, Yorkshire, UK
- Sarah Mackie, Safeway Supermarkets, London, UK
- George French, Senior Technical Manager, Sainsbury's Supermarkets, London, UK
- David Peck, Buying Manager, Tesco, Hertfordshire, UK
- Michelle Waterman, Livestock Production Specialist, Tesco, Hertfordshire, UK
- Sue Armstrong – Brown, Agriculture Policy Director, RSPB, UK
- Clare Oxbry, Real Food Program, Friends of the Earth, UK
- David Clark, National Farmers Union, London, UK
- Hon. Clive Griffiths, Agent General, Govt of Western Australia, London, UK
- Agnes Kachelhoffer, Trade & Investment Officer – Govt of Western Australia, London, UK
- Adam Dejong, Peas & Seeds Importing Agent, Mijnsheerenland, The Netherlands
- Geert Ritsema, Biodiversity Campaigner, Green Peace, Amsterdam, The Netherlands
- Allan & Yannick Monnier, Truffle Farm, Marigny – Marmande, France
- Maurice Metayer, Reignol Sur Indre, France
- Montlouis Winery Staff, Montlouis Sur Loire, France
- Pierre Marie, Organic Sunflower Oils, Reugny, France
- David Sparling, Professor AG Economics & Business, University of Guelph, Ontario, Canada
- Ann Clark, Professor Plant Agriculture / Organics, University of Guelph, Ontario, Canada
- Spencer Hansen, Professor AG Economics & Business, University of Guelph, Ontario, Canada
- Joanne Selves, President, Selves Farms Ltd, Ontario, Canada
- Ellen Wall, Professor, University of Guelph, Ontario, Canada
- John Fitzgibbon, Director, Ontario Environmental Farm Plan, Guelph, Ontario, Canada
- Corey Vangronigen, VG Meat Packers ITD, Simcoe, Ontario, Canada
- George & Tracey Thompson, Nuffield Scholar, Grain Farmers, Clinton, Ontario, Canada
- Alex Rosenburg, Ontario Farm Products Marketing Commission, Guelph, Ontario, Canada
- Sophia Dension, Ontario Farm Products Marketing Commission, Guelph, Ontario, Canada
- Kevin Grier, Senior Market Analyst, George Morris Centre, Guelph, Ontario, Canada
- Allan Mussell, Senior Research Associate, George Morris Centre, Guelph, Canada
- Hon Charles Caccia MP, Canadian Minister for Environment, Ottawa, Canada

- Rick & Carolyn Feurth, Lamb operations & Abattior, Ontario, Canada
- Arnold Stiefel, Grain Trader Cargills, USA
- Eric Bowels, Vic President, Macquire Americas Chicago, Illinois, USA
- Sebastian Barrick, Trader / Analyst, Macquaries, Chicago, Illinois, USA
- Michael Allison, Trader / Analyst, Macquaries, Chicago, Illinois, USA
- Anthony Isles, Trader / Analyst, Macquaries, Chicago, Illinois, USA
- Steve Light, Director, Institute for Agriculture & Trade Policy. Minneapolis, Minnesota, USA
- Kristen Corselius, Program Assitant, IATP, Minneaspolis, Minnesota, USA
- Jerry Carlson, Financial Editor, Land Owner Magazine, Cedar Falls, Iowa, USA
- Jon Winston, Program Officer, AG & Environmental Policy Winrock Int, Arlington, Virginia, USA
- Suzie Greenhalgh, Assoc Economics, Program, World Resources Institute, Washington DC, USA
- Sonia Newenhouse, President, Madison Environmental Group, Madison, Wisconsin, USA
- George Boody, Executive Director, Land Stewardship Project, Minnesota, USA
- Ray Kirsch, Farm Co-ordinator, Midwest Food Alliance, St Paul, Minnesota, USA
- Kathy Lawrence, Executive Director, National Campaign for Sustainable Agriculture, Pine Bush, New York, USA
- Charles Walters, Executive Editor, Acres, Eco-Agriculture Paper, Missouri, USA
- Percy Smeischer, Farmer, Patented Gene Case V Monsanto, Canada
- Mike Callicrate, Ranch Foods Direct, St Francis, Kansas, USA
- Tony Tompson, Salix Grain, Windom, Minnesota, USA
- Mark McDons, Cow Caviar, Chippewa Falls, Wisconsin, USA
- Mary Hendrickson, Co-ordinator, Food Circles Network Project, University of Missouri, Columbia, Missouri, USA
- Chris Boessen, Crop & Swine Economist, University of Missouri, USA
- Michael Cook, Robert F Partridge Professor, University of Missouri, USA
- James Thobaben Ethics Scholar, Molecular Biology Program, University of Missouri, USA
- Kristi Livingston, Graduate Institute of Co-operative Leadership, University of Missouri, USA
- Mike Chippendale, Director, The Life Sciences Initiative, Missouri, USA
- Robert Fraley, Executive Vice President & Chief Technology Officer, Monsanto, St Louis, Missouri, USA

- Thomas Helscher, Director, Biotechnology Acceptance Programs, Monsanto, St Louis, Missouri, USA
- Mark Wells, Strategic Projects Lead, Monsanto, St Louis, Missouri, USA
- Mark Buckingham, Manager Public Affairs, Monsanto, St Louis, Missouri, USA
- James Zimmer, Managing Director Customer, Monsanto, St Louis, Missouri, USA
- Michael Frank, Marketing Director, Traits & Technology, Monsanto, St Louis, Missouri, USA
- Ron Schinnour, Vice President, Strategic Accounts, Monsanto, St Louis, Missouri, USA
- Ross McLaren, President & CEO, Shaws Supermarkets, West Bridgewater, Massachusetts, USA
- Dennis Kwider, Director of Quality Assurance, Shaws Supermarkets, West Bridgewater, Massachusetts, USA
- John Gerber, Professor, Agroecology Program, University Of Massachusetts, USA
- Julie Caswell, Professor Department of Resource Economics, University of Massachusetts, USA
- Shane Ohara, Australian / New Zealand Lamb Company, New York, USA
- Francis Cassidy, Meat Livestock Australia, Washington DC, USA
- Frank Tarantino, FoodComm International, Palo Alto, California, USA
- Joel Weinstein, Foodcomm, International, Palo Alto, California USA
- Stuart Richardson, President AWB (USA), Portland, Oregon, USA
- Adrian Gault, Nuffield Scholar, Kiwi Fruit, Beef / Sheep Farm Opotiki, New Zealand
- Doug Leeder, Former Chairman, New Zealand Dairy Board, Opotiki, New Zealand
- Catherine Bull, Nuffield Scholar, Grower Representative, Fonterra, Whatatane, New Zealand
- Doug Bull, Director Dairy Marketing & Processing Companies, Whatatane, New Zealand.
- Gerard Hickey, Commercial Director, Advanced Foods Ltd, Waipukurau, New Zealand
- Lloyd Fitness, Livestock Manager, Richmonds, Hastings, New Zealand
- Murray Behrant, Livestock Services Manager, Alliance Group Ltd, Invercargill, New Zealand
- Jeremy Absolom, Director, Rissington Breedlines Ltd, Napier New Zealand
- Allan Grant, Nuffield Scholar, Director Canterbury Meat Packers, Ashburton, New Zealand.
- Brent Rawston, Rossendale Wines and Beef Operations, Christchurch, New Zealand
- Chris Wright, Meat NZ Director, Lamb Producer, Waikaka, New Zealand

- Neil Kerr, Managing Director, Kerridale, Culinary Herbs & Lettuce, Rangiora, New Zealand
- Neil Gow, Senior Lecturer, Farm Management, Lincoln University, Canterbury, New Zealand
- Bill Risk, Manager, Topoclimate Services, Invercargill, New Zealand
- Nick Round – Turner, Information Officer, Crops for Southlands Inc, Invercargill, New Zealand
- Craig Howard, Crop Centre Manager, Crops for Southland Inc, Invercargill, New Zealand
- Hugh Ritchie, Drumpeel Lamb & Cropping Operations, Otane, Hawkes Bay, New Zealand.