



**A Nuffield Farming Scholarships Trust
Report**

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**South of England
Agricultural Society**



**Building financial resilience
in free range egg production**

Douglas Wanstall

November 2016

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NUFFIELD FARMING SCHOLARSHIPS TRUST (UK)

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A Nuffield (UK) Farming Scholarships Trust Report



Date of report: November 2016

*"Leading positive change in agriculture.
Inspiring passion and potential in people."*

Title Building financial resilience in free range egg production

Scholar Douglas Wanstall

Sponsor South of England Agricultural Society

Objectives of Study Tour My main objectives were to explore the steps an egg or - in most cases - any farmer can take to build greater financial resilience in their business and to help even out the effects of volatility. I start by talking to economists about the main issues within the industry home and abroad.
My aim is not to be prescriptive but to come up with a range of ideas and suggestions that anyone can apply to their business.

Countries Visited

UK	Germany
France	Austria
Holland	Belgium
Australia	New Zealand
Indonesia	USA

Messages

- Every farm business can improve their physical performance by greater attention to detail, staff incentives and training, and creating a culture of continual improvement.
- There are things that government can do to help, but it should not be in the form of direct subsidies, should not be relied upon, and producers should do all they can to build a business that reduces reliance on support.
- Every farm should investigate ways to increase product value or at least create greater certainty, reduce cost of production and, if it is not possible to integrate your own business, consider working with others and strengthen relationships with suppliers.

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DISCLAIMER

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

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Nuffield Farming Scholars are available to speak to NFU Branches, Agricultural Discussion Groups and similar organisations

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1. Personal introduction

My name is Doug Wanstall. I am a fourth generation farmer based near Ashford in Kent, married to Steph and we have two children, Alex and Issy. My main hobbies are shooting and coaching junior rugby and I have taken my son's team from under 7's through to under 17's. At the time of writing I was still playing the odd game myself but it's only a matter of time before I have to stop!

As a family we run a few different businesses, as well as the farming enterprise that I manage with my father and uncle. We operate 3 wedding venues and a cookery school, and I am a director and shareholder of a food wholesaling business. I spend most of my time, however, on the farming enterprise which consists of 1100 acres of arable and a free range egg operation with some 170,000 laying birds spread across a number of counties!! Within that enterprise we also rear our own birds and make much of our own feed from grain grown on the farm.



Figure 1: The author, Doug Wanstall

After school I worked a year on a neighbouring farm before heading off to Shuttleworth Agricultural College in 1989. After 3 years I came out with a farm management qualification.

I came home and after another 3 years or so larking about I set to work. We became a LEAF demo farm and worked hard to promote its messages not just to visitors but throughout our entire farming business. We were rewarded by winning the Kent Business Awards Environment category and by having some very high profile visitors including Friends of the Earth, the global CEO of Walmart and HRH the Prince of Wales.

In 2003 I was lucky enough to win a fully funded place on the Worshipful Company of Farmers Advanced Management Course having won a competition run by the Farmers Weekly magazine.

In 2008 I won the Farmers Weekly award for the best local food business, a great honour, and we won it for our work in providing local food to local businesses.

I have had a thoroughly interesting working life, always having a strong desire to break from the norm. Mostly it has worked but I have had one spectacular failure too, something that hurt both financially, emotionally and depleted my 'Trust Capital', but it taught me a valuable lesson. I have always been good at coming up with plans and ideas but the execution of those ideas sometimes let me down. So now I do my best to surround myself with the best advisors, partners and staff and work closely with them to ensure we all develop together.

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2. Some Definitions

I felt I needed at the very beginning of my report to explain a few definitions as I have used them in my project.

Adequate Profits

I define Adequate Profit as a fair return on capital employed. I am not prepared to put a figure on what that looks like as every business is different, but I suggest each business sets itself a target to aim for.

Whilst attaining the profit margin the business owner should achieve a fair reward for their time. This in itself can be hard to define. I visited one farming family who had employed a consultant to come in and assess the roles, responsibilities and then the value of each family member's contributions to the business. What they found was that the one leading the operation was overpaid while others in the business were being undervalued. What producers should ask themselves is '*what would I like to earn*' and then determine if that is possible with the business as it is.

Resilience

The dictionary definition is: the capacity to recover from difficulties. In the context I use it, it is the ability of a farm business to survive long periods of low prices, low returns, and dealing with prolonged periods of poor weather that affect farm performance. My aim is to display some of the ways any business can become more financially resilient; not just survive in agriculture but thrive in agriculture.

Integrated businesses

Integrated businesses are ones that add layers of operation that capture additional margin in the value chain. For my own business, our principal operation is producing free range eggs but we have added rearing our own pullets, making our own feed and running our own maintenance and shed cleaning team, all of which add (or at least should do!) margin that contributes to the bottom line of the business.

Probity

The quality of having strong moral principles: honesty and fairness.

Sustainability

A word I attempt never to use as it's old hat, been hijacked by everyone in every context, and denotes staying the same and not improving, developing and enhancing.

So, against that background, I will Set the Scene



3. Setting the scene

Financial resilience is of course an outcome of many different elements of running a business which I attempt to describe from now on in my report. There is so much to it and I don't really touch on soil and water protection and enhancement nor how a resilient business might improve the environment. I take it that a truly resilient business will be ensuring those things are happening within their business. There are many other Nuffield Farming Scholars who have gone into many of those aspects in far greater detail than I could here.

I took the decision to start my travels by setting the scene: does free-range production have a place in a world where the demand for food continues to grow as the global population heads towards 9 billion people?

The answer at present is simple: all the time there is demand, our job as producers is to satisfy that demand. It is not ours as individual operators to decide on the future of global food production. It is, however, our role to respond to market signals and adapt our production to those signals. I interviewed three prominent economists on this subject and on the future of agriculture, all of whom firmly supported producing to markets and that the most adaptive and dynamic business will survive any shocks and the very best will thrive. I summarise our meetings below.

*"It's not the strongest of the species, nor the most intelligent that will survive
but the one most adaptive to change"*

Charles Darwin

3a. Sean Rickard

Sean Rickard is an economist, now independent and of some considerable repute. He has a reputation within farming circles for being a little controversial at times but that is mainly because he speaks his mind and farmers often don't like to hear the truth! I had the privilege of chairing the day that Sean came to the Worshipful Company of Farmers management training course in 2003. He had upset the first member of the course by midway through breakfast!

I found his arguments then - as I do now - thoroughly compelling and the industry would be foolish to ignore his messages.

Sean's key message when I had an in-depth discussion with him during my study tour was that if we are to feed an ever-growing and ever more affluent population we need to grow 70-100% more food than we do now. He did not subscribe to the often-quoted number that 30% of all food is wasted; some undoubtedly is but much of that waste gets fed to animals, energy plants or returned to the soil as fertiliser, so is it really waste?

The food we will need to produce will best be provided by the most efficient producers, not necessarily the biggest, who will make profit to be used first for reinvestment and then to invest in environmental enhancement. Profit is the reward for taking risk. We will need to produce food with the same, or even less - resources and not increase the levels of seed, fertilisers and sprays used. The largest

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productivity gains will come from the very best producers using the latest technology including bio tech. Sean said that a second green revolution is required.

Sean argued strongly that, politically, farming should come under the Department of Business Development and Strategy, and not be subsidised at all. Why treat farming any differently? The removal of subsidies would strengthen the industry's argument with wider society. He recommended that groups of like-minded farmers should group together to swap and share ideas and where possible work together to drive efficiency, and make investments with an aim to drive profits.

We then talked about my business and my intentions to drive growth and further integration. Sean made it clear that before any business integrates, the management needs to be clear that they have achieved good efficiencies within the core business and are confident that any integration will not dilute the management to a point that it affects the core operation. Scale however allows the employment of experts. Farmers don't need to be big; they do need, however, to be open minded, work collaboratively and be efficient.

The removal of subsidies would strengthen the industry's argument with wider society.

Sean's vision for the world of agriculture is a subsidy-free, highly efficient industry, that uses the best technology and drives profits. Those profitable farmers will continue to drive efficiency, be able to invest in their businesses and be better able to invest in and protect the environment and the countryside that EVERYONE has a right to enjoy. It's hard to argue with him!

3b. Nan Dirk Mulder, Rabobank

I met Nan in his office in Utrecht, Holland. Nan is the global head of analysis for the poultry industry for Rabobank. I was keen to meet him to get a global view of the egg industry and to decide where to travel.

Nan started by telling me that Rabobank sees the UK as an opportunity but was only interested in investing in businesses with a value of over £200m. I took a deep breath and said I hoped to see him again in a few years' time!

The U.K. egg industry has no powdered egg production and thus has to import all powdered egg products.

The global egg market is likely to continue to rise due to a number of factors, but predominantly the health benefits of eggs are now well understood and it is most often the entry level protein for families with increasing incomes as they rise out of poverty, as eggs are relatively cheap when compared to other forms of animal-derived protein.

The Chinese are keen for food that can be traced and trusted as they are sceptical of their own industry due to scares such as the melamine-in-milk controversy. They are willing to pay a premium for products that can be trusted, but not yet for high welfare. There is however a small movement within the burgeoning middle classes towards higher welfare standards of food. At the same time, Chinese



labour rates have gone up 2.5 times in 5 years and so are slowly losing their competitive edge: coupled with the current weak pound, is that an opportunity for the UK?

There are massive highly integrated businesses in Asia that are investing heavily to match increasing demand.

3c. Peter Van Horne

I met Peter at Wageningen University. He is a senior economist at the LEI institute there. Peter is widely recognised as Europe's leading poultry economist and he focuses on research projects for government and industry. He has a particular leaning towards the economics of animal welfare, health, environmental protection and international competition.

In our discussion Peter echoed much that Nan Dirk Mulder and Sean Rickard had said, but he added probably one of the most pertinent points that gave me focus and direction for my study:

I myself always knew that our cost of production in the UK was higher than in other areas of the world but Peter had found in his research that, due to the controls we have in the UK from DEFRA, the Lion and RSPCA regulations, the UK's cost of production is some 15% higher than in mainland Europe. I managed to back this fact up whilst in Holland when I discovered that the average price for Dutch free-range egg was considerably lower than ours but they were still making solid returns and investing in their production systems.

Peter then went on to discuss the global powder market. Rather like milk powder, egg powder is a globally traded commodity where, crudely, the lowest cost producer wins the business. Often, egg powder is produced in greater quantities when shell egg production is in oversupply, as it takes up less space and can be stored for long periods of time. The UK does not have any powder plants, due to its uncompetitive costs, yet it imports over 6,000 tonnes of egg powder and over 55,000 tonnes of liquid egg per year.

In this report, to describe the challenge that exists to build a resilient business, I use the analogy of the triathlete striving for victory, who has to be good at all disciplines in order to win the race. There is little point being a great swimmer and cyclist if you can never complete the run in a competitive time.

I have split the goal of building business resilience into three main categories and these make up the main chapters of my report, with case studies and examples of good practice taken from my travels around the world. These categories are:

- **Productivity and Skill:** how can producers get better at what they do?
- **Legislation, Compliance and Statute:** how do the things we have little influence over affect our businesses and how can we mitigate and manage to the best of our ability?
- **Cost of Inputs, Value of Outputs:** how producers can influence that cost and value.



4. The cycle ride

I chose to call this first chapter “The Cycle Ride” as it’s the fastest stage of a triathlon race; you cover lots of miles. Every single thing in this section any farmer can start at any time and begin building resilience in their business.

In this chapter I am going to outline the reasons why high productivity levels, skill and probity can help a business not just survive but thrive. I shall not explore the minutiae of every detail of how an egg producer can get better at what they do, that would take a whole project in itself. But this is the area where each producer and business has the most control and can make the most difference to their future in agriculture. I include a few case studies of some of the best examples I have seen on my travels.

4a. Productivity

Something I picked up from Luke Johnson, a prominent investor and Sunday Times columnist, is that It's a cast iron rule of business that returns in a sector regress to the average. The more a sector enjoys exceptional returns the more entrants will establish. This has the effect of competing away these exceptional returns. The free range egg industry is a prime example of this. For years we enjoyed strong returns as a result of huge market demand not keeping up with production. A farm with average or even poor physical performance could still make money.

It's a cast iron rule of business that returns in a sector regress to the average.

Due to the many new entrants taking the market into over-supply the effect has been to reduce the returns to all producers. Now only the best and with the lowest cost of production will make good returns. One can rest assured that if a market continues to exist then the most efficient and lowest cost producers will always survive; these producers are by the very definition, resilient. The question that farmers now need to ask themselves is: ‘Am I in the top 25% of producers’; if not, then: ‘How am I going to get there?’

The first thing any farmer needs to do, no matter what sector they may be in, is to understand in detail their physical and financial performance. A farm can perform well physically but if you don't know your financial performance until the year end when the accounts are finalised, you will not know at what cost each dozen of eggs is produced for. It is important to set budgets and key performance indicators (KPIs). KPIs can be as simple as numbers of eggs produced against income per week, average feed cost, labour, utility costs per bird. There are a number of sources of information - from as basic as the John Nix pocketbook, a useful booklet that is updated and released each year; the NFU poultry costings; to the more detailed BFREPA egg costings that are published each month in the Ranger magazine. Whichever you use, any of these will be a good start point that will allow producers to judge themselves against the industry average. Farms can then update their own KPIs as their performance improves.



If this seems a little daunting there are plenty of consultants who will develop systems for producers and, as long as businesses have a decent accounts package and it is used to its potential, any consultant worth their salt can put together a set of KPIs and monitor them each month for little cost. Not only will this help the producer to assess their business better and make informed decisions, it will also give banks more confidence that the business is well managed.

It doesn't matter what sector a producer is in, it is important to set targets to suit the individual business. These targets might be the ones I have described for an egg producer, or an extra 100kg of meat produced off grass for a beef or sheep producer, or the organic content of your soil for - well let's be honest - everyone!!

The important thing after the numbers are produced is to respond to the information. Don't just pat yourself on the back after seeing a couple of successes, work hard on improving the weaknesses.

In New Zealand I met Sophie Stanley of Figured, a relatively new company established to help producers improve the financial reporting and flow of information between farmers and their consultants, accountants and bank managers. (<https://www.figured.com/farmers/>). Although Figured is starting with the main dairy, sheep and cropping sectors in New Zealand it could easily work for egg farmers. Such has been its impact in New Zealand that one bank bought 500 licences to give away to its farmer customers to help them improve their financial reporting function.

The system produces live benchmarking information and helps its users raise questions about their business. This type of quality information was adding significant value to its users and enabling better business outcomes.

Key message re Productivity:
produce accurate numbers, benchmark and respond to weakness

In my own business, careful records, benchmarked against ideal results for the type of system, are prepared for me by Doug Jackson of Savills Food and Farming. These figures are of course broken down into considerable detail and pinpoint where the vital differences have occurred, but shown below are the key numbers relating to two different flocks:

Item	Benchmark per bird	House 1	Difference	House 2	Difference
Eggs per bird, dozens	25.00	29.76	4.76	28.64	3.64
Feed av. cost/tonne	205.40	227.66	22.26	213.40	8.00
Total sales per bird	24.08	28.27	4.19	28.90	4.82
Total costs per bird	19.00	20.75	-1.75	26.55	-7.56
Margin per bird	5.08	7.52	2.44	2.35	-2.73

House 2 made a MUCH SMALLER MARGIN compared to House 1, even though income in each case was above expectation. This was due to the fact there was a fire in House 2 at the onset of lay, pushing costs up astronomically. Detailed costings like these enable me to keep a tight handle on my egg production operation.

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4b. Skill of management, attention to detail

Most farmers will have a fair degree of skill in many areas of their business, but all farmers will have a weakness or two. The problem is identifying that weakness, admitting it and working out what to do about it! Another issue is that many farms are too small to employ managers who can help. But no need to despair as there is help out there. Many poultry service companies will have highly qualified reps who can help improve areas of poor production for free. At the very least each business owner should be challenging areas of weakness and asking themselves 'Why'?

Attention to detail and spending time within farm businesses is essential. It doesn't matter what farm enterprise one may have, as farmers we are dealing with living plants and animals that are to a large degree subject to the changing climatic conditions. On my travels I spent a lot of time looking at how businesses and other organisations managed themselves, controlled costs and ensured excellent performance. In short, how the skill of obtaining marginal gains can improve a business.

One thing that farmers cannot control is the weather. What one *can* do is plan for when it goes bad. I heard a great and very simple example of this in Australia.

Michael Craig, a fellow Nuffield Farming Scholar, is a meat producer in South Australia. Michael had a policy of always having 2 years of forage in store and always did his best to maintain it. This meant that in drought years he had plenty of forage for his animals meaning he did not have to sell or cull stock. Obviously in longer periods of drought this would only work for a couple of years but it's better than nothing.

Abdul Dean the One-cent man. I met Abdul at Zeagold Foods in Auckland. He showed me round the packing and distribution operation. He was quite a character and clearly very driven. Known as the One Cent Man he strived to find a saving each day that would take at least one cent of cost from a box of eggs. When a number of savings were made he would give a bonus to all the staff, ensuring they reaped the benefits as well as the company.

Getting away from farming I was very lucky to go into the Williams F1 factory in rural Oxfordshire: not my most exotic trip but certainly one of the most fun! Not only did I get to meet the two drivers Bottas and Massa but also I got to look round the most high tech production facility I have ever seen. The level of attention to detail was incredible. I saw them, in pursuit of perfection, make intricate parts from whole blocks of aluminium. The engineers were looking for anything that would give them a tenth or even a hundredth of a second advantage over their competitors. Of course you cannot compare this with agriculture but we can all challenge ourselves to do better each day. For me it's all part of the fun of being in business.

Sadly I ran out of time to meet Dave Brailsford from Team Sky cycling. Brailsford has taken the pursuit of perfection to another level and one that it is possibly easier to relate to than a Formula 1 team. His search for marginal gain has taken both the Sky and, previously, the British cycling team to levels of performance not



Figure 2: At the Williams F1 factory with drivers Bottas and Massa, taking a selfie

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seen before. (https://en.wikipedia.org/wiki/Dave_Brailsford). His ethos is to find very small improvements in many different areas of the sport - reducing the weight of the bikes, improving power-to-weight ratios of the cyclists, reducing drag on clothing - all adds up to a few more tenths of a second advantage that your competitors do not have (not yet at least). The pursuit of perfection never stops but perfection is never achievable and so the pursuit continues.

Imagine what two extra saleable eggs per bird; small gains in food conversion; the health effect from better vaccine performance; cutting an hour a day of labour through efficiency gains (not at the expense of the hens), could do to individual flock performance? These are all things that to a large extent are in the producer's control.

Japanese company management often practice a set of Principles known as Kaizen. Kaizen is the philosophy of continuous improvement; some interpret it as lean management. I didn't have the time to go to Japan to meet any practitioners. Once my Nuffield Farming study tour is over I intend to meet some practitioners in the UK. The Nissan car plant in Sunderland is managed under this highly developed business philosophy, part of the reason it is one of the most efficient plants in the world. Rather like the Williams team and Team Sky, they never stop striving for perfection but of course the quest for perfection never ends.



Figure 3: The cycle of Continuous Improvement.
Picture courtesy of Quotesgram.com

Some of the best free range egg farms I saw were in Holland, mostly family run (which helps of course); they were all beautifully tidy, anything that needed doing was done and I saw birds of all ages looking well feathered and content. Frankly they needed to be at the top of their game as the egg price was low and if they didn't get top production they would lose money quickly. That said I am confident they would run their farms well whatever the price of eggs.

The New Zealand farms I saw were also well run; their free range industry is small and they have the added advantage of no Newcastle disease, ILT, salmonella, E or T and little in the way of Infectious Bronchitis or poultry redmite – although sadly one would assume the latter will increase over time.

Interestingly, the free range egg industry in New Zealand is copying the UK RSPCA's Assured and Lion standards as they feel that is where the NZ industry is headed.

**Key messages re Skill of Management, Attention to Detail:
never stop trying to manage your business better,
look for small gains in every department**



4c. People

Many agricultural businesses are wholly reliant on outside labour to function. All the best businesses I have visited paid a great deal of attention to this and view staffing as their largest input and their largest asset. Unskilled, poorly trained and poorly managed labour can drag a business down and become the biggest liability.

With a few exceptions staff are as good as the manager they report to, and as good as they have been trained to be. It is often less that the person in question is weak, but more that management has failed to communicate and train them effectively. There are of course exceptions!

It is important to build a positive culture within any operation that employees understand and are proud to be a part of.

*With a few exceptions
staff are as good as the
manager they report to,
and as good as they have
been trained to be.*

Abdul, the One Cent man (see chapter 4a) is one of the best examples I have seen of a line manager who had the respect of his team and who motivated them well, but that in turn is testament to the management team above Abdul who have allowed him to incentivise his team to get the best results.

During my visit to New Zealand I was fascinated by the model for managing dairy farms and the way that staff can start and work their way up from milking cows to owning cows.

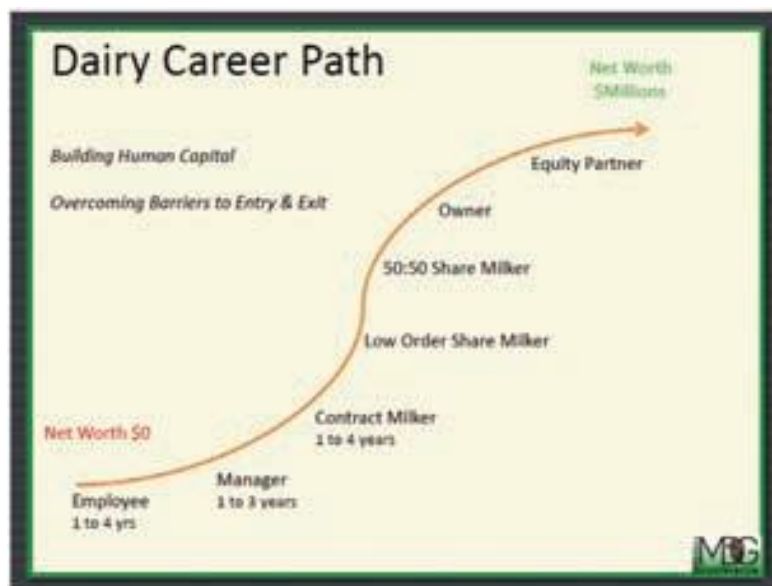


Figure 4: I found this excellent chart on a farm in New Zealand and took the photo - but unfortunately cannot attribute the source

The chart above shows the potential progression of an employee who shows potential and enthusiasm. At each stage their income, responsibility and risk/reward/equity increase as they progress. The system relies on farm owners changing their mentality and being prepared to share the risk and reward; and farm workers, if they are to progress, to work hard, to save and reinvest in the system.



I met a couple of people who had started off as employees or lower order share milkers, who had now progressed to owning their own cows and farms, and were now employing lower order share milkers themselves to allow them to expand their business. In the words of one farmer I interviewed *'they do the work and I use my brains.'* A brain he clearly used well having built up a good deal of equity from very modest beginnings. Despite the severe drop in dairy returns he remained solvent and optimistic. Will this model work in the UK and in the egg industry? I think so!

Brexit remains a threat to the labour supply for UK industry, but I strongly believe that the free flow of labour will continue, maybe with more control, possibly managed by employers, rather like we manage PAYE now. I feel the biggest threat however is from the UK government who have introduced the living wage which will go up in the range of £9-£10 per hour by 2020. That however, assuming Europe doesn't do the same, will attract as much labour as we require in the UK. What the government does not do, however, when implementing the living wage, is tell producers how to pass the cost on, or retrieve it. We have to work that out for ourselves.

Robots are being used more widely across industry now. The more labour costs go up and the more unreliable labour becomes, the more robots will be used. A visit to the Franklin Institute in Philadelphia confirmed to me use of robots will develop a lot further yet.

In the US I met an egg producer called Mike Puglisi who had experienced problems with getting staff at certain times of the year. To combat this he has installed robots to stack large boxes and to put egg cartons into boxes; overall he had saved 5-6 people. Next in line was a robot to move pallets of product around.



Figure 5: a good use of technology to reduce paid labour
seen at Mike Puglisi's farm in Delaware

Key message re People:
don't stop learning, develop your own skills as well as your staff's
and communicate effectively.
'Recruit, train and retain'



4d. Probity

'Make your business useful'. Guy Watson, founder, Riverford Organics

Probity can help build strength and resilience in a business. Always do the right thing and be truthful, be useful to others and build 'Trust Capital' that many, but not maybe all, people will remember. People will help someone who has done the right thing in the past - my own personal experience is testament to this.

In the egg industry there are too many examples of producers who, as soon as they have a problem with production, quickly blame the pullet or feed supplier without first looking at themselves. Modern birds are programmed and, as long as you get good body weights, vaccinate as appropriate, buy food from reputable sources and manage the birds well, they will produce the number of eggs the breeder says they will. It's all too often the management on the laying farm that lets the bird down.

I have sat in on meetings before where suppliers have commented about producers as a whole and how they are fed up with being blamed for everything that goes wrong.

On the sales side we also never seem to be able to improve the relationship between the multiple retailers and us as primary producers. If anything, the relationship becomes sourer as every year passes.

Throughout my travels I have seen varying levels of relationship: some true partnerships where the final margin is shared and others that seem to be almost as fractious as the UK's own; some countries where brands are positively encouraged and some where they are avoided by the retailers like the plague.

I can offer a good insight into the big retailers' approach to brands. Several years ago we ourselves had a visit from Lee Scott, the then Global CEO of Walmart. It was to see how the local food supply chain is developing in the UK. I showed him round the farm and then we sat down and had a good discussion.

One thing that sticks in my mind is what he told me about brand strength. A few years ago Walmart were negotiating with the manufacturers of Tide washing powder in the States. Tide were not playing ball and so Walmart de-listed them from all stores. Within a short space of time sales of washing powders in general started to drop quickly from the stores and it was because the consumers wanted Tide. Very soon Tide was back on the shelves after Walmart swallowed their pride and came back to the negotiating table. No doubt with a better deal.

One thing that sticks in my mind is what he told me about brand strength

brands have power as long as they have connected with the consumer.

What this tells us is that brands have power as long as they have connected with the consumer.

Supermarkets abuse their power in the UK and, through their current price war, all producers and manufacturers are suffering. This has to change and the Grocery Adjudicator needs more strength to deal with it.



In Australia the same problem is beginning to appear, in large part due to many UK retail buyers moving to Australia and introducing their UK practices. In the words of one producer 'You can take them back with you'.

In Australia, however, although producers were as reticent as UK producers to come forward to give evidence, the Australian government subpoenaed them to appear in court to expose the practices.

Everywhere I have been, with maybe the exception of Indonesia, there is a stronger understanding of all links in the supply chain by producers there than by their counterparts in the UK. Regular visits to pullet growers, packers and feed suppliers mean that one understands more about each other's business, the challenges and threats. It's wrong to say you are too busy to visit pullets in rear and then complain when they are not performing as you would like.

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the UK*

I firmly believe there needs to be a stronger bond in the supply chain with supply contracts that state the terms and expectations of both parties. The alternative for producers is to produce their own pullets and feed, something that is just not possible for most.

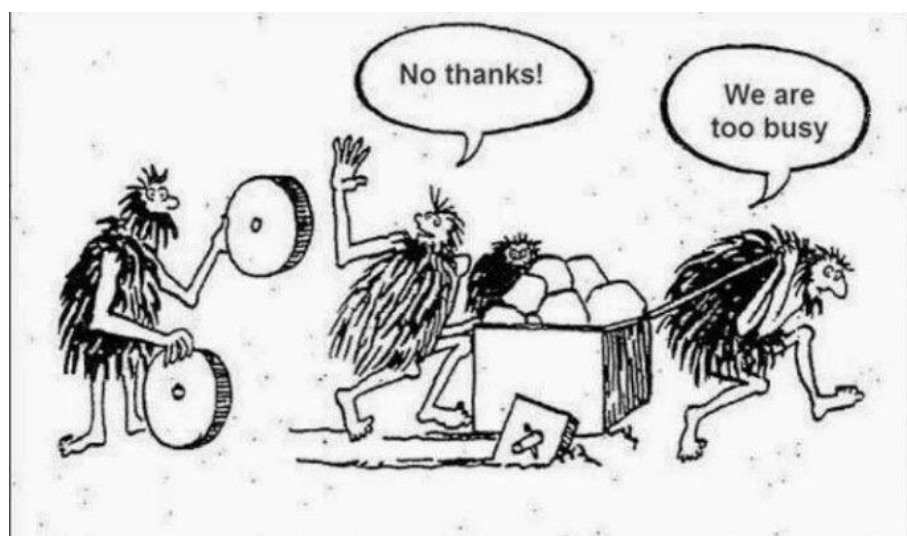


Figure 6: Being too busy is never an excuse to avoid becoming more efficient
(Source: Facebook)



4e. Case studies: be useful to others

Lachie Green

Lachie is a fellow Nuffield Farming Scholar and free range egg producer from Victoria in Australia. Lachie sells free range eggs under his own brand to independent stores and high end restaurants and hotels in Melbourne. His business had been in operation for a couple of generations and had built up a good reputation as well as cash reserves.

Last year one of his restaurant customers reported an incidence of salmonella; it was traced back to a batch of mayonnaise made on site from raw eggs. Firstly it was proven that the eggs were not handled properly at the restaurant and so although the infection came from the eggs the restaurant was at fault for breaking the chill chain.

*The problem was that the incident hit the press, Lachie's business was hit overnight, losing many customers and, with flocks of chickens still laying eggs, he had a problem. Two things then came to his aid. To begin with, because he had operated with a high level of skill and conducted his business with a degree of financial prudence, Lachie had built up a cash reserve to help him through. Secondly Lachie had built a reputation as a man who could be trusted. He had built **probity** in his operation, which meant his customers flowed back into his business.*

Sauder Eggs

Sauder eggs in Pennsylvania, now run by Mark Sauder, is a large egg marketing company with its own production along with buying the production of other producers to grade and pack for a range of retail and food service customers. Mark is the 4th generation family member at the helm of the company.

During the period in 2015 after the US suffered a serious outbreak of Avian Influenza (AI), the price of eggs ballooned for a time. As a result, farmers mistakenly took that market signal as a sign of good things to come and increased production. One result of the decline in egg supply during the AI outbreak had been that manufacturing companies which used egg products as an ingredient swapped out of eggs for alternatives, thus severely reducing demand at a time when supply was increasing again. This has now led to a massive reduction in market prices that are currently well below the cost of production. Thus Sauders and all their suppliers are losing large sums of money. Mark reported 10 months of severe losses and fully expected that to continue for the best part of another year. (continued on next page).



It was clear from my visit that Mark looked after his suppliers, he paid them the same as he did Sauder's own farms and offered the suppliers a range of contracts to suit their circumstances - including cost-plus contracts that shared the pain and shared the gain. In the time when prices were high some producers left Sauder eggs for what turned out to be short term price increases that were not honoured when egg prices dropped. Mark has since picked up some of those producers, increasing his market share and his chance of better profits when the market turns again.

As soon as I had arrived in New Zealand I noticed a hot farming issue within the press. New-born male calves at the time had no value and farmers had them collected a day or two after birth to be humanely killed. There had been a case where one of these collectors had clearly been defying the rules and had treated calves very badly and had dumped carcasses in open countryside. An animal rights organisation called SAFE had been monitoring the whole industry and this gave them the ammunition they needed to start a huge press campaign. There was a hint of complicity between the farmers and collector involved. Basically, a few poor operators had affected a whole industry, and not doing the right thing affected consumers' confidence in the whole milk industry.

Key message from these case studies re Probity:
be decent, honest and fair, do the right thing,
it can repay you when you need it.
'Be useful to others'



Figure 7: The original Founding Farmers restaurant in Washington DC. (See description on page 23)



5. The swim

Continuing with my triathlon analogy, I chose to describe this section as “The swim”. When one swims, there is more resistance, and you cover the least mileage for the time spent and effort exerted. Sometimes dealing with government feels a little like that.

“Democracy is the worst type of government, except all those other forms that have been tried from time to time.” Winston Churchill

The quote above from Winston Churchill is highly relevant. How many times have you as a farmer blamed government for being useless, not helping, making poor legislation? If you are like me then I would say pretty often. But what would you prefer, a freely elected government or the likes of Putin in Russia who appears to have taken that country from the brink of being an economic super power to the brink of an economic disaster and heading back to the Cold War era? Or maybe the system seen in many middle eastern countries where the elite are fabulously wealthy yet they keep many in poverty and the wealth is in the hands of a very few, with barbaric laws and open discrimination against women and minorities? Democratic government is flawed but is by far the best of a bad bunch.

5a. Legislation, compliance, statute and finance

The biggest problem with democracy is that the political cycle is often too short to get through effective legislation. New governments spend their first year in the job finding out what's going on, two to three years actually doing stuff, and then the final year worrying about getting elected again.

The fact is that, although we need our policy makers to ensure that our country has no disadvantages over other nations and as far as possible trade is carried out on an equal footing, we cannot and should not rely on them for help. The egg industry is subsidised the same way the rest of agriculture is: if you have land then you can claim the Basic Payment Scheme. Fortunately, and due to the intensive nature of poultry production, the industry has not come to rely on it.

Government intervention in markets can be made with the best intentions but often they don't look beyond the original issue they are trying to solve and the law of unintended consequences comes into play. On my trip to Indonesia with the Nuffield Poultry Group we heard a fabulous example of this.

Indonesia is vast and it was possible for them to be self-sufficient in commodities such as rice, beef and chicken. The Government then decided that it wanted Indonesia to be self-sufficient in corn (maize) as well, and so stopped imports of corn to encourage farmers to grow it. Due to the lack of imports, the market reacted, giving a strong signal to farmers to grow corn. The farmers responded so well that some rice production was swapped for corn. This led to a shortage of rice, making the price rocket. Bearing in mind rice is the staple diet of the population this did not go down well. This is a great example of a noble endeavour that was ill conceived and led to unintended consequences.

Indonesia was a fascinating country and it gave me an insight into the global growth potential in food production, its challenges and opportunities. One message that sticks in my mind was delivered when we met Damien Roberts, the UK trade and industry representative in the British embassy. He said that

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being British was regarded as reliably good and that products and services that came from the UK were trusted by economies in the south east Asian region, an area with over 600m people with ever increasing wealth. I also know from my travels that the Chinese and Indians feel the same way about the UK. Can you spot the opportunity?

One of the first things that would help farmers through volatile times is tax averaging over a longer period of time. In some countries farm profits can be averaged for tax purposes over 5 years, allowing businesses to flatten out their cash requirement for tax, rather than having a huge cash demand to pay tax which could coincide with a low profit or high loss year when it came to actually paying it. This was going to be one of my major recommendations for the UK but the government obviously had an insider in my study as the policy has recently been announced!

One very interesting scheme available to agricultural businesses I discovered during my trip to Australia. Australian farmers have a scheme called Farm Management Deposit accounts. I am about to describe it in very basic terms - as is always the case with anything to do with tax there is a huge amount of small print involved. In good years, each farmer plus multiples in partnerships can save up to a total of \$800,000 into their deposit account. Farmers can deposit pre-tax primary production income. That money is held tax-free and interest is paid on that money. Farmers are able to leave it there and draw on it in low-income years at which point the money is taxed. Canny farmers will draw those savings at any time when they don't actually have taxable profits, always attempting to stay below the tax threshold. The only time this will not work is if they have 5 or more years of high profits and they have to draw the money and be taxed, but of course the money is in the deposit account and available, plus producers can top the balance held back up again.

*In the light of Brexit,
never has it been
more important to
have our
government fighting
our corner on trade.*

I see this as a major way to manage high levels of volatility in the UK. Too often, UK farmers will buy a new tractor or build a new poultry shed to avoid tax, using up the spare cash generated in good years.

In the light of Brexit, never has it been more important to have our government fighting our corner on trade. It is essential that they don't sacrifice agriculture to free trade without there being the same levels of welfare and hygiene standards from importing countries.

Of course, the UK is meant to have been in a free trade area since our membership of the EU began in 1973 but there are plenty of examples of how free and fair trade has failed in the EU Economic area: the burning of English lamb, additional French government support for their farmers, higher minimum wages imposed on UK industry, to name just a few.

That said we have had our own examples of unfair trade in the UK too. The Lion scheme is a fabulous example of an industry-led code that has dragged the egg industry in the UK from the mire of the salmonella crisis triggered by Edwina Currie's comments in 1988 stating that "*most of British egg production*" carried salmonella. Her statement had the effect of egg sales plummeting almost overnight and it devastated the industry.



The rules within the Lion and other schemes makes our cost of production higher in the UK than almost anywhere else in the world, making us a target for importers. The only barrier is that would-be importers cannot live up to the Lion Standards as they are written, making it a quasi market-protection tool. Fortunately, and for good reason, our retailers have decided to only sell Lion eggs and thus the system works. It is however highly important that we as producers honour the scheme to the letter and work with our customers to maintain their trust so they continue to sell only Lion eggs.

The only issue with Lion and a point I have already mentioned is that it makes us a high cost producer. At times of excess production, it is difficult to export that excess and so it has a greater effect on egg prices.

I wonder whether the time has come to build more processing capability in the UK, maybe even in powder production, and develop a British, higher value brand that would be trusted in many areas of the world?



Figure 8: Example of US value added egg products. (Author's own photo)

The last two meetings of my Nuffield Farming study tour were with Mike Scuse, the deputy secretary of the United States Department of Agriculture (USDA), and Nathan Bowen, Public Policy Director for the National Association of State Departments of Agriculture.

In each meeting we talked extensively about the industry in general, subsidies to agriculture, and the Transatlantic Trade and Investment Partnership or TTIP. I will relate the gist of our conversations.

TTIP is a free trade agreement that is being negotiated between the US and the European Union (EU). The aim is to allow tariff-free trade and investment between the countries. The US has already



negotiated and started a similar agreement with Mexico and Canada - NAFTA - and in all three of those countries agricultural trade has increased. There are still complications but it is working.

The US has also completed negotiations for a Trans-Pacific agreement (TPP) that was waiting to be ratified by all countries at the time of writing. It involves 12 countries: the US, Japan, Malaysia, Vietnam, Singapore, Brunei, Australia, New Zealand, Canada, Mexico, Chile and Peru. NOT being in a free trade agreement with Japan has cost the US beef industry, as Japan and Australia do have a bi-lateral trade agreement and Australia has taken some of the US beef trade away from the US, which is having to pay heavy tariffs to trade with Japan. To the beginning of November, 2016, the impact on US farmers has been a loss of sales totalling £140m dollars since the start of the bi-lateral agreement between Australia and Japan.

TTIP is in active negotiation now and is likely to be so for a year or two yet. There are some huge areas of contention: the EU's opposition to GM technology and the fact that many agricultural companies in the US would not be able to export their products to the EU; EU geographical identity protection, which would mean that Parmesan and Feta manufactured in the USA would not be allowed to use the original geographical names; and finally that the EU does not consider American soya sustainable.

Certain products will likely be given protection and welfare and health standards will need to be matched as it stands now.

TTIP could and should be good for all parties, but it has a long way to go. Look at the EU trying to negotiate with Canada; that took 9 years and very nearly fell at the final hurdle. The agreement, once negotiations are complete, has got to be ratified by all countries, sent through Congress and, in the US, get past one of the two candidates for president¹. One of these has said he will stop it dead and the other isn't that keen on it, not during an election campaign at least. Secretary Scuse, when pressed if he thought it would happen or not, said that if everyone really **wants** to make a difference, all parties will find a way to make it happen. Nathan Bowen expressed doubt that it would ever be completed as some of the differences were just too great.

From what I have learnt I would express the same opinion as Nathan Bowen. If it does happen however it will take years, and the UK could have left the EU, negotiated its own deal, and be in its own bespoke agreement before the rest of the EU even know what's happened.

Key message re Legislation, Compliance, Statute and Finance:

**don't build your business assuming government will be there to help;
do everything you can to protect your market;
be 100% compliant, 100% of the time**

¹ As of today, 9th November 2016, we of course know who the next President will be
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6. The run

We are now at the final stage of our hypothetical triathlon race, we are nearly there. But be aware that the topics in this chapter can take a little longer to implement.

In this chapter I look at ways that a business can protect the value of their outputs and protect the cost of their inputs. I also examine in some detail the role of integration in farm business and how it can add profit to the bottom line of a business if managed effectively.

5a. Output value protection

Primary output value and volume are the two factors that can most affect the profitability of any business. Volume we can influence; value to a large degree we cannot. Across the world there are many types of tools that have been established to help protect output. Some are very simple, some are effectively gambling and some are highly complex.

In Canada there is a system called Supply Chain Management. This is in effect a market manipulation tool designed to limit production in order to ensure price pressure never comes to fruition. The scheme is also an assurance scheme and ensures quality and welfare standards are upheld. Each year production and consumption levels are looked at and, if eggs are required, then quota is released.

Personally I feel these types of quotas and market protection tools have no place in an era of global trade. The USA has a free trade agreement with Canada – NAFTA - yet Canada has supply chain management in place for dairy and egg production. It is likely that a World Trade Organisation case will be brought against Canada because of it.

What I can tell you, however, is that over dinner with a group of poultry industry leaders in the USA they wished they had such a system at the time due to their current over-production and crippling low prices.

I have mentioned a number of times my dislike for direct farm subsidies; I believe their days are numbered. In my discussions with Secretary Scuse we talked extensively about US farm subsidies and how they are managed.

In the US they have a number of insurance schemes that are all operated by the USDA: Area Risk Coverage, Price Risk Coverage and the Margin Protection Program which relates to dairying.

The interesting thing about the MPP is that it protects the *margin* between average feed costs incurred and average milk price received. It is basically an insurance scheme administered and financed by the USDA, which calculates notional monthly figures for both feed cost and milk income. The MPP does not guarantee a profit, participation by the farmer is voluntary and he chooses the level at which he will receive compensation. Obviously premiums reflect the level chosen. In August, 2016, the USDA paid out \$11m dollars to farmers. The scheme has only been in operation for 3 years and is viewed with suspicion by many farmers who aren't too happy about spending upfront on premiums.



Direct payments to US farmers are deeply unpopular with American voters; this type of margin insurance seems to be a better way, if a government is to intervene to aid volatility. The farmers are more involved in the schemes as they have to buy into them; *they* make the decision on how much risk to take. It also means the cost to finance these schemes goes up and down; in good years, farmers get nothing and the USDA save money. How many times have we seen newspaper headlines in times of high profitability in agriculture, decrying how farms are making record profits AND getting £3 billion per year in subsidies?

New Zealand is a beautiful country; almost every Nuffield Farming Scholar goes there as it also has one of the most vibrant agricultural industries in the world. They have a very small domestic market with only 4m people in a country slightly bigger than the UK. Due to the small population if they are to have an agricultural industry of any scale they need to export. NZ farmers receive no support in the way of subsidies at all. That means one thing: NZ needs to be competitive in global markets.

NZ does have a few things on its side however: it is close to large markets (or at least closer than the UK is) and it has a great climate. Relative to the UK it suffers less interference from government; the agricultural industry represents a large proportion both of the population and of the New Zealand GDP.

New Zealand also has Fonterra.

I was lucky enough to spend the best part of three days with Fonterra and thank you to fellow Scholar Satwant Singh for facilitating it all.

Fonterra was formed in 2001 having been 3 years in gestation. The Productivity Commission of NZ spotted that dairy had the potential to form a large part of the economy and gave Fonterra a mandate to grow. The dairy industry now produces \$20 billion in revenue and represents 7% of the NZ GDP.

While in the UK the government was focused on breaking up the milk monopoly, the NZ government in contrast allowed Fonterra to grow and flourish. Fonterra is not a monopoly as there are alternatives, but it is as good as one, and has built to such a scale that it has a global influence on dairy markets.

The areas that Fonterra gets involved in are too many to describe in this report. I have pages and pages of notes from my 3 days with them and many other Nuffield Farming Scholars have looked into the details more closely. Why I am interested is that through



Figure 9: Even Fonterra's head office building is impressive



cooperation, integrating the value chain, adding value, forming large marketing desks and a buying group, the Fonterra business has grown, delivered an on-average greater return to the producer, and increased the GDP of an entire country.

In the UK we would never be allowed to do it but Fonterra is a magnificent example of what can be done when the shackles of government are removed. The government had the foresight to see that if they encouraged a solid industry to develop, they would end up being repaid in tax dollars, and the farming industry would become a significant contributor to GDP.

It wasn't all roses, however, as at the time of my visit dairy returns were very low and some of Fonterra's farmer members were quite aggressive towards the company due to the reduction of their milk solids returns.

6b. Cost price protection

There are many price protection tools available in the UK, from very simple fixed price or feed tracker contracts for egg sales and year-long fixed feed prices, to buying grain and soya futures to help protect feed costs. What we have never had until quite recently is a system to make our own markets.

The use of any futures products to help even out the effects of volatility on a business can be useful, but proceed with caution as the irony with these products is that they actually rely on volatility to work effectively; if the price doesn't change no one makes or loses anything!

Buying groups can offer an important function for producers both large and small to keep costs low. There are many examples across the UK of buying groups that negotiate large group discounts and the more you use them the better they do. My experience however is that they are not always better on all inputs so keep them honest and check them out to ensure competitiveness from time to time.

**Key message on cost price protection:
cost and value price protection mechanisms can work well
but proceed with caution, start simple on a small scale
until you are confident that you can make it work.**

Layers of integration can act as shock absorbers in times of huge volatility. The more a business controls the less outside influences will affect the business. To take it to its extreme an egg farm could rear its own birds, feed them all from crops grown on its own farm and sell all the eggs at the farm gate. Now this is an unlikely scenario for a commercial farm but there is little that can affect the profit of this hypothetical farm, except the production of the birds being poor and the final farm gate price for the eggs, which of course this farmer has set himself at a competitive retail value.

In New York, by the way, I saw eggs on the shelves selling for \$9.38 per dozen and couldn't resist a photo. (see photo on next page). I decided then that if I could sell 20% of my eggs at the farm gate for



that price I would get rid of 80% of my chickens! Of course this was a very high value, niche and exceptional product but it does show what can be achieved on a small scale.



Figure 10: Eggs in Wholefoods Supermarket Market New York

Being involved in the value chain prior to hatch is unlikely, owning the retail outlets is possible with farm shops, vending machines etc., but it is unlikely that a farmer would sell all his output without some of it being wholesale; at which point the control of the final sale price is, although decided by the farmer, dictated by a competitive market.

Although I said above that it's unlikely that farmers would own their own retail outlets that will sell volume, it is possible. In Indonesia I saw a farming company that had started to build supermarkets.

In the US I visited a great restaurant business called the Founding Farmers, owned by 42,000 farmers in the country. There were only seven restaurants at present but they had ambitious expansion plans. They might not sell much of their own farms' produce through the business but they are involved at the highest level of the value chain and should, if the business is successful, earn the profit generated.

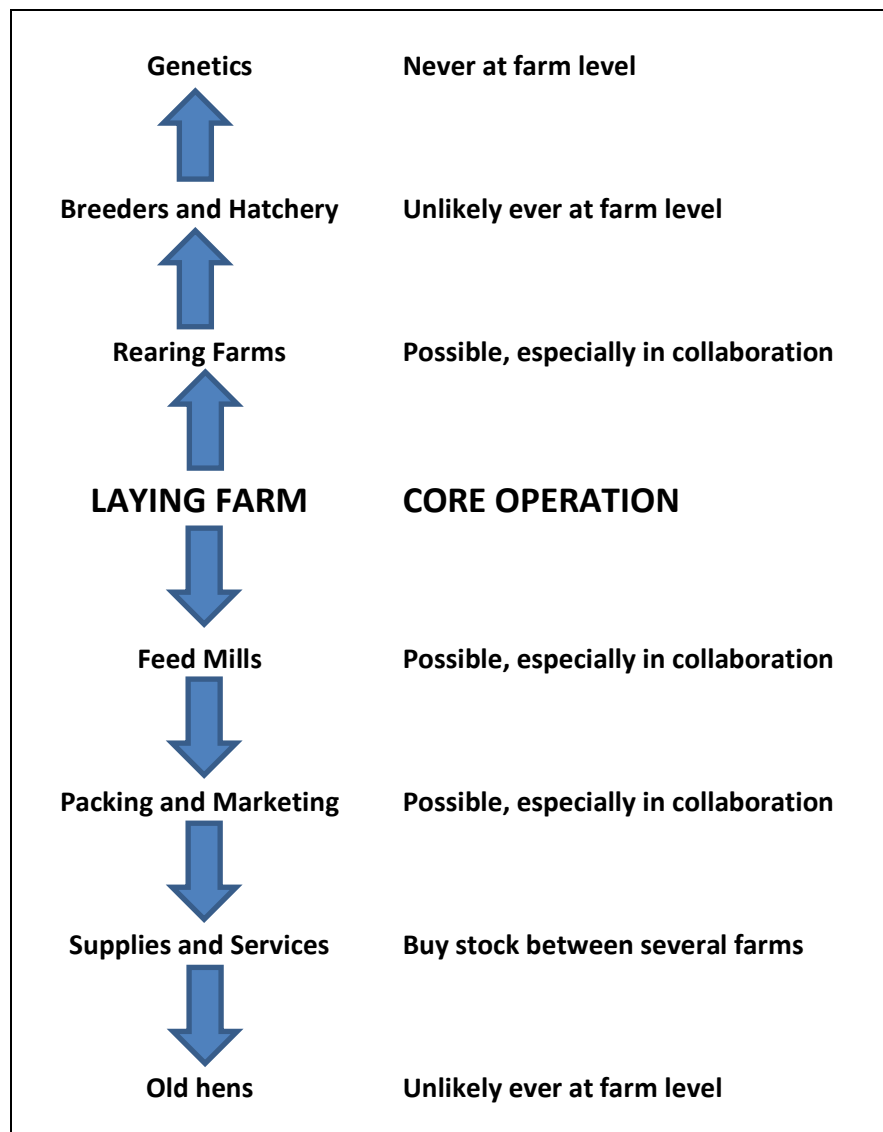
It started when the North Dakota Farmers Union decided to try and improve its brand and raise awareness. They teamed up with a couple of restaurateurs and got started. They refer to their move up the value chain as 'de-cluttering the supply chain'. What they mean by that is they have rid their value chain of all superfluous links that make margin but add little benefit. (see photo on page 15).

I consider the production of eggs as the main enterprise within my business. When I added producing my own pullets I added a level of vertical integration. When I started making my own feed I added another vertical layer. At the same point I used wheat grown on the farm in the feed; this added a horizontal layer of integration as it added value to the arable operation already in existence.



In every business there are dozens of types of suppliers and each type could be considered as a potential layer of integration and a link in the value chain. I attempt to pick out the main links in the free range egg value chain and make comments on each in the table below. (Source: author)

MAIN LINKS IN THE FREE RANGE VALUE CHAIN



In Indonesia I visited a couple of huge, highly integrated poultry businesses. One in particular was fascinating for many reasons.

The Wonokoyo Group was established in 1983 by Mr Wonokoyo Rojokoyo. He spotted an opportunity in the poultry industry and realised that it could be made highly efficient and contribute to the health of an ever-growing population. It made me wonder what he did in his spare time back then as he started his working life as a tailor!

The business had breeding farms with parent stock, hatcheries, growing farms, 1 slaughter house, 2 processing plants and feed mills producing over 700,000 tonnes per year of poultry and fish food.

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We were lucky to visit a feed mill and the slaughter house and processing. This was a business that had come from nothing and through good management, dynamism and controlling almost all of the value chain, managed to grow on an almost unrivalled trajectory. The management were tasked with persistent improvement in quality and efficiency.

Mr Rojokoyo made sure that these core values were instilled into his entire team from top to bottom:

Honesty, discipline, responsibility, timeliness, spirit, leadership and progress

We also visited another Thai-owned company called Charoen Pokphanol. This is one of the truly global leaders in poultry production. I won't go into too much detail, aside to say they had seen similar growth curves to Mr Rojokoyo. The only step they had taken further was the addition of owning their own supermarkets - truly in control of the entire value chain. Both companies cited total integration as their goal and it was integration that had enabled such strong growth.

In New Zealand I visited a number of facilities owned by Zeagold foods: from farms, to grading, to further processing and marketing. Everything was very well run and they had dynamic managers and staff in all departments. One thing that stood out was how they were marketing their eggs. On the face of it, they were doing what we are here in the UK, but they were doing two things that are not common in the UK. Firstly they had a better relationship with their retail customers. Both parties were intent on maximising the margin and, rather than a cost-plus model, they were working on retail-minus, i.e. working out the price a consumer would pay for a brand and then setting the retail price accordingly. Zeagold then went a stage further and had a team of 52 merchandisers across the country ensuring that shelves were stocked properly, and who were also communicating with consumers to raise brand awareness and increase sales. We are a long way from achieving this in the UK due to the relationship with retailers being so weak.

Egg sales, feed cost and pullet production should all add margin to the final bottom line of the business. It is important that each layer is costed and fair values are apportioned to the costs and values charged to each enterprise. Integration can disguise inefficiency if not costed and monitored properly.

What is also essential is not to see adding layers of integration as a silver bullet that will automatically make your business profitable, but to make sure the core operation is working to its optimum, or very close to it, as a first priority. You will know if that's the case if you have set your KPIs and benchmarked yourself, and found your business operating in the higher percentile of the industry.

Integration requires skill and new knowledge and so one needs to be confident that either your business has the right talent, or that your move into integration is big enough for you to employ the right skills. If not, then think twice.

Key message on integration:
integration can work but proceed with caution, deliver the core first.
Think how you could work with other like-minded farmers



7. Discussion

I have visited many organisations that have demonstrated ways to develop resilient operations. They have done it through incredible attention to detail, good cost control, better than average performance, building layers of integration on top of their core operation and sometimes, in exceptional cases, a combination of all these things. The very best producers acknowledged that they still had weakness and worked on those areas. One or two of the very best had realised that to sort out the weaknesses they had to recruit experts as it was beyond their skill set.

Strong businesses were fixing prices, playing markets and using some level of cost and value protection mechanisms. They were planning their operations and running extensive budgeting and benchmarking systems; they were planning to thrive, not planning to survive.

Government can help the agricultural sector with a wholesale change in the way subsidies are managed, good trade policy and clear rules and regulations. Don't however rely on our legislators to do the right thing. Longer period tax averaging and business deposit schemes could be valuable tools to help act as shock absorbers to farm businesses in times of volatility and could be easy to implement in the UK if the will is there to do it.

*The UK cage-free industry
has a good future ahead,
with all major retailers
having given 2025 as a date
when they will stop selling
eggs produced in colony
cages.*

Our assurance schemes need to work with the whole industry, lobbying to build greater trust with our industry's customers and therefore growth in our markets. We as producers need to do our bit and be 100% compliant 100% of the time, and embrace change so that those who may attack our industry have no case. Some schemes need to consult more with the industry and trial changes before implementing them.

The UK cage-free industry has a good future ahead, with all major retailers having given 2025 as a date when they will stop selling eggs produced in colony cages. But what will cage-free look like? Will it be barn production or will we skip barn altogether in the UK and go straight to 100% free range? On the face of it that sounds good for free range producers but do we want to be at the bottom of the value league, or will supermarkets understand our additional cost and always pay a suitable premium? What happens to the relatively large sector of the population who cannot afford the extra cost of buying free-range eggs? Will they stop buying eggs altogether, citing they can no longer afford them? There are as many threats to free range farmers as opportunities, making the quest for perfection and therefore resilience ever more important.

In this report I have hardly covered finance issues; this would be a major project in itself but I noted that the best businesses were often the ones that had borrowed the most money and taken the most risk. '*Nothing concentrates the mind like high borrowings*' commented one New Zealand farmer I met. That said, you don't need to invest large amounts of money to grow and succeed; it can be done more organically and it would be easy to argue the most resilient of businesses is the one that holds cash and doesn't rely on outside funding at all.



In the US I spent a lot of my time on the eastern side, in New York State, Pennsylvania, Maryland, Delaware and the Washington areas. I had hoped that I would have time to see Amish country and boy am I happy I managed it. The Amish are a highly traditional Christian church with Swiss Anabaptist origins. They lead very simple lives, working the land, selling any excess produce and making further income by selling traditional crafts and specialist food. Amish fudge and shoofly pie are something to behold! The Amish have their own shops and use very little energy in the form of fossil fuels or electricity - they can exist without them at all. Most of the energy they *need* they grow for themselves in the form of wood fuel and horse feed, rather like the rest of the world did before tractors were invented.

Amish farms were neat, there were no weeds, and from what I saw in late October they had little to fear from a lack of fertility as much of their farming system is based on grazing livestock.

The most impressive part was that families averaged 7 kids and they had an 85-90% retention rate of their youth having given them the opportunity to go wild for a couple of years prior to committing to the Amish way of life. Amish numbers are increasing.

I have been looking at resilience in business - is the Amish way of life the best example I have seen? I would say, in a personal context, to preserve their way of life then yes, they need no outside intervention at all; in fact they do all they can to avoid it. In a global context, where we need to feed 9 billion people by 2050, whose wealth and calorie intake is going up, then no. That is of course unless we all give up our desire to eat more than we need and to buy an ever-increasing array of consumer goods, and instead live like the Amish.



Figure 11: a simpler way of life, photo taken in Lancaster County Pennsylvania



8. Conclusions

1. Adding layers of integration can deliver more consistent profits and act as a shock absorber to volatility. You don't have to do it on your own, maybe work with other like-minded producers?
2. All businesses can improve; if you think your business is the best and cannot get any better, look again.
3. Government can do more to help producers deal with the effects of volatility - but don't rely on it and beware of government intervention.
4. The introduction of a range of insurance products for each sector could work to help protect margins and protect against volatility.
5. There is a massive opportunity for egg producers as global demand increases but the UK is expensive relative to the rest of the world and so we need to develop higher value, trusted products, if we are to compete in export markets.

9. Recommendations

1. All businesses should know their costs, set KPIs and benchmark themselves against them
2. Greater levels of attention to detail and skill are required by all businesses. Farms should adopt an ethos of continual improvement.
3. If adding layers of integration is not for you, strengthen your relationships with your suppliers, spend more time understanding both them and their businesses.
4. Develop your own skills and those of your staff and communicate effectively.
5. Be good, honest and reliable, build goodwill as it can repay you. In law and assurance schemes be 100% compliant 100% of the time.
6. Government should consider a farm management deposit scheme. They have fortunately already copied my idea of 5-year tax averaging for farms! The whole subsidy system needs to be reviewed to make it more fit for purpose.



10. Executive summary

From my travels I have concluded there is little doubt that adding layers of integration can be a good way to build resilient farming enterprises that can deliver acceptable profits year after year. Not everyone is a fan, though, and many policy makers and people of influence are keen to preserve the traditional family farm, not just in the UK but in other parts of the world too. I have not argued against the smaller family-run farm business but I strongly feel that every business needs to be able to survive without being propped up with government subsidies and thus has to become more financially resilient. The poultry industry in particular has had a history of not relying on subsidies and working closely to market conditions. Free range has done well because the market has continued to grow at such a rapid rate, so rapid that supply has only just kept abreast of demand, but now the technical ability of all free range egg farmers will have to improve if they are to thrive.

Integration, however, is nothing without skill and if one makes the transition from small family business to large integrated agri-business, even if still owned by the original family, good management and governance is key. If one fails to make all integrated layers profitable then one might as well not bother; stick to what you know and just produce eggs; let the experts make the feed and grow the pullets.

The transition into integration is the most difficult. Most farmers I met were very good at what they did, producing great quality products with a margin. Not many of them possessed the skills to extract more value from the whole integration chain. Adding layers of integration should be viewed the same as any diversification project. Again, if you are not farming well, don't try and do anything else, get the basics right first.

If you have a strong desire to integrate then take good advice, make sure either you have the skills within your business or the enterprise is large enough to employ a specialist to ensure success.

Skill and productivity levels are key and if one can operate within the top 10% of any sector in physical performance then the future looks secure. Link sector-beating productivity to commodity pricing protection and cost control, and you will have a business that can thrive in almost any circumstance.



11. After my study tour

Throughout my study tour I compared my own business with those that I came across. Sometimes I felt great that I was on the right track but more often than not I realised I had to raise my farming game! I had already started the move to building layers of integration but had broken the golden rule of not making sure the core operation was working to its optimum before starting the next.

As a result I have sold one of the non-core family businesses, the Kent Cookery School, which although profitable was only ever going to go so far with me at the helm. It needed fresh impetus and I am pleased to say that's what it has got. I am also investigating how we can cooperate with local arable farms to relieve me of the day to day management of that enterprise whilst staying in the game. I have employed a very good poultry production manager who is helping raise standards across the board. All of this is releasing my time to focus on the core business of producing large numbers of high quality, high welfare free range eggs at an industry-topping cost.

Enterprise performance and attention to detail are areas that we shall be focusing on at home. We have set new KPIs which we share with the farm managers and compare against benchmarks each month. I have already started to introduce new training regimes for all staff, with full management programmes for key staff.

We are trialling the NZ share milking model on a couple of farms to see how that works out in free range poultry. Will it lead to a higher turnover of staff as those that make a success go out on their own, or will it lead to us simply sharing some of the margin with good people? I hope the latter.

I am due to take over the Vice Chair position for the British Free Range Egg Producers Association (BFREPA) and it is my intention to help convey the messages learnt during my study to the wider industry.

For me this Nuffield Farming Scholarships Trust opportunity has opened up my eyes to the issues around the world, has given me global context and a renewed enthusiasm to practice what I have learnt. I have decided to try and take at least one decent trip per year to study the industry further. My aim is to continue to build my own knowledge for the rest of my life.

Douglas Wanstall



Figure 12: Picture taken in the New York Library

continued overleaf



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