



Nuffield Farming Scholarships Trust

Award sponsored by John Oldacre

Closer to the Consumer

Andrew Freemantle

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1. MY BACKGROUND

I live on my parent's farm near Exeter, Devon, with my wife Liz and children William and Alex. I have been here for 24 years. Leaving school in 1986 I worked as an apprentice on a neighbouring farm then I went to Bicton College, to do a National Diploma in Agriculture. I travelled to Indonesia and Australia in 1992 – 93. In 1994 I started farming pigs with 60 sows at Kenniford.



We now have 320-sows on a farrow-to-finish Freedom Foods-approved pig unit, marketing a total of 140 pigs per week. Approximately 50 of these - per week - are sold direct to the final consumer under our own Kenniford Farm brand via our farm shop, catering and wholesale businesses. We employ 16 people full time and 10 part time, and the business has been built up over the past 16 years via hard work and perseverance.

Disclaimer

The views expressed in this report are my own and not necessarily those of the Nuffield Farming Scholarships Trust or my sponsor or any other sponsoring body.

2. How Nuffield soon changed my thinking

At the time that I was awarded my Nuffield Scholarship the subject I wished to study was "*The possibility of introducing a fair trade system for British agriculture*". However while I was attending the International Contemporary Scholars' Conference - which is the first official engagement for all New Scholars after being selected - I realised that a fair trade system was not actually the vital current marketing issue for farmers who connect directly with the consumer and try to educate him/her about the product in question. Far more important, and far more basic, was to explain one's environmental practices, methods of production and USPs. This applies particularly to farming because there are so many scare stories in the media at large concerning food and food production.

During the Contemporary Scholars' Conference we were given a lecture by Professor David Hughes, an emeritus professor of marketing. Among his clients was Nestle who had just sold their millionth Nespresso coffee machine via direct selling on the internet, bypassing their traditional middleman, the supermarkets. Nestle are a huge, 90 billion dollar company. If they are looking to, and succeeding at, getting closer to their consumer, how much more so should this apply to UK farmers, who perforce operate on a very much smaller scale?

Professor Hughes' lecture, and the Nestle example he cited, inspired me to change the title of my study tour to:

Closer to the Consumer

My Nuffield eureka moment had come early!

3. My Study Tour

I visited:

- Canada
- USA
- Japan
- Holland
- Although I chose to kick start my study by attending a couple of conferences in England.

The details of my findings in each of these countries can be seen on the following pages.

My report will guide you through my travels citing examples from around the world to back up my recommendations.

3a.The UK

The Visits

BBC Good Food Show in Birmingham, November 2009. Nestle Nespresso stand

Cirencester College Business Strategies for the next Decade Conference 2009

Riverford Organics

Key Points

- The Nestle Nespresso Stand was packed with young, pretty salespeople and was very busy. This was in contrast to the NFU stand which featured a Massey Tractor and had a senior poultry person talking to the public. There was no representation from the pig, dairy or beef sectors, and there was empty space in the hall which could have been put to good use. However I noted that Debbie & Andrew's, with their eponymous sausage range, had a good stand and were attracting plenty of interest.
- Guy Riverford from Riverford Organics who sell 27,000 boxes of organic vegetables every week was exhibiting. He said he was "*obsessive about getting closer to the consumer*". Riverford achieve this through cookery classes for their prospects, given in an ordinary home. Typically such a workshop would be hosted by an existing Riverford customer and the lesson given by one of Riverford's own cooks. Charge to the "pupil" would be around £50.

Recommendation

UK agriculture needs better representation at the Good Food Shows. Use young farmers with live cattle and interactive displays, something that people will remember.

3b. Canada

The Visit

Banff Pork Conference January 19-22nd 2010.

Challenging Pork Marketing Models. Kevin Grier Pig Economist

Key Points

- Pork is always a commodity, so producers must be prepared to be price takers.
- Every business should differentiate
- Target customers maximise revenue
- Value equation - quality and price
- There are no untapped markets
- Young people across the world are not eating pork like their parents
- In Canada price and demand went down - a very bad combination
- Since October 07 the US and Canadian herds were down by 500,000 sows
- But productivity is up.
- COOL (*Country of Origin labelling*) helps net importers - not net exporter's.

China (Talk by Kim Weng Shu HSBC China)

Key Points

- Lots of people but a high percentage is very poor. *Percentage wise not many Chinese can afford Western imports. But even so 5% of the Chinese population - 1.3 billion - equates to 65,000,000 people and a huge export opportunity for international pork producers.*
- Largest importer of soya in the world. *Threat to soya availability and price going forward is a threat to pig farmers.*
- China cannot feed itself. *Must import food or the raw materials to produce it.*
- Pork is the most important item in their CPI basket.
- In the last 14 years 30% more meat has been eaten per capita
- 22% of the world's population, yet 7% of the arable land. *(I thought this was a great fact).*

- 38kg of pork per person per year is eaten. *(In the UK it's 20 kg per person).*
- A stable pork supply is a government priority
- 48 million tons eaten this year.
- By 2015 this figure will be 91 million. *That's almost double the current figure and will need a lot more pig feed to produce.*
- The Chinese will almost certainly prefer to import feed rather than pork meat.
- There are opportunities for Western producers to supply safe, fresh processed pork into China for consumption by the wealthier elite.
- Feed scares are common in China. *Safe Western food for the elite could provide opportunities for Western producers.*

Recommendation

Since the younger generation worldwide is eating less pork than their elders, marketing must be aimed at the former.

3c. USA

The Visits

Fair Oaks Farms, Illinois

This was a huge industrial farm but with a visitor centre attached. The business was used as a blue print for Nocton Dairies' plans for their large scale dairy farm in Lincolnshire - the planning application for which has sadly had to be withdrawn as of February 2011.

Key Points

- 10 farms owned by 9 independent farmers trading as Fair Oaks Farms.
- Own Petrol station and a Subway fast food franchise
- Farm size 19,000 acres, 32,000 cows
- Over 100 calves born every day
- All farms similar set up 25 Mexicans per unit
- 250,000 us gallons a day
- Older cows' tails docked, younger ones not!
- 1% production sold as Fair Oaks product *but that's still a lot of processed products*
- Antibiotic free sold at a premium from the heifers as they have had no long acting dry cow therapy. *My visits to American supermarkets indicate that antibiotic free produce is a big thing. There is hardly any free range or organic products.*
- Lights to tell you when calf is coming as per traffic lights
- AD plant supplying enough electric for 750 homes
- 500 acres in a scheme like ELS
- Education centre supported by Dairy Dollars non profit
- Very smart video presentation funded by them
- Restaurant funded by the all the farms in the group.
- Very flash over the top in your face pro dairy promotional videos
- 400000 visitors a year
- Does do a very good job of promoting intensive dairy industry
- Exhibits at Chicago and Indianapolis Museums of science and technology

The building in the photo on the next page houses 2,000 of their total 32,000 cows and can be seen from the visitor tour bus.



The picture below shows the calving theatre at Fair Oaks, which again can be seen from the tour bus. Fair Oaks always has a cow calving for the public to see (there are 70-100 calves born each day across all four farms)



3c. USA -continued

The Visits

Chicago Museum of Science and Technology

I visited this Museum and found shiny new tractors and combines, mock-ups of milking parlours and also of a farrowing crate which quite amazed me.

The public in the US are very much closer to farming than are the public in the UK., and welcome the opportunity to see exhibits like this.

Farrowing crate mock up at the Chicago Museum (Ever In England??)



3c. USA -continued

The Visits

Gunthorp Farms, Illinois. Farmer Greg Gunthorp

A free range farm selling pork, chicken and duck products direct to consumer

Key Points

- 80 sow Duroc x Landrace x Large White herd
- 12 pigs sold per sow per year produced seasonally, very low production (too cold to farrow outdoors in winter)
- 900 pigs sold last year, very heavy and fatty, probably higher than a 30 mm probe
- No insulation on arcs, very basic kit in very cold weather - minus 10 when I was there
- A lot of feed used but very cheap as at February 2009
- Straw a similar price to the UK
- Had some outdoor drinkers that did not freeze up, but pipe was buried very deep
- Greg was convinced that more and more people in the US want to know where their food is from.
- Pigs sold at 120 kg deadweight and had a lot of marbled fat.
- Slaughter pigs looked bigger than gilts ready to serve
- Made his own back bacon called *Canadian bacon* in the US
- Most bacon was sold as streaky loins, whole bone in for chefs to slice themselves.

But the main enterprise was poultry

- Produces and slaughters 40,000 chickens and 12,000 ducks per year
- Had own processing line. (*There are only 200 chicken slaughter houses in the whole of US*)
- Note no equipment suppliers in the US for any large scale outdoor production - *opportunities for UK equipment manufacturers?*

His best customer was Frontera Grill in Chicago. Frontera has an award winning chef who makes a big play in his menus about using produce from named farms.

Greg kindly paid for me to have dinner here. The place was packed on a Wednesday night. It was 250 miles from the farm which highlights the problems US producers have getting produce to market. Yet, in this instance, one simple arrangement between Gunthorp Farms and Frontera Grill provided the bases for two thriving businesses.

Comment

Except for a tiny amount of supply chain deals the USA lags behind the UK in all aspects of local food supply chain. Yet when it came to large scale food production and economies of scale UK farmers were the laggards.

3c. USA - continued

The Visit

Traders Point Creamery (www.traderspointcreamery.com - lovely site)

Key Points

- 40 cow organic milking herd
- Housed in a traditional American barn
- Businesses like this seemed very few and far between in America
- All milk produced on the farm is processed on the farm.

Traders Point Creamery



Recommendation - taken as a result of visiting these three US farms

No matter how large and industrial your business, a positive message can be given. Work with other farmers and open up a site so that people can see for themselves.

If this is not possible, take the display to the people via science and technology museums. Mac Donald's' sponsor the Food and Farming exhibit in the Tokyo science and technology museum

3c. USA - continued

The Visits

Alemanya Farmers' Market in San Francisco.

This was the first Farmers' Market in California, founded 1943. Open Saturdays 5 - 5 pm. Place packed.

Ferry Plaza Farmers' Market

The market stalls were outside but shop units in the Ferry Building were rented to individual producers at \$40-50/day. There was a waiting list.

Key Points

- The Ferry Plaza Farmers' Market is operated by the Centre for Urban Education about Sustainable Agriculture (CUESA).
- Market open Tuesdays and Saturdays with 10-15,000 shoppers on the Saturday.
- The markets offer produce and flowers from small regional farmers and ranchers. Other regional artisan products include breads, cheeses and jams.
- There is also a smaller Thursday market featuring an array of artisan street food: wood fired pizza, grilled meats, sandwiches, tacos.
- Fresh produce also on sale.
- Shopping at a Farmers' Market provides an opportunity to learn how food is grown, by whom, and why it tastes so good.
- CUESA hosts weekly cooking demonstrations and interviews with farmers and these programs are free and open to the public.



Alemanya Farmers' Market in San Francisco.

3d. USA - continued

The Visit

An all grass organic farm

Key Points

- 160 all grass organic farm
- 120 beef sucklers, cross breeds with Friesian predominant.
- 2000 layers with seasonal production. Packer paid \$6.50/dozen for the eggs
- 15 sows and finishers mostly pre sold as half pigs @ £11 per kg.
- Gloucester Old Spot crosses.
- A Meat Club was used to sell to customers. Customer put down a \$100 deposit and had the meat when it was ready.
- Boars castrated, fed whey plus chicken feed @ \$450 ton.
- Dogs left with the chickens to protect them from bobcats and foxes.
- Annual organic inspection very lax - the place was a right tip.
- Very untidy with dead stock left around the farm

While I was chatting to the farmer I noticed his dogs fighting over a very dirty bone attached to a badly decomposed sheep carcass that had been left to rot in the yard.

Comment

The farm was very poorly run and inefficient compared to the UK equivalent. Sadly this can happen with some American organic outfits.

3d. Japan

The Visits

Chubo Shiro, a multi species feed firm.

Chubo Shiro is a nationwide company with a 2.4 million ton output, 400 employees and a research farm. They have a technology agreement with BOCM Pauls regarding creep feed manufacture. The business is family owned and the manager is 72. Who will succeed him is open to discussion. He only has daughters and Japan is still quite old fashioned regarding women company owners.

Key Points regarding the Japanese pig industry.

- Relatively young industry, only really got going 40 years ago.
- Japan's 120,000,000 people eat 17 kgs pork per year, over twice the UK consumption.
- Fish provides the majority of dietary protein, but this is likely to get more and more expensive. Japan has very few arable acres so 90% of feed has to be bought in.
- The Japanese quandary is; what is the most environmentally sound way of sourcing their pork - importing from the USA, Canada, Denmark, or Holland, or by producing it themselves.
- I feel personally that the Japanese should produce some at least at home, otherwise they are at the mercy of the nations they trade with.

Pork Prices.

- Prices paid to farmers per kilo seem quite good in sterling terms, but sterling has of course depreciated over the last 2 years.
- Pork prices now £3.23 per kilo. Not long ago it was £1.6 per kilo.
- These prices represent a 10 year low for Japanese farmers.
- For every finished pig produced £8 has to be paid to get rid of slurry and organic matter. Three farms I visited use a lot of sawdust which had to go into a very expensive treatment system so the water could eventually go back into the ground water system and the solids dried and given to local rice/vegetable farmers as compost.

Feed

- Costs around £300 per ton. Antibiotics may not be added to the ration as it is made.
If a farmer needs a medicated ration the antibiotics are literally spread on tote feed in the lorry before delivery. Feed bins used by farmers are owned by the feed company.
GM crops are allowed in rations as well as fish and meat and bone meal.

Farmer and Industry Cooperation

- There is nothing on a national scale; no BPEX, no National Pig Association. I urged the Japanese to contact BPEX and see if some information could be shared.
- I pointed out that the UK national herd has halved in the last 12 years but that farmers have learned to work together; also that the national herd is growing again albeit aided by the weak pound.

Breeds/Marketing

- The farms I visited had Large White x Landrace sows crossed with Duroc boars. The pigs had more fat cover than the customer wanted
- Differentiation in the supermarkets was little to non-existent. Three Japanese struggled to find Japanese home produced pork among the Australian, American and Danish.
- Consumer prices for pork are high between £10-15 per kilo. Tempura, a cut from the shoulder battered and fried, is very popular at around £18 per kilo.

Tempura on display at Geshmack Farm Shop (see page 18)



3d. Japan - continued

The Visits

The Fresh One Co-op

Key Points

- This is a loose Co-op of four farms.
- Respectively the farms have:

360 sows (this is Geshmack, plus a wholesale and farm shop/restaurant business): 160 sows : 110 sows (Mr Kanatsugu, see 2 pages later on):
80 sows
- They all use the same breed of pigs and a special finisher ration with low amounts of linoleic acid, no maize and 10% more oils which gives a fatter and more marbled meat in the finished pig.
- The price they receive is 460 yen per kilo, which is 15% more than the national price.

Finishers At Geshmack Farm



3d. Japan - continued

The Visits

Geshmack Restaurant and Farm

Key Points

- The restaurant is run by the President of Fresh One and his two sons run the shop and one runs the farm.
- They have been in the pig business for 40 years.
- Six years ago the son who runs the shop visited Germany for one year to learn the butchery business. He came back and built the butchery/restaurant. They still trade with the German butchery buying sausage mixes
- The shop uses 25 pigs a week, bought from the farm at 25% above market price.
- Is this sustainable? *I do not think so. I know from my experience you are only making money on one part of your business at the expense of another.*

The Farm

- Has had pigs on it for 40 years and they looked superb.
- There are 360 sows farrow to finish selling at 115 kgs live weight.
- Male pigs were castrated. *(This practice is illegal in the UK if you want to sell under any type of Assured Standards scheme)*
- 10-15 gilts per month are bought in as herd replacements
- Pre weaning mortality is 7% with 12 born alive and 25 pigs sold per sow per year.
- Sows are in dry sow stalls or crates all their lives. *(This too would be illegal in the UK)*
- AI, collected on farm, is used - In the UK this would be illegal. AI would be purchased for a herd this size in the UK.
- Boars were bought in from the National Research Centre (Japanese Defra)
- For £700-800 I could feel this was the cause of some friction, the father preferring to stay with older breeds even though they did not perform so well, because of the taste.
- Finishers were not in slatted buildings. Each group of 20 had a pen 3.6m by 8m.
- Enough sawdust was put in the pen before each batch of new pigs to last for as long as the pigs were there. Sawdust costs £5 per pig which is high, but the pigs look in great condition. It was a "no slats" way of producing pork.
- Labour was high by western standards.

3d. Japan - continued

The Visits

Mr Kanatsugu Pig Farm

This farm is part of the Fresh One group

Key Points

- His farm is also part of the Fresh One group.
- 110 sows run by father and son partnership with no other employees
- Male pigs castrated.
- Stock from Farm Tec breeding company for gilts
- National Breeding Company again for Duroc boars.
- Slurry system cost £115,000 eight years ago and costs £500 per month in electric, a big cost burden.
- Dows were again kept in crates. They were in good condition but perhaps had too much cover. The born alives were lower than the previous farm at 11 per sow

Feeding Herd Management

- I had never seen this system before.
- At weaning the sows were taken from the farrowing crates and the piglets left for a couple of days. This is a low stress way of weaning. For the rest of the growing period the young pigs stayed in these groups, so pigs never mixed. This is great in theory but you have big differences between the litters from sows and gilts, so building usage is inefficient. Cost per pig place was £670, so it was expensive to keep space empty.
- Buildings were not insulated and had drip feed water systems to keep sows cool in summer when temperatures can average 33-34oC.
- Sawdust was used as bedding. It is in plentiful supply

Below - Duroc breeding boar



3d. Japan -continued

The Visits

Mr Ishikawa Farm Shop Restaurant

This was a farm shop with a restaurant close by

Key Points

- 60% of the pork produced is branded as "Brio", his brand.
- He was selling 12,500 pigs a year so 5,000 went the normal route to market and 7,500 went as his brand - most as pigs to supermarkets to be butchered in store.
- Interestingly adjacent to the shop was a greenhouse style building that he rented out for cheap BBQ nights. Customers cooked the food themselves and he served them alcohol. He could accommodate up to 100 people in his shed. *Is this something I could do?*

From these farm visits I got the idea for:

Recommendation 4

Create a brand with other farmers.

Work together to promote it and use this to connect with the consumer.

The farmers from Fresh One have achieved a higher price for their pork by working with each other creating a brand and marketing it successfully via their farm shop, and by delivering Fresh One pig carcasses straight into supermarkets.

3d. Japan - continued

The Visit - my final visit in Japan

Chubo Shirvo Research Farm

This is in a mountain location 600m above sea level

Key Points

- There are 40 dairy cows, 20 beef cattle and 120 sows plus progeny to finish
- Male pigs were castrated, the norm in Japan
- Seven groups of sows on three week batch farrowing system
- Creep is fed from 7 days.
- Stock was sourced from PIC for boars, and Kaya Farms for the sows.

There were two trials ongoing.

1. Appraising the effect of reducing the protein in finisher diets without compromising growth. 17% crude protein inclusion seemed to be working best at the moment.
2. Feeding more fishmeal in the finisher ration to increase the amount of Omega Three in the meat. This has been linked to better health. The test involved cooking some Omega Three enriched pork and comparing it for taste against the control. This we did at the last meal that was cooked for me.

Because of the remote mountain location wild boars often came right into the farm. I saw that they had rooted in the ground near to the office block. Chubo Shiryo seemed quite calm about this. Personally I would not be so sanguine. The building housing the pigs was not that secure. Disease spread could easily happen.

I wrote this piece in March 2010. In May there was a Foot & Mouth outbreak in Japan. All of Fresh One's pigs were culled in an attempt to stop the disease from spreading. Fresh One started to restock in September 2010.



Mr Kanatsugu (see page 20) with the hat and Mr Morimoto from Chubo Shiryo

3e. Holland

The Visit

Martin Roojackers Farm in South Holland.

Key Points

- 750 sow herd with a large dynamic group system for the sows.
- With funding help from the Dutch pig industry (approximately £36,000) he had built viewing galleries looking into the farrowing crates, dry sow accommodation and finishing buildings.
- The dry sow accommodation is a large clear span shed with over 500 sows. Each has an ear transponder so that the animal can be fed through electronic sow feeders.
- Similarly they can be sorted and monitored via these transponders
- The lying areas are never cleaned out but the central passage is cleaned out daily.
- Gilts are also housed in the shed but in a separate pen. When they are used to the system they are mixed in with the main group.
- The finishing shed has just been completed and cost 1,000,000 euros for 3,200 pig places.
- The pigs were in groups of 400.
- They are weighed automatically through a weigh crate as they feed. When they reach 97 kgs they are drafted into another part of the building ready for the abattoir lorry.
- The building also had a state of the art air cleaning system.
- I walked round the building on a hot day and the smell was non-existent
- Due to the success of the viewing areas in other parts of his building Martin built one in the apex of the roof. One can look down on one out of 400 finishing pigs on a part slatted unit.
- The viewing room contains information on the Dutch pig industry and a visitor book which was full of positive comments.
- The detail in the piggery was staggering even down to an electronic people counter which had recorded 20,000 visits in the last 12 months.



Martin RooJackers Dry sow house and viewing gallery which receives 20000 visitors a year

Recommendation

UK farmers should work together and invest in a network of similar viewing galleries across the country this could reap great rewards in raising consumers' awareness about modern farming practices. The galleries were double glazed, so no disease risks were created. Neither did they interfere with the normal day to day running of the farm.

4. Conclusions

1. Big Business has recognised that getting closer to the consumer improves the bottom line and is desperate to do it. UK Agriculture must do the same.
2. UK Agriculture has a great story to tell but does not tell it.
3. Connecting to the consumer does not have to be too onerous on individual farmers if they co-operate with others in the same production sector to provide visitor facilities.

John Alvis, NSch, President of the Royal Association of Dairy Farmers, said in a recent speech at the ROAD TO SUCCESS DAIRY CONFERENCE:

"Farming must present a more positive image and the industry needs to get closer to the consumer. We have the highest standards of animal welfare in the world".

5. How My Business Will Change After Nuffield

My staff coped very well in my absence, which will give me the opportunity to stay away from the day to day running of my business and concentrate on long term planning.

I am very keen to open up viewing galleries at Kenniford. We have buildings that would lend themselves very well to viewing points that would not interfere with the day to day running of the farm.

When in Chicago I saw a restaurant called The Purple Pig with the tag line:

"Cheese, Swine and Dine"

I am hoping to start up a farm walk and meal experience as we now have some award winning vineyards in neighbouring fields called:

"Swine, Wine and Dine"

6. Acknowledgements and Thanks

I must thank my wife Liz for looking after things so well when I was travelling, the farm and catering staff for keeping the businesses running, John Oldacre for providing the scholarship and John Stones and Anne Beckett from the Nuffield organisation for helping with my reports and finally my fellow scholars for providing such great company and inspiration.

Andrew Freemantle

Kenniford Farm
Clyst St Mary
Exeter
Devon
EX5 1AQ

Email : sales @kennifordfarm.com

Tel : 01392 875 938

Mobile : 07974 652460