

Value Adding using Traceability & Regional Branding in a Commodity World

A report for



By David Fulwood

2006 Nuffield Scholar

Completed April 2007

ANFSA Project No GRDC 050

Sponsored by:



© 2007 Nuffield Australia
All rights reserved.

This publication has been prepared in good faith on the basis of information available at the date of publication without any independent verification. Nuffield Australia does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication nor its usefulness in achieving any purpose.

Readers are responsible for assessing the relevance and accuracy of the content of this publication. Nuffield Australia will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on the information in this publication.

Products may be identified by proprietary or trade names to help readers identify particular types of products but this is not, and is not intended to be, an endorsement or recommendation of any product or manufacturer referred to. Other products may perform as well or better than those specifically referred to.

This publication is copyright. However, Nuffield Australia encourages wide dissemination of its research, providing the organisation is clearly acknowledged. For any enquiries concerning reproduction or acknowledgement contact the Publications Manager on ph: 02 6964 6600.

Scholar Contact Details

David Fulwood
PO Box 9
Coleman Road
Cunderdin WA 6407
Phone: +61 8 96 351 127
Fax: +61 8 96 351 485
Email: david@fulwood.com.au

In submitting this report, the Scholar has agreed to the Nuffield Australia publishing this material in its edited form.

Nuffield Australia Contact Details

Nuffield Australia
Telephone: (02) 6964 6600
Facsimile: (02) 6964 1605
Email: enquiries@nuffield.com.au
PO Box 1385, Griffith NSW 2680

Acknowledgments

Thank you very much to my wife Jo, who not only looked after our two year old son Hamish during the time that I was away but was pregnant with our twins, Sebastian and Annie, who were born three weeks after I finished travelling.

Thank you to my Dad, Malcolm, who took on the extra work load of managing our business himself for most of 2006, and dealt with all the extra problems associated with a very dry growing season.

I would also like to formally thank and acknowledge GRDC (Grain Research and Development Corporation) for its sponsorship of my Nuffield Scholarship and acknowledge its continued support for Nuffield Australia.

Thanks to Sergiy Grykshtas for all his work and time spent organising a fantastic program in the Ukraine, Louis Chirnside for his time in the Ukraine, Matt Yamamoto and Hiroshi Takahashi from the Western Australian Government and Rob Mann from MLA for arranging meetings and hosting me in Tokyo.

Thank you to Nuffield Scholars Barry Cudmore, Jim McCarthy, Stevie Houston, Robert Parker, Mike Giffin, Bruce Kerr and Dianna Spellman for their generous time and hospitality in Canada and the UK.

Thanks to Nuffield Australia and everyone who contributes to the fantastic Nuffield Scholarship Programme.

Table of Contents

| | |
|---------------------------------------------------|----|
| Acknowledgments | 2 |
| Table of Contents | 3 |
| Executive Summary..... | 5 |
| Findings | 5 |
| Outcomes..... | 6 |
| Objectives | 7 |
| Introduction - Changing trends in food | 8 |
| Food traceability..... | 9 |
| What is a traceability system? | 9 |
| Beef Traceability in the European Union..... | 9 |
| Quality Meats Scotland (QMS)..... | 10 |
| Food Traceability Systems | 13 |
| Japan leading the way..... | 13 |
| Traceability from a consumers view - QR code..... | 17 |
| Regional Branding..... | 18 |
| Business Examples | 20 |
| Southdowns Lamb | 20 |
| Bookham Cheese and Pasta..... | 21 |
| Jordans Cereals..... | 22 |
| Elveden Farms Food Hub..... | 24 |
| Hill Farm Oils..... | 25 |
| Conclusion..... | 27 |
| Recommendations | 28 |
| Contacts & Business Visits..... | 29 |

| | |
|----------------------------------------|----|
| Canada | 29 |
| Ukraine | 29 |
| Ireland | 30 |
| Northern Ireland | 31 |
| Scotland | 31 |
| England | 31 |
| Japan | 34 |
| China | 35 |
| References | 35 |
| Plain English Compendium Summary | 36 |

Executive Summary

“Farmers are their own worst enemy, the price of a commodity goes up so they produce more, the price of a commodity goes down so they produce more again”, Adrie Zwanenberg Rabo Bank Head Quarters Netherland, February 2006.

There is increasing opportunities for producers to look past the farm gate, to explore ways to add value to their commodity product. It is easy to be a commodity producer and blame the next step of the supply chain for poor prices, but producers need to understand that they can be involved further down the supply chain if they want to move away from being commodity producers and price takers.

Value adding at a farm level is capital intensive, labour intensive and usually inefficient compared to commercial large scale food processing. This means that finished or processed goods produced on-farm or locally must have a point of difference so that consumers are prepared to pay a premium for the product.

Only the lowest cost producers will survive in a commodity producing environment, a trend that has been occurring in all types of agricultural production worldwide for decades. The number of producers is decreasing and the output of individual operations has increased as a result of the need to lower the cost per unit of production.

Findings

There is an increased focus around the world on food quality and safety. This is particularly evident in developed countries, in particular United Kingdom, United States and Japan and will become more of an issue as developing countries become more affluent. The percentage of the world’s population prepared to ‘go out of its way’ to purchase food that offers some sort of perceived health or high quality attribute seems to be increasing.

The evidence of this is the evolution and implementation of food traceability systems, country of origin labelling, high quality product lines in supermarkets and the increase in number and size of “wholesome” type food retail outlets.

Outcomes

This trend is giving producers of food commodities an opportunity to move away from commodity production and provide specialised products to a developing market segment.

The producer must provide the consumer with a product that has a point of difference. The point of difference gives the consumer a reason to purchase a particular product.

Traveling to New Zealand, Netherlands, England, Ireland, Scotland, France, USA, Canada, Ukraine, Japan and China, I have seen, in varying markets, the effective use of regional brands, origin labeling, promotion of health benefits and traceability using new technology; all put in place to give products a point of difference or a unique selling point.

I've been fortunate to visit many businesses and enterprises producing and selling goods which fit into the above criteria. In this report I will illustrate some of these examples to show how commodities can be turned into value added products. I hope to also demonstrate opportunities for producers and food manufacturers to become more involved in the supply chain and to pay more attention to the demands of consumers, rather than producing a product in the traditional manner and expecting to gain market share or improve returns.

Objectives

In our family business we have spent considerable time and money concentrating on an efficient production system. This has involved sharing larger agricultural equipment and peak season labour with my Uncle's farming business. The equipment and labour is spread across a larger cropped area to increase overall efficiency. We have implemented a complete controlled traffic system using high accuracy auto-steering on all cropping machinery and also the variable rate application of cropping inputs. Our system now requires less labour units per hectare, and other benefits include increased machinery and input efficiencies.

As commodity producers we know that lowest cost production is the key to operating a profitable and successful business. My interest is getting commodity producers to be involved with their product past the farm gate, to move away from being commodity producers by adding value to their product.

Two adding value methods that I planned to concentrate on are:

- branding; and
- provision of product traceability to the consumer.

Nuffield has given me an opportunity to take a step outside of our business, where we are required to focus on low cost production and provided me with a chance to focus on big picture issues with regards to food production and consumer trends at a global level.

During my travel I chose to look at a number of different products where the producers are involved with their produce past the farm gate. I also investigated traceability systems implemented in the production of a range of food products. The number of examples where producers are involved with adding value to a finished grain product is somewhat limited; however I encountered a number of producers involved with adding value to grain by producing a higher value product such as red meat.

Traceability systems in meat production has increased dramatically in recent years and is now moving into traceability of the grain used in meat production. The implementation of traceability systems in meat production, particularly beef, has been fast tracked due to mad-cow disease outbreaks in major beef producing and consumption areas such as Europe and the USA. With increased occurrences of Avian Virus (Bird flu) greater emphasis on traceability is expected, particularly in China with its huge potential for increased meat production.

Introduction - Changing trends in food

The food and retail sector in Australia is one of the most concentrated in the developed world.

The National Association of Retail Grocers estimated the combined market share of Woolworths and Coles was 76% in 2002. This increased from 40% in the mid nineteen seventies. This is a much higher dominance than most of the developing countries worldwide and highlights the large influence and power held by the small number of large operators in our retail market. *Source: National Association of Retail Grocers of Australia (2002).*

This also illustrates the average Australian's shopping habits. Generally the large supermarkets don't have the time or resources to acquire local produce for their local stores and acquisition and distribution of supplies takes place through centrally located distribution centres. The provision of cheap food by the large supermarket chains appears to be a priority over offering customers locally produced produce.

One example of this is the implementation of generically branded items such as lower cost, higher margin milk, branded with their own supermarket label.

Tesco Supermarkets in the United Kingdom is a good example of the marketing of "own" brand products with three distinct ranges of products, aimed at three distinct market segments. The sub-brands include; "Finest" for the premium product range, "Value" for the cheapest lower quality range and "Tesco" label for the middle range products. Other smaller segment sub-brands include Organic, Healthy Eating and Kids. Own brands are a growing trend with many other supermarkets in the UK because these products provide a higher profit margin to the retailer than specialty branded products.

At the other end of the consumer segment range, in high income areas of developed countries, there is an increased desire to shop locally for high quality produce at specialty stores, such as butchers, bakers and cheese shops. There is consideration for where the food is produced, by whom, and the production system used, and also any effects on the environment caused by the method of production.

Domestic and international high income, "food aware" consumers provide Australian commodity producers with opportunities to supply high quality produce, particularly if they can offer a "point of difference" which may include traceability or branding by the producer.

Food traceability

Traceability systems can track and trace food and its information at each stage of the food chain. It allows consumers to obtain correct information about food and its suppliers, and to make use of this information when they buy food products. Consumers are able to access accurate information about the product itself and also use the information for risk management purposes. Overall this increases the product reliability for the consumer because of the more stringent record keeping for each stage of the supply chain.

What is a traceability system?

A traceability system is a manual or computer system kept by a business which will link the animals or beef bought, to the reference number or code of the beef sold. All operators in the supply chain must have a traceability system so that beef on sale to the consumer can be traced back to the animal or group of animals from which it was derived and to prove that the labelling information given to customers throughout the supply chain is correct. *Source: Beef Labelling Guide, Department for Environment Food and Rural Affairs, United Kingdom.*

“Traceability means the ability to trace and follow a food, feed, food-producing animal or substance intended to be, or expected to be incorporated into a food or feed, through all stages of production, processing and distribution” *Source: EU’s General Food Law (Regulation (EC) No. 178/2002.*

“Ability to trace the history, application or location of an entity for consideration”. *Source: ISO9000/2000.*

Beef Traceability in the European Union.

On 17 July 2000 the European Union (EU) passed a regulation which meant that all beef retailers had to state where their beef is produced from. This is designed to give consumers clear information about traceability and origin of products, so they can make a more informed buying decision. The regulation applies to all fresh and frozen beef including veal, but excludes value-added meat products such as crumbed or seasoned meat or burger patties with added ingredients such as soybean protein or cereal binder.

Beef traceability on display at a Butchers Shop, Edinburgh, Scotland.



Regulation (EC) No 1760/2000 of the European Parliament established a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products. This regulation added to Council Regulation (EC) No 820/97 which was introduced in 1997, which set law about national cattle identification; traceability of origin including where the animal was born, reared, slaughtered and processed; and also voluntary labelling with additional information such as production and welfare details.

Labelling information may be written information given to customers at the point of sale and includes information given on packaging material and on labels near the product. It also includes information given at the point of sale in advertisements, posters, announcements and leaflets associated with the product.

For meat sold from a traditional butcher where meat is not pre-wrapped, information must be on the meat or displayed on a ticket in close proximity to the meat or on a sign visible to the customer.

Some or all of the following information must be recorded and displayed under the EU regulations -

- intake date (of animal, carcass or cut)
- the supplier
- delivery note
- kill date
- weight
- product (cut)
- UK ear tag/cattle passport number or reference code
- tray number or colour
- the date placed on the counter and link these to:
 - the reference number or code
 - the compulsory labelling about slaughterhouse and cutting plants
 - any approved labelling claims made against sales.

Quality Meats Scotland (QMS)

“Scotch Beef” and “Scotch Lamb” are sold under the European-wide scheme called ‘Protected Geographical Indication’ (PGI). This scheme helps the consumer identify high quality, traditional products, which are unique to a region.

Scotch Beef is a very good example of the use of both regional branding and product traceability, to add value to the product. To qualify for PGI and to be marketed under the Scotch beef brand, the beef must be sourced from cattle that are born, bred and slaughtered in Scotland, and must have been reared exclusively through farm assurance schemes.

QMS concentrates on eating quality attributes (tender, flavoursome and enjoyable to eat) as well as animal health and welfare. The overall aim is to produce the best quality product for the consumer as well as maximising returns through the supply chain. Scottish meat products enjoy a reputation of high quality produce but are under increasing pressure to remain competitive against competing international producers.

The recognition that it is financially difficult for producers in Scotland to remain competitive in a commodity market, has led to QMS concentrating on high quality meat production. This is seen by the work done educating producers and supply chain participants about how to improve and maintain quality. Producers are asked to concentrate on beef genetics, consistent growth rates, no rapid dietary changes and careful handling of animals. Processors are educated on using a combination of electrical stimulation, hip-bone suspension, considerate chilling and ageing.

QMS Value adding schemes

Monitor Farms

QMS has set up a Monitor Farms Program in Scotland, with the aim of improving production systems and quality, using existing farm enterprises as a real-life demonstration to other producers. The program involves local farmers, vets and processors attending on-farm meetings to make group decisions about the operation of the monitor farm. All management decisions are made by the group, which is regularly attended by 20 or more farmers. Reports on each of the farms are issued to the farming press and also published on a web site and information on technical and financial analysis is included. By 2006, a total of eight monitor farms had been setup, including beef and sheep production systems. I was fortunate to spend time at Drumdow, which was the first monitor farm in Scotland, owned and managed by Robert & Eileen Parker. Robert, in discussion with the monitor group, has made a number of changes and conducted a number of trials including the gradual move toward increasing the level of Hereford genetics in his cattle operation to improve the performance and quality of his produce.

Scotch Butchers Club

Scotch Butchers Club is a QMS initiative that allows independent butchers to join for an annual fee. QMS provides support, advice, and promotional material, all aimed at increasing customer's awareness of the brand and quality of the product sold. To qualify as a member butchers must source beef, lamb, and pork from an approved supplier, and can then use the "Scotch" label on their products. Members are also kept up to date with information on any issues that may affect their business, such as changes in legislation. They are regularly invited to educational seminars and discussion group meetings for butchers.

Scotch Beef Club

Scotch Beef Club, also a QMS initiative, accepts restaurants as members if they promote Scotch Beef clearly on their menus. The club is designed to give the restaurant the confidence to promote that the beef it serves is what it is claimed to be. Diners are reassured that the beef they are eating is Scotch and has been produced to the "Scottish" standards with a guarantee on the welfare of cattle. Chefs and restaurant operators can also attend The Scotch Beef Academy, which runs short courses educating students about all aspects of beef production and also how to read and understand the traceability information on beef labels.

Country of Origin Labelling (COOL)

Country of Origin Labelling for all restaurant menus is currently being discussed in the UK. If the proposed legislation is passed by the Government all restaurants serving red meat will be required to disclose the country of origin on the menu for each meat item offered. Again, this proposal is aimed at allowing consumers to make an informed choice about the origin of the meat they purchase.

Food Traceability Systems

Japan leading the way

Zennoh

Zennoh (National Federation of Agricultural Co-operative Associations) is one of the largest cooperatives in the world. There are 3.62 million farm households in Japan and most of these belong to one of Zennoh's 842 primary-level co-ops. Zennoh purchases and distributes materials and equipment for agricultural production as well as the collection, distribution and marketing of agricultural products. It aims to further develop Japanese agriculture, improve farm life and secure reliable supplies of food for Japan.

Japan has a heavy reliance on imported raw material such as fertilizer, foodstuffs, gas and oil. Zennoh arranges direct import and on-going relationships with suppliers to provide farmers with stable and cost effective supply. Because of the reliance on imported materials, a high percentage of Japanese customers place an emphasis on the quality and origin of the food they purchase and consume, therefore traceability from production through to the consumer is of increasing importance in Japan.

The Zennoh Reassurance System has been put in place to secure food safety in response to consumer demand for safe, domestically produced farm & livestock products. This system is well developed and implemented. In 2003 this system:

- kept records for 1.58 million tonnes of rice
- was used in 44 production plants producing ¥4.6 billion (approx \$AUD500) worth of products
- was promoted for the use in domestic beef producing operations.

The system was originally implemented in the year 2000 as a result of a toxin that had occurred in a part of the food chain in Japan. The goals of implementing such a system were:

- to encourage mutual trust between the grower and the buyer of the produce (Zennoh)
- to provide an information link from the producer through to the consumer
- to create their own certification and independent auditing process
- provide traceability of the product in both directions; from the producer to the consumer and from the consumer back to the producer
- to strengthen the customer's sense of security through active transmission of traceability information.

This logo (right) is used on products that satisfy the criteria of being traceable, inspected, audited and certified by a third party, and has traceability information available via a website and other methods.



Other features of the system are:

- products certified by Zennoh must be identity preserved (IP) through all stages of the supply chain
- consumers comments or messages can be submitted at the retail shop, supermarket or via the internet, and are sent back to the actual producer or grower of the product.

This system enables growers and the supply chain participants to understand and respond to consumer request.

Development of a working traceability system in Japan

Components of the system

The development of a system can be shown using an example that was implemented as a demonstrative test for rice traceability in Japan. This system was set up by Central Union of Agricultural Cooperatives (JA Zenchu) named “Relational Traceability System”. It involved a number of participants including JA Zennoh, Pearl Rice East Japan Company and monitor consumers.

The system is made up of three interlocking sub-systems which perform their functions independently of each other. These subsystems are:

1. production information database system
2. segregated management database system
3. information exchange system.

The production information database is for the recording and storage of production information from the producer’s diaries. The segregated management is for managing the receival and dispatch of farm produce using barcodes. It can identify the product from the time it leaves the production point and is linked in with the production database at this point. The information exchange system is operated through the internet and is where the consumer accesses information about the product. The consumer enters information from the product barcode onto a website to find the production history for that exact item.

With the production of a packaged polished brown rice product, information is collected at each stage of the production process. Each business involved establishes its own segregated management database and attaches a label showing the website location of the relevant traceability information. From production to the stage just before polishing at the rice mill, a “harvest code” is used. This code is used up to and including receipt by the rice mill. After polishing, the rice is packed into consumer size bags where a “product code” is added to each item, which is in addition to the “harvest code”. Also on any invoice issued up to the retailer level, a “trace code” is used which provides information about the movement of produce between businesses along its distribution route. Both the harvest and product code are printed on the bag label along with a Universal Resource Locator (URL) or website link.

In this example the data recorded is as follows:

- Production information
 - producer name, collecting organization, producing area
 - production processes including planting and harvesting dates
 - pest control history including pesticide names and application date
 - fertilizer history including, name, application rates and date applied.

- Cargo collection and shipment information
 - farm product inspection information including season, brand, grade and inspection location
 - product collection history including collection date, type of product collected, the producer of the product, storage site, quantity of product
 - shipment information including shipment date, type and quantity of product shipped and shipping destination.

- Polished rice information
 - incoming cargo history including shipment receipt, type of shipment received, shipper, storage site, quantity of incoming cargo
 - brown rice history including polishing date, variety of rice, polishing machine
 - shipment history including date, type of shipment, polishing information, destination and quantity.

This system has been developed for rice, but is suitable for many other crops including cereal grains, fruit and vegetables.

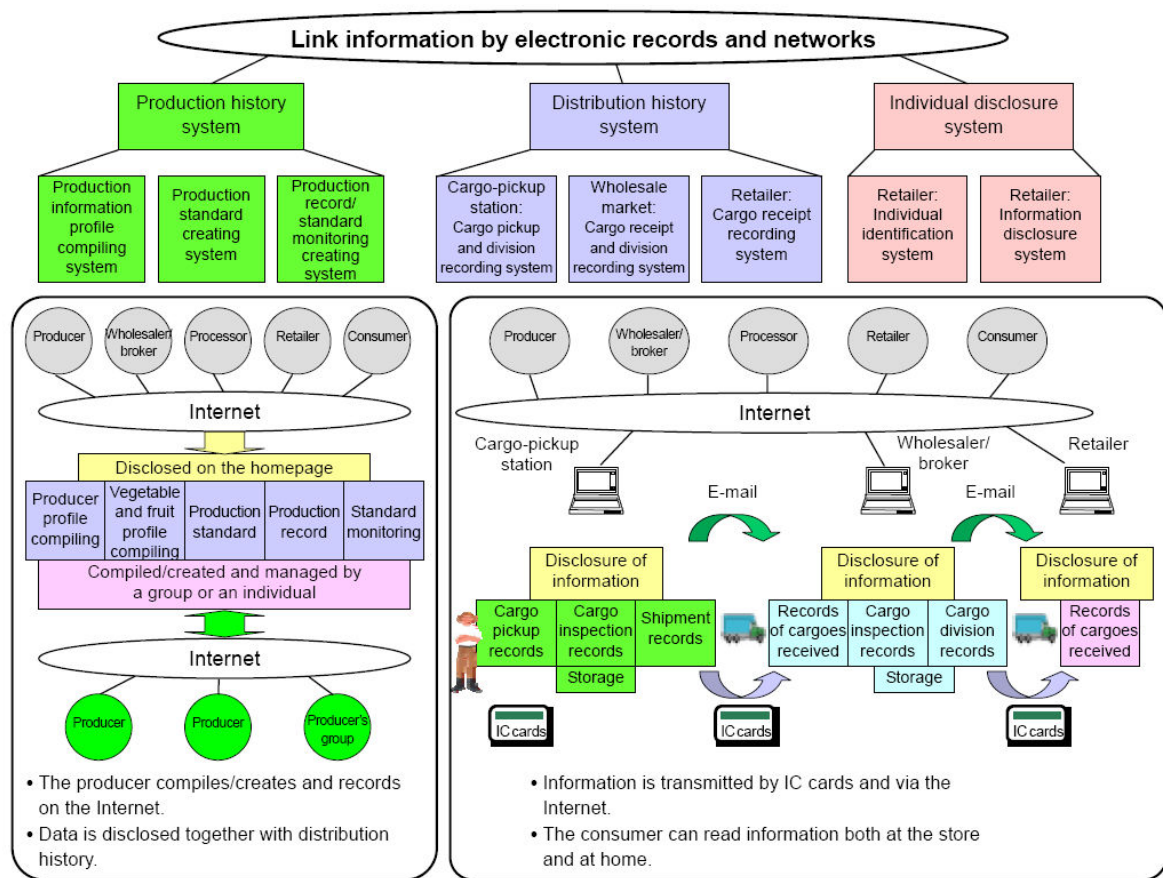


Figure 1. Information flow in a fruit and vegetable traceability system.

Source: *Guidelines for Introduction of Food Traceability Systems*

Costs involved

In this example three separate systems were used as discussed above. The total cost including software fees and additional development and improvement of the system to provide full traceability was approximately ¥8 million (approx AUD\$90,000). It is estimated that if a business was to set up a complete system from start to finish the total cost would be five to six times this amount which is prohibitive to many business. One suggestion to reduce the cost of implementing this system is to share the system between two or more business enterprises.

Benefits of the system

- allows many production files to be arranged and filed and also helps producers to keep diaries up to date
- cargo collection and shipment is easily facilitated through multiple businesses due to unified and real-time inventory management
- product characteristics are emphasised directly to the consumer through the label code and URL
- directly promotes to the community and consumer the producer's and supply chain's positive attitude towards food safety and security
- storing and analysing diary data allows improvements in production systems to increase yields and quality
- consumer feedback can be collected easily and quickly and used for product development and marketing
- reassures the consumer about the quality of the product, and allows the fast and efficient recall of products if required for any reason
- introduces a complete computer based system to production, which helps improve overall efficiency.

Traceability from a consumers view - QR code

A traceability system can be used to offer the consumer a point of difference, with the aim of allowing simple access to product information. This is typically done through the internet, where information can be accessed and in most cases feedback can be given by the consumer to the producer or manufacturer of the product.

An even more convenient and faster way of accessing traceability information is through the use of the latest technology used in Japan called the QR code. This is a two dimensional matrix type bar code in which black and white dots and lines are arranged in a grid pattern (right).



The QR code can contain a large volume of information, has high scanning efficiency even without touching the product.

It is relatively inexpensive because it can be printed on any material along with other information, such as the example seen above.

The main advantage of the QR code is that consumers can use their mobile phone camera to scan the bar code to instantly access the required information through the phones internet service.

Regional Branding

Regional brands are used widely for the promotion of food and beverages throughout the world. Champagne & Parma Ham are two examples of the very successful brands used on products that are produced in a specific area or production region. The name of that region has become a brand in itself and is recognised and associated with these products worldwide.

Regional brands are used at a world wide level right down to individual farmers selling their own produce in their local village. I met growers selling locally grown watermelons out of the back of cars in the Ukraine. Also a Japanese rice farmer growing, processing and packaging his own rice on-farm and selling it using his own local brand, rather than through a cooperative, which is typically the marketing method used in Japan.

Regional branding is possibly one of the oldest types of product branding with livestock being marked by its owner for identification purposes. This identification became a brand as buyers could recognise the origin of livestock at local sales and repeat purchase if they had been previously satisfied.

Regional brands work best where:

- the production area has a naturally occurring physical boundary, for example an island or valley
- the production region is environmentally clean
- the product is produced in a traditional way
- the quantity produced is naturally limited, for example by productive land area
- the brand is easy for consumers to recognise
- the product is credible and will fulfil its promise to the consumer
- functional or emotional attributes can be associated with the brand
- consumers can expect a satisfying experience from the product as well as some benefit being given back to the region through their purchase.

Regional brands are a powerful marketing tool; however for a regional brand to be successful outside of its own region it must offer consumers a point of difference. The point of difference promoted may be the climate, soil type, rainfall or environment of the region, rather than a physical difference to the end product.

Regional brands work very well in the United Kingdom, where the country is divided up into a large number of relatively small counties. An increased awareness on healthy eating and issues such as food miles has led to consumers purchasing more locally produced goods from their own county in the UK. In this case making the consumer aware of the area that the product was produced attracts sales from local consumers, but may be a negative point of difference if the product is being sold in nearby counties where it has to compete with other regionally branded goods.

From the view of a grain farmer looking to add-value to produce I believe regional branding alone will not lead to additional sales or higher prices. The main reason for this is that the grain is still being produced as a commodity and grown under similar conditions and methods to grain grown in the next town, district or even state. In this case the regional brand by itself doesn't offer the consumer a point of difference. Where the regional branding may work for grain is if traceability, identity preservation or a different method of production e.g. insecticide free, is used along with the regional brand so that the consumer can buy the product based on the point of difference and also associate the product with the area that it was produced.

As commodity producers, branding of our product, has traditionally received very little attention because production has been a major focus. Growing up in the wheat belt area of Western Australia I was always amazed at the number of shires that display the wheat sheath and ram's head as their district emblem. This is a simple but obvious example of how a simple emblem shows that little or no thought has been given to looking for a point of difference to promote our products.

Business Examples

Southdowns Lamb

Southdowns Lamb is a lamb marketing group based in the South Downs area, south of London, England. This is a good example of product branding and traceability as well as providing the consumer with reassurance about animal welfare.



I met with Mr John Giffin, who is a director of South Down. John explained that there are currently 14 growers supplying 9000 lambs per year. All the producers are in the South Downs National Park Area of England.

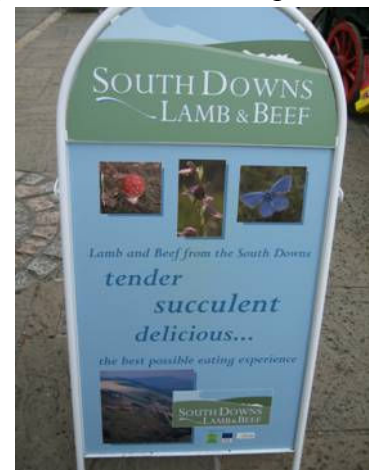
The aim of the group is to ultimately provide the consumer with “the best possible eating experience” or in John’s words “to supply lamb with the best flavour and texture possible”.

The group aims to produce a 20 kg dressed lamb. Producers supply lamb at a fixed price of £2.70/kg and the processing costs are fixed with the butcher at £0.65. The return to growers is currently a 10% premium over the open market. The fixed price is reviewed annually, but gives the butcher and therefore consumer, access to high quality lamb at a stable price.

All the lamb is processed at a local abattoir to reduce the distance the product has to be transported, and to support local business. Lamb is not supplied year round, with the philosophy that it is unnatural to extend the normal seasonal production process. Breeds traditionally from the area are used and all lambs must be sired by Southdown or Hampshire rams. Every cut of lamb sold is traceable back to the farm it was reared, with the aim of giving the consumer safe & reliable food.

I met with the butcher in Horsham, Sussex who has the exclusive rights to the South Down brand in the town.

He was very positive about the product and happy with the quality being supplied. His main concern was with the competition from supermarkets in the area. Marks & Spencer, Waitrose and Tesco are located within a few hundred metres of



his business. His customers requested he sell fruit and vegetables, due to their local shops closing, and he has diversified into cheese, condiments, pastry goods and fruit and vegetables.

Bookham Cheese and Pasta

Bookham Cheese and Pasta is a fantastic example of value adding at a local level, with products produced under the theme of “Quality, Local, Traceable”. Managing director Rob Bookham explained that he sources as much of the ingredients locally as possible. The range of products produced at any one time varies depending on the seasonal availability, for example the winter & summer vegetable fillings in ravioli.



Although not a farmer himself, Rob has had many years experience in agriculture managing farm businesses and has chosen an on-farm location to set up his pasta manufacturing facility.

Milk for cheese and butter production is sourced from one local dairy to ensure that the products are as local as possible.

Rob is in the process of setting up direct supply agreements with growers to produce durum wheat and supply locally milled durum for the pasta manufacturing. Rob is committed to producing a premium quality product and is also committed to passing on some of the premium to local growers supplying him direct with ingredients.

Rob believes that offering products made with local ingredients and offering full traceability gives him a unique selling point, and gives the consumer a reason to pay a premium for his high quality product. Each package of pasta has a unique code on the label which can be entered on the company webpage. The website then gives the consumer information about the ingredients and their origin. Selling of the produce originally took place at local farmers' markets and now includes premium supermarkets such as Sainsbury and he has had discussion with Waitrose.

If high demand leads to business expansion opportunities, Rob has plans to offer shares in the business to the growers supplying Bookham Cheese & Pasta with key ingredients. This would guarantee the growers a market for their produce plus a share in profits.

Jordans Cereals

Jordans is a medium sized privately owned company based in Biggleswade, Bedfordshire, located north of London. The company produces whole grain based cereals with a focus on healthy eating. The company has an annual turnover in excess of £70 million; it employs 350 people and exports to 20 countries, with 25% of its product exported to continental Europe.



Jordans is competing at the premium end of the health food market. It produces a high quality and well branded product, but has created a unique selling point for its produce by purchasing “Conservation Grade” grain from farmers, with labelling promoting this on it’s product.

Jordans contracts farmers to grow grain for it under the Conservation Grade scheme. The scheme involves the farmer devoting 10% of their farmed land to wildlife and habitat creation. Typical activities under the program include replanting of hedgerows and trees and allocating areas of land to plant wild bird food, wild flowers, grasses and clover. Also a list of pesticides that can and cannot be used must be adhered to in order to pass the annual audit process.

A premium is paid to the grower of between 10 and 15% for Conservation Grade oats, wheat and barley.

The aim of this scheme is to improve native flora and fauna under a program that meets the needs of the farmer, food companies and conservation ecologists. The consumer can make a conscious decision to purchase this brand of breakfast cereal or other product with the knowledge that some of the premium paid for the product is helping to protect and improve the wildlife habitat in the UK as well as support sustainable farming.

I was fortunate to meet with Mr Bill Jordan, who is the co-founder of Jordans Cereals. He believes that there will always be a place in the market for medium sized food companies offering high quality products with a point of difference. This difference may be traceability, environmental care programs or segregation of raw material including identity preservation. According to Mr Jordan, medium sized companies can have better control over all the stages of production including the growing and sourcing of ingredients. Mr Jordan is enthusiastic about the future of the health food market with positive year on year growth shown in the “health” related sectors of the breakfast cereal market in Figure 2 (on following page).



Figure 2. Year on Year % Value growth of breakfast cereal sectors in the UK.

Source: AC Nielsen The Retail Pocket Book 2006.

Jordans Cereals compete in the largest category of the dry groceries industry. Total annual sales of cereals in the UK total £1175 million (Figure 2) of which Jordans Cereals has a market share of around 4%. The cereal bar category has total sales of £226 million (Figure 3) of which Jordans has market share of around 8%.



Figure 3. Total value of Dry Grocery categories in the UK 2005.

Source: AC Nielsen The Retail Pocket Book 2006.

The implementation and promotion of Conservation Grade is an excellent unique selling point for the product and provides the consumer with a reason to purchase this brand of products on an ongoing basis. Jordans has adopted a “back to nature” philosophy with its products and marketing, which has a strong appeal in the premium market that it targets. I believe Jordans will continue to build market share with its high quality produce, strong brand and continued support of improving the environment.

Elveden Farms Food Hub

This food hub is owned by Elveden Estate, a 20,000 acre family owned property located North of London. The Food Hub is one of the Estate’s newer enterprises; it has been trading since July 2005.

This is a food buying, consolidation and delivery business. Local producers deliver their produce to the company’s food storage facility, where the Hub takes ownership of the goods and stores them short term for distribution to ASDA supermarkets in the area. The Food Hub has been an initiative of ASDA Supermarkets and it has been implemented in six locations across the UK to give each supermarket access to the best local products from its particular area. The Hub provides a link between local producers and local ASDA stores and deals in locally produced high quality, high value produce.

The advantage for the producer is that they only have one delivery point for their goods, but their product is distributed and sold to a number of supermarket locations. The process of price negotiation, invoicing and payment are simplified with only the producer and Food Hub involved.

The advantage for the supermarket is that they are able to access and take delivery of local produce easily through one contact and one purchase account. Elveden Estate Food Hub currently has access to over 80 different products; many of these are from different suppliers.

Producers of these products would find it very difficult to get access to large supermarkets such as ASDA, without the service provided by the Food Hub. The supermarkets would be very reluctant to set up accounts with suppliers for these small volume speciality products and problems with large numbers of small deliveries are overcome. ASDA provides the Food Hub with access to its stock management system so that supply is maintained and demand for different products can be monitored easily.

The Food Hub operates by charging the producers with a set margin for the service it provides, and the supermarket still has access to local products at the price it would pay if it was dealing one-on-one with the producer.

The Food Hub concept assists small and medium scale regional producers to access large supermarkets without having to negotiate directly with the supermarket and without spending large amounts of money on promotion and distribution. The benefit to the supermarket is that they get access to locally produced goods in each different geographical area, without having to deal with each individual producer.

Hill Farm Oils

Sam Fairs produces high quality edible grade rapeseed oil at Halesworth, Suffolk in the UK. Sam owns and controls the complete production process from the growing of the rapeseed through to bottling and packaging the oil on his farm.

The product is promoted as premium edible oil suitable with the following attributes:

- Cold Pressed rapeseed oil has just 6% saturated fat content. In contrast most olive oils have 14% and sunflower oil has 10%.
- Rapeseed oil has 59% mono-unsaturated fat and 30% poly unsaturated fat.
- 2:1 Omega 6 to Omega 3 ratio.
- Contains mono-unsaturated fats, Omega 3, 6, 9 and Vitamin E antioxidants which are all known to help lower cholesterol.

Source: www.hillfarmoils.com

Sam faces direct competition from olive oil which is well established in the UK market and seen as a healthy and natural product. He is promoting his cold pressed extra virgin rapeseed oil as a locally grown, traceable, sustainable produced, non GM culinary oil.

Marketing and promotion is one of the major hurdles Sam has faced in producing, distributing and promoting this food grade product. He gave the example of the food company that produces Flora margarine adding fish oil to margarine as a source of Omega 3.



They spent over £4 million pounds in the UK promoting this new line of product, where the original product and brand of “Flora Margarine” is already very well known by consumers.

Sam uses the following rule of thumb with regard to new product promotion “Work out the budget required to get your idea to the packaged saleable product stage and then times that budget by up to 10 to calculate the amount of money required to successfully market and promote the new product”.

Promotion and marketing can be a big drain of cash flow for most small to medium businesses. I see this as a particular problem for most primary production businesses, which typically don’t spend money on these activities and may have limited surplus cash flow.

Sam was more enthusiastic about the potential of agricultural production of renewable energy. He can see benefits for farmers as they are able to work together on large scale production without branding, marketing or promotion, not having to focus on food grade production.

Conclusion

As commodity producers we have to make a conscience decision to move away from commodity production. This will not happen by itself. As a commodity producer you may decide that you do not want to be involved in value adding, you may make the conscience decision to concentrate only on efficient production. If this is the case, it must be acknowledged that to be successful in commodity production the cost of production has to be minimised and production maximised.

For a grain producer wanting to value-add part or all of their production, it must first be acknowledged that there are a number of reasons that is difficult for most grain producers to move away from commodity production and become directly involved in the production of a finished good. There are, however, many opportunities for commodity producers to add value to their business and or production without necessarily going to the extreme of producing the finished good.

These opportunities were summarised by Professor David Hughes at the Atlantic Value Chain Conference in Nova Scotia as follows:

- optimise scale, technology and management on-farm
- commodity markets are fragmenting, so focus on value driven products that earn higher margins for all chain members
- look for horizontal partners to gain scale or critical mass
- move along the supply chain, communicating with all stages from the ingredient producers to contact with the final customer
- identify the highest value supply chains or the best route to the consumer and work out what it takes to become directly involved in this supply chain
- think value chain – build in value for the customer and remove non-value adding costs.

The major barriers to grain producers becoming more involved with adding value include:

- grain generally requires high levels of processing before a final consumable product is produced
- processing to this degree is capital and labour intensive
- grain products are perceived as safe relative to other food products, therefore offering traceability or quality assurance is not as highly valued by consumers for grain products compared to other products such as meat or dairy
- Australian producers have a smaller domestic market than most other production areas of the world, making it difficult to sell large volumes of fresh grain based produce without relying on export markets.
- marketing and promotional is required to gain market penetration and establishment of a brand - this can be expensive and a large drain on cash flow for a typical primary production business.

Recommendations

Primary producers have two distinct choices:

- continue commodity production as efficiently as possible
- move away from commodity production by adding value.

I recommend that Australian grain growers do a combination of both.

If primary producers want to add value to their production they must become more involved in the supply chain or “value chain”. This means becoming more involved with some or all of the steps involved in production, as our product moves and changes to reach the final consumer.

The first step that we should take to move away from being commodity producers is to gain a better understanding of all our customers along the supply chain and their current and future requirements.

This understanding will allow us to focus our production on the supply chain’s requirements and immediately add value to what we produce.

...“Nothing is more dangerous than an idea than when it is the only one you have”...

Alain Chartier – French poet and political writer (1385 – 1433)

Contacts & Business Visits

Canada

Barry Cudmore
2004 Nuffield Scholar
Chair
Foodtrust
Brackley Beach, R.R. 9
Charlottetown PE C1E 1Z3
Prince Edward Island, Canada
www.foodtrust.com

Atlantic Value Chain Conference
Dartmouth, Nova Scotia, Canada
Key note speakers-

Professor David Hughes, Emeritus Professor of Food Marketing, Imperial College London.
www.professordavidhughes.com
Michael Scott, President of Operations, Atlantic Region, Sobeys Inc. www.sobeys.com

Ukraine

Professor Ivan Mykolayovych
Crop Production Institute, Kiev

This government funded institute coordinates research and farm advisory services in areas of crop production.

Ms Kalenska Svitlana Mykhailivna
Director of Agriculture
Agriculture Faculty
National Agricultural University, Kiev

The major agricultural education centre in the Ukraine, with 80,000 registered students includes a 100ha research farm.

Mr & Mrs. David & Tamara Sweere
Kiev-Atlantic Group
8 Staronavodnystska Str., of.74
Kiev, 01015, Ukraine
Farm located at Myronivka region.

Farmer from United States and has farming in Ukraine since early 1999's. Operates at two farming businesses cropping 8000ha and a cattle operation plus a recently completed grain elevator, a vegetable oil seed and soy bean processing plant and one of the most modern feed mills in Ukraine

Agro-Soyuz Farm, Agro-Soyuz Corporation
Majskoje Village
Dnepropetrovsk Region, Ukraine.

A 14,000 hectare no-till farming enterprise, with intensive livestock. Includes dairy cows, pigs and ostrich. This operation is owned by the Horsch family, who produce agricultural machinery world wide with a focus on no-till equipment. This operation is a demonstration farm for new machinery and new agricultural technology.

David Fulwood

Sponsored by GRDC 29

Mr Louis Chirnside
President World Tomato Processing Council
Consulting on tomato production to Chumak, Kakhovka, Ukraine.

Mr Johan Bodén
Corporate Development Director & Co-founder
Chumak
Kozatska str. 3, Kakhovka, Kherson region, 74800, Ukraine
Large privately operated food production in the Ukraine. Tomato-based products including ketchup and tomato paste also bottled sunflower oil, pickled vegetables and mayonnaise.

Mr Fredrik Svinhufvud
Managing Director (President Europe-Ukraine Business Association)
Tetra Pak Ukraine
82 Mezhyhirska St., 04080, Kiev, Ukraine
www.tetrapak.com.ua

Mr Victor Ignatenko
Executive Director
Freedom Farms,
Zavetnaya Station, Promyshlennaa St. 7, 74801
Kherson Oblast, Kakhovka, Ukraine
30,500 ha Ukrainian Farming Operation, run in a traditional “top down” management structure. Soybean & Corn plus wheat, sunflower, pigs

Mr Oley Rysich
WJ Grains
Kerson
www.wjgrain.com
Bulk export grain terminal & flour mill located on the Dnepr River, owned by WJ Group of companies. 100,000mt capacity, exporting 500 to 600 thousand tonne per year.

Mr Anton Miroshnichenko
Trade Department Manager
Nibulon Ltd
9-B, Faleyevska St., 54030, Mykolaiv, Ukraine
Privately owned Ukrainian company Grain trading, logistics, storage and production, exporting up to 2 million tonnes. 43,000ha farming operation growing barley, maize, wheat & sunflower.

Ireland

Mr Jim McCarthy
Nuffield Scholar
Malburn Farms, Ballyburn, Castledermont, Co Kildare.
Low cost commodity production. Grain producer in Ireland on large scale mainly rented land. Focused on People & Profit. Involved with large corporate grain business in Argentina.

Northern Ireland

Mr Steven Houston
Nuffield Scholar
The Muir, 91 Killagan Road, Glarryford, Ballymena
Co Antrim, Northern Ireland, BT44 9PS
Dairy Farmer studying alternative market for milk.

Mr Wallace Moore
Arable Farmer
Ballymena
Co Antrim, Northern Ireland, BT44 9PS
Cropping wheat, barley & rapeseed.

Scotland

Mr Robert Parker
Nuffield Scholar
Drumdown
Kirkcolm, Wigtownshire, Scotland
Sheep & cattle production on 186ha. First monitor farm in Scotland under a program operated by Quality Meats Scotland (QMS).

Ms Suzie Carlaw
Marketing Manager
Quality Meats Scotland (QMS)
The Rural Centre, Ingliston,
Newbridge, Midlothian, EH28 8NZ
www.qmscotland.co.uk

England

Mr Mike Giffin
Nuffield Scholar
West Laing, Horsham Road, Rusper, RH12 4 QX
Studying regional & national branding to improve returns for farmers.
Managing the following farm businesses in the area south west of London.

Wimlands Farm, West Sussex.
160 acres, 125 is cropped, balance countryside stewardship (set aside)
Contract farming arrangement, profit share with landlord.

Shottesbrooke Farm, Maidenhead, Berkshire.
Owner also owns 1800 acres in Scotland.
This property is 1550 acres of which 1150 cropped, 115 set-a-side, balance is grass rented to local sheep farmer. Growing wheat, oilseed rape, spring rape, oats, and winter beans.
Property included private air field and hanger facilities.

Charrington Farms, Flanchford Farm, Surrey.

Owned by a family trust. Area of 1500 acres, 170 rented from neighbours. 1000 ac arable, 850 cropped, 300 acres permanent pasture, grazed, 200 acres woodland.

Income also earned from let cottages, commercial buildings, woodlands let to pheasant shooting syndicate & trout fishery. Labour includes two full time staff plus game keeper. This farm participates in countryside stewardship scheme & conservation grade grower for Jordans, growing oats and cereal-rye at 15% premium. Also LEAF accredited ([www.defra](http://www.defra.gov.uk)). In future it may supply Durum to Bookham cheese and pasta with durum. Every arable field had a 2 or 6 metre margin for countryside stewardship,

Leconfield Estate

An area of 14000 acres of which 12,500 is now tenanted. 1500 acres is run by John Giffin and 600 of this is National Park. John is a director of South Downs Lamb.

Rob Bookham

Managing Director

Bookham Cheese and Pasta Limited

Twineham Grange Farm, Bob Lane,

Twineham, West Sussex RH17 5NH

“Fresh, local, traceable...” www.bookhamcheese.co.uk

Mr Bruce Kerr

Nuffield Scholar

Director

Kerr Farms

Letheringham, Woodbridge, Suffolk, IP13 7RA

www.kerrfarms.com

Large arable & livestock enterprise plus farm tourism and other integrated business enterprises owned and operated by the Kerr family.

Mr Mark Dordery

Managing Director

Nidera UK Limited

The Havens, Ransomes Europark,

Ipswich, Suffolk IP3 9SJ

www.nidera.com

Bulk commodity traders & transport, domestic and international

Mr Sam Fairs

Hill Farm Oils

Hill Farm

Halesworth, Suffolk, UK

www.hillfarmoils.com

Producing cold pressed extra virgin culinary rapeseed oil on-farm.

Mr Guy Smith

Two times Nuffield Scholar

Wigboro Wick Lane, St Osyth, Essex, CO16 8ER, UK

Farms in the lowest rainfall area of the British Isles (540mm)

Crop & livestock farmer plus golf course, air field and seaside real estate

www.voiceofbritishagriculture.com

Promoting British agriculture and educating people about farming in the UK.

Bedfordia Farms, Twinwoods, Bedfordshire UK
Processing food waste and pig waste to produce electricity & fertiliser on-farm.

Mr Bill Jordan
Co- Founder & Owner
Jordan Food Company
W. Jordan (Cereals) Limited, Holme Mills, Biggleswade, Bedfordshire SG 189JY
Value adding using conservation image plus high quality product and packaging. Believes that there will always be a place for medium size high quality manufacturers
www.jordans-cereals.co.uk

Ms Dianna Spellman
Nuffield Scholar
Managing Director
Partners in Purchasing
117, Fenchurch Street
London EC3M 5DY
www.pipltd.net
Managing and controlling purchasing in catering in the London area for corporate clients.

Ms Alexia Robinson
British Food Fortnight Organiser
www.britishfoodfortnight.co.uk
A group set up with the aim of promoting British Food.
Funded mainly by corporate membership of food industry participants.

Mr Andrew Sharp
Farmer Sharp Limited, Diamond Buildings, Pennington Lane
Lindal-in-Furness, Cumbria, LA12 0LA
www.farmerssharp.co.uk
Meat Retailer and Borough Markets. Andrew comes from a family history of butchers and farmers. He is passionate about British Food and also passionate about providing the customer with exactly what they require.

Ms Elizabeth Jackson
Food Hub Manager
Elveden Farms Ltd
Estate Office, Elveden, Thetford
Norfolk IP24 3TQ
www.elveden.com

Mr Stefan Williams
Stourgarden P.G. Rix (Farms) Limited.
Lodge Farm, Boxted Road, Great Horksley
Colchester CO6 4AP
Producing Onions for Tesco. Supplies Tesco with all the onions for the South of the United Kingdom. Produces 30,000mt on farm and buys additional from local growers plus imports from Spain, Israel, New Zealand and Australia to give year round supply.
Pricing with Tesco is flexible and no forward contracting takes place for onions, surplus income is placed in a buffer fund which is drawn on by Stourgarden and Tesco if the market moves against them or additional imports are required. These two companies appear to need each other and therefore have a flexible pricing arrangement.

Japan

Mr Hiroshi Takahashi
Senior Business Development Manager
Government of Western Australia
Tokyo Office
13th Floor, Fukoku Seimei Building
2-2-2 Uchisaiwai-Cho, Chiyodu-Ku
Tokyo 100-0011

Mr Toshio Endo
Manager
Oilseeds and Protein Feed Section
Feed and Grain Department
UniCoop Japan
Coop Building
1-12, Uchikanda 1-chrome
Chiyoda-ku
Tokyo 101-8505

Mr. Hiroyuki Sato
Food Safety Systems Group, Lead Researcher
National Federation of Agricultural Co-operative Associations (Zen-Noh)
1-8-3, Ootemachi
Chiyoda-ku
Tokyo100-0004

Mr. Masayoshi Furuya
The Seikatsu Club Consumer's Cooperative Union
Development Department, Assistant General Manager
6-24-20-6F
Shinjuku, Shinjuku
Tokyo 160-0022

Mr Chiyuki Uehara
Green Eye Development Department
Food Merchandising Division
Aeon Company Limited
5-1, 1-chome, Nakase, Mihama-ku
Chiba-shi,
Chiba 261-8515

Ms Junko Akiho
Investment Manager
Invest Australia
Australian Embassy
2-1-14 Mita, Monato-ku
Tokyo 108-8361

Mr Rob Mann
Marketing Coordinator
Meat & Livestock Australia
12F World Trade Center Building
2-4-1 Hamamatsucho Minato-ku
Tokyo 105-6112

Mr Jinyama Noen
Rice Producer
Imai, Yukuhashi-city
Fukuoka - pref

China

Mr Joe Fung Chung Wah
Director, Chief Strategic Development Officer, Chief Raw Material Officer
Guangzhou Malting Company Limited
Supertime Development Limited
No.2 Chuang Ye Road, Guangzhou Economic & Technical Development Zone, 510730,
China
Largest Malt producer in China.

Ms Shirley Lu
International Trade Department Manager
Zhaoqing Four Gardener Investment Holdings Ltd
No.18, Nanwan Road, Nan'an Town, Zhaoqing, 526100, China
Flour mill producing for domestic & export markets from imported grain.

References

UK Retail Pocket Book, AC Nielsen, 17th Edition, January 2006.

Beef Online, UK's Progress, Clint Peck, April 2001.

Beef Labelling Guide, Department for Environment Food and Rural Affairs, United Kingdom

EU's General Food Law (Regulation (EC) No. 178/2002.

Guidelines for Introduction of Food Traceability Systems
Committee on the Guidelines for Introduction of Food Traceability Systems, Inspection
Planning Department, Japan Frozen Foods Inspection Association, 4th floor, Hokoku Bldg.,
4-6, Shibadaimon 2-chome, Minato-ku, Tokyo, March 2003.

The Origin of Brands, Ries A& Ries L, 1st Edition, Collins Publishers, 2005.

Plain English Compendium Summary

| | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project Title: | Producers Adding Value in a Commodity World |
| ANFSA Project No.: | |
| Scholar: | David Fulwood |
| Organisation: | Nuffield Australia |
| Phone: | 0419 041 444 |
| Fax: | 08 96 351 485 |
| Email: | david@fulwood.com.au |
| Objectives | To demonstrate to producers how they can move away from commodity production. |
| Background | As commodity producers we are price takers for both our income and costs of production. Value adding allows the producer to move away from the cost-price squeeze. |
| Research | Undertaken abroad whilst travelling for 16 weeks during 2006 on an Australian Nuffield Scholarship. |
| Outcomes | Primary producers need to find a “point of difference” that can be used to promote their product and need to become more involved in the supply chain if they wish to move away from commodity production. |
| Implications | Producers should become more involved in the supply chain which they produce for. This involvement will give them a better understanding of market requirements and allow them to move towards value added production. |