A ROYAL HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND AND ROYAL SMITHFIELD CLUB

AWARD



OPPORTUNITIES FOR FURTHER COOPERATION IN THE PIG MEAT SECTOR

A NUFFIELD FARMING SCHOLARSHIPS REPORT

BY

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The views and opinions expressed in this report are entirely my own and do not represent the views of the Nuffield Farming Scholarships or my sponsors.

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Summary

In the current political climate there are large amounts of grant funding available for cooperative ventures within agriculture and further food processing. Boards of existing coops or groups of enterprising farmers may be tempted to alter their businesses to try to take advantage of this funding

The study was undertaken to try to understand whether or not it would be possible for pig farmers to add value to their produce by developing and marketing a brand of pig meat which was based on meat eating quality alone. Investigations were carried out to see if it was possible to do this under the auspices of a farmer owned cooperative in order to increase returns to the farmers and also to see if it is possible to develop relationships with customers, which would be mutually beneficial and increase consumption of locally produced high quality pork.

The study included visits to Canada, USA, New Zealand, Australia and Singapore and businesses both privately owned and cooperative were visited to try to see strategies that had or had not been successful. Some of these businesses are highlighted in this report as case studies.

This is an enormous subject and there are no definitive answers but this report will attempt to show factors which affect the success or failure of businesses in this sector based on lessons learned from these case studies. The report will show the key factors for success of a coop, the desirable factors and criteria that lead almost invariably to failure of cooperative ventures.

Recommendations are made for cooperatives in the UK which may be considering moving in to adding value to member's product. Whether these coops are in the meat sector or not is not important as the principles remain the same assuming that we are talking about primary agricultural produce.

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INTRODUCTION

I grew up on the family farm in Aberdeenshire which was a mixed farm with dairy and beef cows, pigs, sheep, cereals and potatoes. I come from a family of four boys all of whom are farming. As we returned from our various educations we assumed responsibility for separate enterprises. I returned from gaining an HND in Agriculture at the North of Scotland College of Agriculture in Aberdeen and from travelling in Australia to be responsible for the 280 indoor sow unit which was a gilt multiplication unit at the time. By 1997 we were all running completely separate businesses in partnership with our parents.

Now in 2009 my business consists of a 600 sow unit and a 190 cow dairy unit with 900 acres of arable land for the production of forage and cereals to support these enterprises as well as grazing for the dairy young stock.

The pig unit is an intensive indoor unit commercially producing pigs for slaughter at 110 kg live weight. These pigs are all marketed through Scottish Pig Producers which is a cooperative selling live pigs for around 100 members. All feed on the farm is home mixed and co products are also fed to the feeding herd through the wet feed system. JSR genetics are used to try to produce a lean carcase at heavier weights. There is a staff of five on the unit.

Holstein genetics are used in the dairy herd which has an average annual production of 9000 litres per cow. The herd is now closed in order to try to reduce the burden of disease and so therefore all female calves are reared as replacements and male calves are finished on an intensive beef system. The Genus RMS programme is used to try to breed uniform, robust replacements in order to increase the longevity of the cows. Two staff are employed here.

On the arable side we have a staff of two. All forage for the cows is home grown and we grow enough cereals to supply the pig unit for a third of the year and remainder is bought locally. All waste from the livestock units is applied to the arable land to try to keep fertiliser costs to a minimum.

I am also Vice Chairman of Scottish Pig Producers (SPP) which currently markets 8500 pigs per week for the farmer membership. SPP was formed in 1979 when a large local pig processing plant was closed. I joined the board of SPP in 2003.

BACKGROUND

The Scottish Pig Industry is small and quite isolated from the rest of the UK and is dependent on only one large scale processing factory based near Edinburgh. 70% of the pig production however is based three hours away in the North East. The vast majority of pigs are marketed through either one large company or one of two farmer owned coops of which SPP is one. The fact that the industry is in the hands of so few individuals, means that lines of communication are very short and responses to changing markets or legislation can be very quick and unified. This certainly puts the Scottish Industry in a unique position within the UK. This can be illustrated by the fact that the Scottish Pig Industry was the first to have both an industry wide quality assurance scheme and pig health monitoring programme in the UK and in the case of the former scheme, Europe.

Through my dealings as a Board member of SPP I have become much more aware of how the pork market operates and how the pricing mechanisms etc are operated. I am involved in meetings with processors and retailers at all levels and have begun to get an understanding of the relationships between the two and how those relationships vary depending on the different retailers involved. The more that I have learned the more I have become concerned that:

- 1. Processors are completely focused on volume of throughput to the large retailers at as low a cost as possible and that very little attention was being paid to meat eating quality and provenance of pork products.
- 2. The prevailing poor prices at the time could have led to the closure of the Edinburgh factory which would have rendered pig production uneconomical in Scotland because of the extra haulage costs involved in transporting large numbers of pigs in England.
- 3. Scottish producers were receiving reduced prices for pigs due to their geographic distance from the market despite being told that the majority of the pork produced in Scotland was of the highest quality.
- 4. Retailers were all developing their own pig production model which would result in the development of a series of niche markets for which the majority of pigs produced in the UK are unsuitable.

I was well aware that there are large grants available from the EU for cooperative ventures in agriculture and further food processing for capital investment and began to wonder if a cooperative such as SPP may be able to increase members returns by adding value to product. If that was the case, then it would be essential for any brand which was created to have a point of difference from all the other pork in the market. I considered that the only option available was to create a brand which assured the highest levels of meat eating quality not only to create a point of difference but to keep the customer coming back for more.

With this in mind I wanted to use the opportunity of my Nuffield Scholarship to travel and look at two topics specifically.

Firstly, to find examples of businesses that had tried to add value to agricultural product in various ways. This may be by developing and marketing a brand or even just taking production one stage further such as slaughtering pigs and selling the product on for further processing. It would be important to find examples which had been unsuccessful at vertical integration as well as those that had been successful.

Secondly, to see businesses that were focusing on meat eating quality and selling product based on a guarantee of quality. It would be essential that these firms would be using a commercially viable animal as their primary product. A Gloucester Old Spot will give some superb tasting meat but the product is far too fat to be sold on a large scale to the general public. SPP sells about 8000 pigs on a weekly basis therefore a significant number of those would need to be marketed under the value added regime in order to have any effect on members' income.

STUDY TOUR OVERVEIW

In February 2008 I attended the Contemporary Scholars Conference in Melbourne and Victoria which was a fantastic opportunity to meet all the other scholars from around the globe.

In the following November I spent four and a half weeks in USA and Canada. The USA leg was spent in the Mid West and the Canadian leg was based in Ontario.

February 2009 saw me back in the southern hemisphere visiting New Zealand, Australia and Singapore.

Having travelled to a small extent in Europe I was concerned that the coop structures there were so advanced, well established and enormous that it would be very difficult to learn about their establishment. The coops in Europe were set up in a different era and these countries farmers have an almost built in ethos of cooperation. I considered that I may learn more in countries where cooperation is less established and where cooperative struggle to get established i.e. very much similar to the UK!

USA

I visited Illinois, Iowa, Missouri and Minnesota and was immediately struck by the sheer scale of the swine industry. Huge breeding herds were producing pigs for finishing, often by contract finishers, on locally produced wheat, corn and soya. It is currently popular for pigs to be weaned directly into the buildings in which they will remain until finished in an attempt to maximise growth rates by removing the stress involved when moved. Pigs are finished at very heavy weights and average slaughter dead weights of 100-110 kg are common. In general the pigs are far fatter than in Europe but this presents no problems as both the American and Asian consumer are looking for good fat cover as they are aware that this is where the flavour comes from.

I found a visit to the Board of Trade in Chicago intriguing and was very interested to note that a large number of producers used this facility to sell their pigs forward as well as to buy feed ingredients. This meant that a high proportion of producers were protecting themselves from the fluctuations of the markets.

The swine industry here had been through a period of expansion but the effects of high feed costs were beginning to take effect and several producers, particularly the smaller ones, were beginning to leave the industry.

The American market is export led with the main targets being Japan and Asia. This is very useful for the American processors as carcase utilisation is improved as the Asian consumers prefer a different type of cut the home market. There is pressure from imports especially from Canada both of live pigs imported for finishing and from pork products. Large numbers cheap Canadian finished pigs were being trucked into the Mid West for slaughter.

The home market is controlled by 5 or 6 very large processors who supply a similar number of huge retailers. These retailers adopt a very different attitude to brands. Wal-Mart for example have none of their in house brands in store where as at Super Value own brands were used extensively. The trend seemed to be away from own brand, which was a surprised me but litigation seemed to be the driver for this.

Moisture Enhancement (ME) is used extensively to try to improve the tenderness and meat eating quality of pork. ME is the injection of brine solutions to improve meat eating quality. Increasingly selling product already in a marinade is used as disguise for this procedure. Moisture enhancement of product is a clever way to ensure that the meat is always tender and succulent and reduces the possibility of the cook spoiling the product and increases uniformity.

In general production seemed to be efficient and well organised with excellent buildings and accommodation. Producers and processors were facing similar problems as Europe. All producers that I met were very focussed on driving down costs could have focussed more on increasing output as a means of increasing profitability.

CANADA

The Canadian industry had been going through expansion like the American industry but had begun to suffer earlier than the US. Completely dependent on export market two things were crippling the Canadian farmer. New "country of origin" labelling in the USA was affecting demand and, also the relationship between the Canadian and American dollar had hugely reduced the competitive advantage that Canadian producers had once had over their southern neighbours. This coupled with the rapidly increasing feed prices meant that this was not a particularly good time to be producing pigs in this part of the world.

At one time Canada was exporting over 50% of home produced pork but this was heading for 20%. Rationalisation was happening all over the industry. In 2007 the government had introduced a buy- out scheme which effectively paid producers to get out of pig production. Maple Leaf who were the largest processor in the country

had just announced plans to close six processing facilities but were intending to build a new efficient plant with the capability to slaughter over 85 000 head per week. Maple Leaf had been a vertically integrated company with 125 000 sow which had reduced to 30 000 in recent times. This gives an idea of the contraction in the industry here.

The Canadian industry resembles the US in many ways. There are subtle differences such as lower slaughter weights about 96kg. The diets are more cereal based because that is more readily available and much of the production is based out in the cereal producing areas. Production tends to be more from family farms. There were 140 000 weaner pigs being exported to the US on a weekly basis which shows the strength of the connection between the two countries.

NEW ZEALAND

New Zealand seems a strange country to visit if you are studying pigs but I felt that there would be a lot to be learned. The industry is of similar size to Scotland and is also in the hands of a very few individuals. Red meat is king in this country, much like the UK. The New Zealanders are experts at understanding and taking advantage of markets and I considered that there would be plenty to be learned from the red meat sector in NZ.

The pig industry is small and disjointed with a fairly high proportion of outdoor production especially in the South Island. Producers are aligned with particular processors and tend to stick with them. Slaughter weights are very low around 65-70 kg this seems to be for traditional reasons because that it was the New Zealand consumer has always had. Pig herds are small and are run generally as family farms. There is very little pork exported and processors and producers seem to be frightened of foreign competition. Feed costs are a particular problem for New Zealand pig farmers especially in the North Island as very little grain is grown there so they are vulnerable to the world grain markets which were just coming off a high when I was there.

I came across very little cooperation in the pig meat sector in NZ although there were examples as well as attempts at vertical integration. Obviously however in both the dairy and red meat sector there was plenty examples to be found.

AUSTRALIA

I chose to visit Australia for two reasons. Firstly I felt that it resembled the UK in many ways being quite a small industry under huge pressure from imports and processing and retailing is in the hands of a few big players. Secondly I knew there was a business in Western Australia which was an example of a model that I might want to follow which had set up a brand of pork based on meat eating quality. From the farm to the plate production criteria were put in place to try to ensure that the pork was of the very highest meat eating quality. Before I had ever applied for my Nuffield I felt that this may well be a road that our industry should be following.

The industry in Australia was going through a period of contraction due to long periods of drought and the following high world cereal prices. Genetics in Australia are poor due to government policy of not importing genetics. I felt that this was giving their producers a disadvantage as they were falling behind the rest of the world. Slaughter weights were around 72 kg and there was a degree of outdoor production especially in Western Australia.

There is a degree of protectionism as fresh/ unprocessed pork is not allowed to be imported to Australia although processed product is. The word processed is a bone of contention. Some product is exported to Asia and Singapore in particular especially from WA as it is considerably closer and meat can be exported by ship without shelf life expiring.

SINGAPORE

After problems with animal health on the island of Singapore it was decided to remove livestock and with such a large human population all requiring pork as the main protein it quickly became a target for pork exporting nations especially as whole carcases were required for the Asian diet. A large proportion of the pork is retailed through the traditional "Wet Markets". Here small market stalls cut up carcases which sold daily. Many locals have a preference for Indonesian pork however with a little research it is amazing what passes as Indonesian!



2007 FIGURES

Country	Production	Export	Import	Sow	Consumption
	Tonnes	Tonnes	Tonnes	Herd	Kg/hd/yr
USA	9,952,709	966,127	334,972	6.169M	30
Canada	1,894,380	150,939	5,346	1.546M	27
Australia	384,200	40,550	56,842	288,000	21
New Zealand	50,500	139	2,149	39,743	20
UK	739,000	99,000	741,000	455,000	21

CASE STUDIES

Meadowbrooke Farms, Illinois



This farmer owned coop was formed in 2001 after the especially poor pig prices in the end of the 90s. The membership was originally 220 farmers with varying levels of commitment from 100% downward. The structure was in the form of a new generation cooperative with a fee of \$24 per hook on the slaughter line. Slots were allocated to producers as they bought their shares in the company. The objective of the coop was to try and grow specific markets especially export, natural (anti biotic free, niche) and further processing. Significantly no member had ever been a member of a cooperative before.

A brand new factory was built on a green field site in Rantoul, Illinois which opened in 2002. Grant funding had been obtained for 40% of equity which was higher than expected as the normal for a venture such as this would have been 10-30%. The plant was built for a daily capacity of 2800 per day but was regularly achieving 3500. 40-47% of finished product was exported to Japan and Europe. Staff consisted of around 600 at the factory and a further 25 based at the offices which were some three hours south in Belleville. The factory had cost \$30m to build but the staff seemed to like the factory lay out etc.

CEO was Jim Burke who had been with the coop since its inception and had come from a military background. He described the setting up was the coop as "grabbing on to a moving freight train". There was little doubt that the coop had been through some very turbulent times and that he had had to take an enormous amount of flak.

Membership had halved to 109 at the time of my visit. \$1m of factory equipment had been thrown out in the first two years of production and carcase cut yields had been as low as 78% when target is 90%. Member discontent had been a massive problem principally because the members were receiving a price below "cash" price for their pigs and slot allocation was a constant problem. The delivery slots had been allocated on a first come first served basis and this had become unfair as the slots should have been allocated on a geographical basis. Despite all these problems the three members that I met had tremendous confidence in the CEO.

Given these circumstances some members were not supplying the numbers of pigs that they were obliged to and more importantly not paying the \$24 for the hook.

Meadowbrooke were then forced to go to the market to buy pigs at "cash" price – which was higher than the member price. A circle was developing and member moral was very low.

Eventually the members who had failed to supply were sued and the cooperative won the case. This meant that these members were obliged to supply pigs for their contract notice period or pay the \$24 hook fee. The coop then had the time to line up supply of weekly market pigs and the factory was able to run at near capacity. 3400 were being processed on a daily basis at the time of my visit, six days a week.

Gene Lehman had been brought in as a consultant and according to Jim Burke that had been the single best thing that the board had done in an attempt to turn the cooperative around. Mr Lehman was retired director of Smithfield Foods and his wealth of experience had been invaluable to upper and middle management as well as the Board. He instructed management to maximise revenue streams per unit which were \$20-25 below target. An example of this was that income from rendering had been overlooked and this then became an income rather than a cost. Small details that the inexperience management at Meadowbrooke had overlooked were spotted and rectified.

In November 2008 the firm was in the second year of a three year plan to turn the business around and there had been a \$3m turnaround in income. Member confidence was returning and some were willing to commit more pigs. Although member price was still below cash price the feeling was that the two prices would soon be in equilibrium.

I found this case study one of the most interesting and probably one of the most relevant to my own situation and the individuals that I met were very honest and open about the issues that the coop had faced and how every effort was being made to overcome these problems.

Vande Rose Farms, Iowa

This small cooperative was based in Oskaloosa in Iowa and had been formed in 1998 by three farming families of Dutch origin who wanted to market top quality pork. The organisation had started by slaughtering just five pigs and was selling the progeny of 1800 sows at the time of my visit. The focus was on producing the finest quality pork and certain protocols were in place to try and produce the highest quality meat as product was sold the top end restaurants and shops all over the USA.

Pure Duroc boars were used as the terminal sire on Chester White sows which was an old highly prolific, docile breed from the 1970's to offset the lack of numbers often associated with the duroc breed. Both breeds selected for flavour and meat eating quality rather than leanest and growth rate. Finishing pigs were fed on high oil diets to try to enhance meat eating quality. All progeny were slaughtered by a contract slaughterer less than an hour from the farms to try to minimise stress at a cost of \$35 per head. Heavy slaughter weights were used with an average of 280 lbs and all pork was hung for a minimum of 24 hours. Special attention was paid to the ph levels of the meat and any product had to be a minimum of 6.2 ph before it was eligible to sell under the brand. All meat was marketed as Antibiotic Free which was very much a trend in the US in late 2008 and means that the animals have had no "in feed" medication.

Until two years ago seven third party cutting plants were used to further process the pork but two cutting plants had been purchased in that period and now the organisation had a staff of 48 in processing and 8 in sales and administration.

Producers received a premium of \$2.5 per cwt above the USDA average price for pigs that achieved brand specification.

All brand product was destined for the home market with 60% going to the restaurant trade and 40% to shops.

In 2004 CEO Steve De Bruin introduced beef into the product line along similar principles as the pork. For this the Hereford breed is used. Wine has also been introduced recently. The grapes are grown on members' farms for a local winery and marketed under the Vande Rose brand.

This organisation had known what they wanted to achieve and gradually worked their way into that specific market building up to a significant size from nothing.

North American Bison Cooperative

NABC was formed in 1993 by 330 bison producers from both USA and Canada and opened a processing facility in North Dakota in 1994 with the capacity to process 5000 head per year. The capacity was increased to 8000 in 1999 with the intention to reach 10 000 in 2000. The coop had also acquired a bison marketing company called New West Foods and a distribution firm called Great Plains Food Co neither of which had been successful and had not introduced any cost savings.

In 2000 demand had reduced significantly and production had increased. In 2003 sales from the coop had reached \$22m but for up to three years previously the coop had been putting carcases into frozen storage. Members did not receive any payment for animals that had gone into storage. Not surprisingly the Board declared bankruptcy in October 2004 barely ten years after the formation of the coop.

By mid 2005 the stock of frozen bison beef had been liquidated and the cooperative emerged from bankruptcy under a new Board and with a new President/CEO called Dieter Pape. A decision was made that in order for the plant to be profitable the coop would have to contract slaughter to increase the output from the assets. Interest was increasing in "Natural Beef" at this time in the US (antibiotic and hormone free beef). NABC and others joined forces to form a limited company in which NABC had a 10% shareholding. The company would trade under the name of North Dakota Natural Beef (NDNB) and contracted the coop to supply management, marketing and administrative services.

Both NABC stock and NDNB stock are slaughtered at the coop plant in New Rockford ND and product from both companies are further processed at the new 41000 sq feet cutting facility in Fargo ND belonging to NDNB.

I felt that this was an interesting organisation in that a coop had joined forces with a company to their mutual benefit. The economic interdependence between the two firms has increased the ability of each to obtain comparative advantage in their respective product market. The coop seemed to be on the road to recovery as a result although the success or failure is totally dependent on a good working relationship between the two firms and the contracts being fulfilled by both parties. If however the trust or cooperation between the two organisations is lost then there is potential for massive problems. Well drawn up contracts over lengthy periods would be beneficial to allow both firms to get well established before any parting of ways.

QPP, Minnesota

Although this was not a cooperative or indeed was it a firm which marketed anything or had formed any type of brand, this was one of the most interesting visits of my whole Nuffield experience. Based in Austin, Minnesota QPP contract slaughtered 19 000 pigs on a daily basis for Hormell.

Austin is the home town of Hormell which is one of the larger and certainly one of the most innovative pork processing companies in the US. SPAM is the world famous brand that was created by Hormell in 1937 and they have been at the forefront of pork product development since then. Spam is such an enormous brand that there is a museum dedicated to the brand in Austin where every conceivable type of merchandised product can be purchased. Hormell are also responsible for the Always Tender brand which is a moisture enhanced product which guarantees a good eating experience every time and has been a pioneering product as well as highly successful. They have an excellent relationship with their farmer suppliers and are prepared to pay for the quality of pig that they require. A producer who achieves 80% top grades gets \$1 /head bonus and 90% gets \$2/head. A close relationship has been formed with a pig genetics company to try to develop pigs that the market requires and research is being constantly being carried out on pig stress levels etc.

QPP was formed in 1989 and is owned and run by Kelly Watting. QPP take ownership of the pigs as soon as they are taken off the transporter. They are then slaughtered and cut into primal cuts and as soon as these cuts "pass through the wall" they become the property of Hormell. QPP own no plant and are free to concentrate on slaughtering the pigs as cheaply and efficiently as possible, all the capital expenditure is Hormell's. 1300 people are employed by QPP and effectively that is all that the company is – a group of people. In return for all Hormell's capital expenditure the Austin factory is the cheapest per unit slaughter facility in the US. In 1993 the daily capacity of the factory was increased from 5000 to 19 000 and in 2005 a brand new factory in Albert Lee 12 miles away was introduced into the relationship.

The contract between the two firms is on a 120 day rolling notice and is reviewed annually or as changing market circumstances dictate. The key to the success of this relationship is trust and faith in the individuals involved. Neither partner is too greedy and is prepared to see the other benefitting. Both realise that they are interdependent. QPP realise that the quality of their finished product must be very high and Hormell are aware that they must provide good facilities and equipment for that product to be delivered "through the wall" cheaply and efficiently. For example Hormell had just spent over \$1m on a new office for QPP.

I would stress that Hormell and several other of the large pork processing companies had tried to replicate this arrangement all over the US and had been unsuccessful which suggested that the success of this arrangement is down to the individuals involved.

Conestoga Meats, Ontario



Based in Ontario and three hours from Toronto, Conestoga is a farmer owned coop was processing 13 000 pigs per week for its farmer members. At the time of formation in 1994 there were 500 members but in 2008 at the time of my visit this number had reduced to 170. There was a board of 12 including Chief Executive Officer Arnold Drung. There was a staff of 350 in the factory of which 30 were office based. The minimum commitment was 500 pigs per year and the maximum 40 000. Based on a new generation coop structure members were charged \$20 per hook which had not changed since the start of the coop.

The factory was purchased in 2001 and was 20 years old at that time with a capacity to process only 3 000 pigs per week. The plant had been run by a family business and crucially there were two advantages about this. Firstly as part of the deal the existing management were contracted to the coop for a further 5 years and their experience was invaluable and secondly the factory had an existing brand attached to it which was included in the sale. This brand was aimed at the top end of the market. The previous owners were renowned for paying a high price for the pigs that they required but were very particular about the quality of those pigs. This policy had been continued and in 2005 pig price became directly linked the price of pork. Conestoga paid their suppliers one of the highest pig prices in Canada.

Since the purchase, capacity has increased to 13000/ week gradually, through expansion on the existing site, and the current business plan intended to increase production to 30 000

/week. At the time of my visit there was considerable rationalisation happening in the Canadian pig processing sector with the largest processor, Maple Leaf, cutting their pig kill considerably and management did not envisage any problems procuring the pigs to supply this increased capacity. 30% of product was exported to mainly the USA and Japan which would be quite low compared to many Canadian processors.

This was a particularly interesting organisation to visit because it had expanded from very modest beginnings having taken over a small but successful business. There had been no large grant aid and the coop seemed to be thriving in a difficult environment. Although there had been a dramatic reduction in member numbers this was in line with the reduction of pig farmers over the same period. Membership loyalty was good and the coop seemed to be going from strength to strength. Interestingly most of the farmers were of Dutch origin and I did consider that the spirit of cooperation may be present in their genes!

Five Star Pork, New Zealand

This was a small but interesting coop based in the North Island of New Zealand but includes producers from the South Island. There are 30 members who can supply pigs and membership was not open i.e. individuals were selected and offered the opportunity to join. The board consists of 4 farmers and another director who comes from a marketing background. The staff is around 20 with 15 of those involved in processing and there are 5 sites involved in the operation. The meat is marketed through a brand called Karou Farms.

Formed in 1999 by the merger of 2 smaller coops the original plan was to export pork into Singapore. This was to be done by using a new treatment of meat called gas flushing which both enhances meat eating quality and more importantly in this case increases shelf life. The meat was to be exported by sea to Singapore which is obviously much less expensive than air freight and this was only possible because of the increased shelf life.

Initial shipments were air freighted in to Singapore to establish the market and the next step was to send larger consignments by ship however problems developed politically with the exportation of gas flushed product into Singapore and eventually the plans had to be shelved. By the time these issues were ironed out changes in currency exchange rates made the project unfeasible. These financial changes also brought the air exporting to an end which was extremely disappointing as the volume had been increasing considerably.

As a result the coop was forced to concentrate on the home market which is small and congested. The pigs are slaughtered at one of three contract abattoirs and transported to the coop cutting plant. 1000 pigs per week are sold to a food service company and are distributed to restaurants and the remainder are marketed under the Karou brand. The coop takes ownership of the pigs directly from the farm but only the number that they can add value to hence the number marketed under the brand is variable although a further 2000 per week would be available. Any profit is redistributed to the members on a bonus scheme.

Although this coop was having problems I did sense a real determination to make the coop work and a belief in the cooperative ideal. The set up of the coop was such that the CEO was responsible for all aspects from procurement to marketing and at the time the CEO was being replaced. Circumstances had contrived to bring the exportation plan to an end, which everyone agreed had been a sound and innovative plan and the coop had been left to try and survive and breakthrough in a very difficult market.

Harvey Pork, Western Australia

This was a very interesting visit to a pig farmer who had stopped farming to concentrate on the development of a gourmet sausage brand. Graeme Moore had secured the brand name some years ago. There was an established brand called Harvey Beef which is synonymous with quality and he had thought that there may be an opportunity for his pork under the Harvey banner in the future.

Gradually over the years Graeme developed flavours of sausage in the back shed at his farm and in July 2008 Harvey Pork Gourmet Foods was born with a philosophy never to compromise on quality. Australian sausages are very heavily processed much like they used to be in the UK and there high quality sausage was definitely a novelty in Australia. After an initial relationship with a distribution agent had failed and having problems finding another which was not already distributing pork Graeme took it upon himself to get the two flavours of sausage into stores in Perth. He found that most stores were prepared to try the product

but the difficult bit was to get repeat orders and become established. In December 2008 he sold 750 kg however the global downturn had affected demand in Jan / Feb 2009 and he had tried to reduce packaging costs to remain competitive. Two new flavours were being added to the range with the intention of complimenting the existing sausage rather than competing with them.

The drive and enthusiasm that Graeme had was infectious. He was trying to bring something new to the market and was putting an enormous effort into doing so. To do this from a standing start is phenomenally difficult and he was depending on the uniqueness and high quality of his product to do this.

The Craig Mostyn Group, Western Australia

In 1998 the CMG purchased a factory at Wooroloo just north of Perth to process pigs for the home market with the capacity for 2000 pigs /week. They also invested in their own pig farming to become vertically integrated as well as forming relationships with independent pig producers and by 2000 the capacity had increased to 4500 pigs/week. An opportunity arose to purchase the next door lamb abattoir and this enabled them to develop a new slaughter line and upgrade the facility to export standard in 2003. The plant now processes 14 000 weekly which is 95% of the WA kill.

Domestically a relationship was developed with Action Supermarkets and a small group of farmers who were trying to develop a meat eating quality brand under the name of WA Select Pork in 2001. Pigs were farmed and processed to a template which was intended to improve meat eating quality. For example pigs were castrated and diets were altered to enhance the quality of the pork including feeding high magnesium levels. Grant funding was obtained for advertising and promotion with the intention of increasing the numbers and weight of pigs being sold through the fresh meat counter. After some years the farmer side of the collaboration fell away as the farmers felt that they were not receiving adequate premium for their product and were not being compensated for their extra costs of production. This was particularly disappointing as this was the type of relationship that I had wished to see. One of the pig suppliers felt that the main reason for this failure was that there was plenty of processor to retailer communication but not enough farmer to retailer communication. CMG and Action Supermarkets were continuing with the brand themselves although in 2005 Action was sold to Metcash which caused some uncertainty and further weakened the brand.

A brand called Linley Valley Pork was also introduced which marketed free range pork, principally for the food service industry. Above this some 2100 pigs were sold to Woolworth and De Sonja Supermarkets weekly.

Much of the CMG focus in the last 3 or 4 years has been on exporting to Singapore and to the "Wet Markets" there which I had the opportunity to visit. The geographic situation of WA gives CMG an advantage over the rest of the country in terms of freight cost into Asia. Selection of specific genetics, feed regimes and on farm management strategies have been undertaken to improve the quality of pork and offal and adapt the pork to the Asian taste.



Findings and Recommendations

Findings

Throughout my investigations I found that all the organisations which I visited had several things in common. Each had slightly differing agendas but common threads ran through them regardless of size, structure, location or product type. I had visited and met with people involved in many types of food production from dairy through all types of meat to fruit and wine. The difference in Nationality traits was something that constantly struck me as I travelled round the world. The New Zealander answer to a problem would be totally different to the American answer.

Everyone had incredible enthusiasm to produce good food at a competitive and affordable price. There was a desire to be efficient as well as to be innovative and ground breaking. Each wanted to provide their customer with what was required and build long lasting relationships with them.

I found in every country that both farming and food production firms had far superior relationships with agricultural academia than we do in this country which can only be detrimental to our industry. The money that these countries' governments invested in the Colleges and Universities was well spent and the individuals whom I met that were involved in the research and back up for the Agri/Food industry struck me as capable and willing. This was something that I was very envious of.

There was general agreement the there is not "extra money" out in the marketplace for any significant volume product although there may be for niche products. There is constant pressure on price no matter where you are and there will always be a competitor just around the corner willing to supply if you don't come up to the mark in either price or service.

Everyone that I visited was agreed that it was the people in the organisation that determined how successful it was.

I found it very common for a brand to be built on good principals and standards only to be diluted over time. There may be several reasons for this but the most common are that the principles are weakened to cheapen product either to gain or maintain market share. Another reason is that the individuals who made the original deal have moved on and the belief and passion for that brand has been lost.

On the farming side I found in general a degree of depression among the pig farmers especially in North America. This was as a result of the high world feed prices combined with

relatively low pig prices. Since that time grain prices have collapsed giving the pig producers a chance to recoup some of their losses.

Recommendations

These are the recommendations that I would give to any farmer owned cooperative which intends to develop and market their own brands of meat and the factors that I feel will be important in the success or failure of that coop.

Factors for Success or Failure

Membership Loyalty

This is absolutely paramount to the success of a cooperative. If the loyalty is lost then the coop is better without the unhappy members. These members will be constantly disruptive. It is crucial to be selective with membership. There should be a common belief and understanding in the objectives of the coop and it is not possible to do this with an open membership. In an existing coop hoping to branch out into adding value it is advisable to set up a sub coop which only includes members who are interested in the project as there is no point in trying to force members on a road down which they are unwilling to go.

There can be several reasons for losing member loyalty. Firstly and most commonly is under estimation of the task ahead. To develop and market a new brand is an extremely and challenging task. It will be very difficult to gain market share as those already in the industry will be doing their very best to supply the market into which you are trying to break. Unless you have a significant point of difference over your competitors it may be necessary to undercut the market initially to gain that market share. In this instance the coop may well have to pay their members a reduced price for their stock which will obviously lead to discontent unless members are fully aware of the possibility from the outset of the venture.

If the Board of a coop is over optimistic with budgeting of the venture or has underestimated the capabilities of the previous processor then again the membership is likely to become impatient and unsettled. If early results are not as expected will is quite possible that farmers may well look elsewhere to market produce which may lead to a half empty factory which is the quickest and surest route to failure.

Personnel

As with every business the quality of staff employed is crucial. This is especially true of the CEO and upper management. Each of the successful coops that I visited had a dedicated man at the helm. It can be very difficult for a cooperative to employ staff who possess the same commitment and dedication as owners or partners of a private firm who have a financial stake in the firm. It can be especially difficult for a new coop to attract experienced upper management from existing competitors as these individuals would require considerable courage to leave an existing firm to work for a farmer coop. A coop would have to allow for the fact that they may well have to pay for the mistakes of inexperienced middle management working in upper management positions until established.

It is advisable to be prepared to use third party consultants if need be. Although this may well be expensive I have seen examples where a consultant has been employed at huge cost but with dramatic effect on efficiency and profitability of a factory. These people can be particularly useful when less experienced management have been employed.

Capitalisation

There is no doubt that the easiest part of a project like this is raising the capital. In Europe there are large amounts of money available in the form of grant funding for farmer cooperative capital expenditure. However grant funding is not a good enough reason to start a project and it must be financially viable in its own right.

Most coops that I visited had had little problem raising funding from membership but most had spent capital unwisely and often equipment had been replaced at an early stage.

I feel it is advisable to keep an extra 1/3 of initial capital in reserve for expenditure in year 3 to allow for teething problems and unforeseen expenditure at this stage and this will protect against having to increase borrowing at a crucial stage.

Structure and Leadership

As with all businesses good structure and leadership are essential for success but both are especially crucial in a coop as the Board are spending other people's money. The Board must the strong, dynamic, courageous and determined and should never simply just take the executive management's word for it without thorough questioning and investigation. The Board should never become a "club", it is very easy to become comfortable and complacent and in this situation bad decisions will be made.

New Generation Cooperatives are a good way to set up the structure. This is when members have a stake in the coop relative to their commitment. In an abattoir for example members pay for the number of slaughter hooks that they require. If for some reason those hooks are not filled then that member must pay for them anyway. In good working coops these hooks can become tradable which is an excellent position to be in. New Gen coops are an excellent way of committing the membership to the factory.

Due Diligence

Whether taking over an existing facility/business or starting a fresh due diligence must be paid and everything investigated thoroughly. This applies to the production systems as well as to the markets available. I saw several examples of how bad research had led to expensive equipment being bought only to find that it was either inferior or unnecessary and that equipment was thrown out after a very short time.

A cooperative venture will be greatly strengthened if an existing, successful brand can be purchased. To build a new brand from a standing start is tremendously difficult to do and is rather like starting a running race with your opposition starting 10 meters down the track. However the purchase of a failing brand may well be ever worse and so the coop must fully investigate all aspects of the brand before committing to it.

One of the most common reasons for failure was over expansion and badly conceived takeovers and mergers. It is common for coop ventures to initially very successful possibly due to the enthusiasm of commitment of the members for a new venture but after a time the novelty factor can wear off. It is possible for a complacency to set in if things are going well. I saw numerous examples of coops which had expanded after initial success only to become unstuck shortly afterwards because due diligence had not been paid at the time of expansion. A coop should be very well established and on a very sound commercial footing before any expansion.

Protect Position

Sadly on a few occasions I saw coops which had been established based on good ideas and principles but had failed or been forced to merge because they had given away their point of difference in order to get market share. The principles had been lost over time or given away, in order to make a deal. I recommend that the coop should stick rigidly to their principles wherever possible because once the principles are gone they are lost forever and the coop has lost any advantage over their competitors.

Conclusions

It is extremely difficult for a company to add value to product or to develop and market a brand especially on a large scale where they have no niche market advantage. In the case of a cooperative the task is even more difficult especially in a country such as the UK where the cooperative spirit within the farming community is nowhere near the strength of that of European countries. There are thousands of examples of organisations which have tried to do this and have been unsuccessful.

Despite these difficulties I have concluded that it is possible for a coop to add value to members' product by developing and marketing their own brands of pig meat. However circumstances must be correct, the project must be clearly defined, reasoning behind the venture sound and the objectives must be clearly identified. It is definitely better not to start a venture than to rush in full of enthusiasm and bluster only to falter at the first hurdle.

I feel that a project such as this should be started on a smaller scale and be allowed to grow while at the same time gaining experience. To begin on a large scale is tremendously difficult. The most difficult and yet most important thing to do is to employ the right person to run the business. All the successful businesses that I visited had a very capable, dynamic individual at the top with a supportive board behind them. Many of these businesses had become more like a farmer owned business than a cooperative. This is where a coop should position itself.

There is scope for a brand which can guarantee good meat eating quality and there is a proportion of the population which are prepared to pay extra for a good meat eating experience. Further research is required into ways of bringing reliably consistent product to market without using any additives or heavily processing meat to achieve this. It is essential to have a point of difference and to be innovative and novel where possible.

Postscript

My Nuffield Scholarship has been a thoroughly enjoyable experience as well as being informative and challenging. Although I have barely scratched the surface of my topic I have an understanding and grounding on the development of coops that I could never have had otherwise. This is a much longer process than if my study had been on a subject relating to my own business and so it is not possible to implement changes in the same way although I hope that I will be able to use what I have learned in the not too distant future.

I have met many inspirational, dynamic people, some in connection with my topic and some out with and hope to remain in contact with many of them as the years go by. I have learned that there is almost always something to be learned from other people even when you made a visit and realised that the business was not relevant to the subject.

My Nuffield Scholarship has given me an opportunity to experience something that very few people have the chance to enjoy, for which I am hugely grateful. I am certain that I have embarked upon something that will be beneficial to me throughout my life and that the learning experience is only just beginning.