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CONFERENCE PAPER

WORKING TOGETHER FOR A BETTER FUTURE[1]

Martin Taylor

Introduction

Long Clawson Dairy was established in 1911 by 11 local farmers to make Stilton Cheese, they were unhappy with the returns they were getting for their milk and thought they could do better. As a result Clawson was created, with the business operating as a Co-operative and its members/famers owning shares in the business. It has not all been easy going, for many years especially in the post war years the business made losses and looking back through the board minutes there were discussions about the potential dissolution of the business. However, the business survived and has gone from strength to strength, there are now over 60 supplying farmers and its customers include the majority of the multiple retailers and a significant export business. Over the years the business has entered new markets including liquid milk doorstep rounds and speciality cheese (e.g. cheese with fruit or herbs), and when appropriate exited markets such as liquid milk in the 1980's as the business became unprofitable due to increasing distribution costs as the majority of the milk started to be purchased with the weekly shop from the national retailers. The business operates from four sites in the east midlands, employing over 450 staff with a turnover £38m in 2007.

The Co-operative pays a milk price based upon a basket of local milk prices, this ensures that it pays a competitive milk price each month. At the end of the year, once the accounts have been finalised, the profits are split between re-investment into the dairy and a bonus paid to the farmer members. The split of payments depends upon the investment requirements for the following year, which in turn aims to deliver the milk price the following year. Thus the business and farmers work together to deliver a total return for the milk.

In recent years costs have spiralled upwards at an alarming rate, and the consumer has become more price conscious and increasingly aware of where their food comes from. This may sound all bad news, however Clawson is well prepared to deal with such issues and take advantage of consumer trends to assist in the company's growth plans. The business has seen the input costs of particularly milk and energy increase between 20 and 40%, given these are the two largest costs in the business this could be a problem if no action was taken. Although the magnitude of such rises was more than expected Clawson had seen the potential problems arising and put plans in place. It was obvious from the outset that any such plans could not be delivered without working with both our customers and suppliers. To give you a taste of these plans I will explain a few, namely;

1. This paper was originally presented at The Oxford Farming Conference, January 2009, and is reprinted by kind permission of the author and the Conference Secretariat.

- Reduce wastage and improve milk utilisation
- Improve selling price without reducing volume
- Composition and seasonality of milk supply

Milk Utilisation

As with any business you regularly analyse your costs and look to make savings through buying efficiencies, or in a manufacturing business improving your process to reduce wastage. It has been well published in the press that the cost of milk has soared over the previous 18 months. For a cheese business where the majority of its cost is milk this is a major issue, such rises were sufficient to bankrupt the business if nothing was done.

Milk consists of around 12.5% solid matter and the rest is water and other soluble items. During the cheese making process the solids (fat and protein) are bound together as cheese curd and the liquid fraction is referred to as whey, hence the term 'curds and whey'. For every 10 litres of milk you process you generate around 9 litres of whey, and to make 1 tonne of cheese takes around 10,000 litres of milk. Thus cheese factories generate significant quantities of whey. Initially whey was seen as a waste product and disposed of as effluent or to animal feed, typically for pig feed. Several cheese companies over the years have invested in processing technologies to further process this whey to produce products which have a value. Clawson was proactive in this area and in 2000 installed membrane technology to filter out the protein in the whey and sell the product as concentrate whey protein. The protein content of raw whey is typically around 6%, once this has been removed you are still left with a large volume of liquid waste. To recover all the value Clawson invested in further membrane technology to recover a product called whey permeate, mainly milk sugars (lactose) and minerals, and to further process the by product from this to collect the water which is used in the boilers to generate steam. Thus recovering every last piece of value from the milk, and significantly reducing our waste. In addition, the water generated now accounts for around 40% of our total water use, again saving the cost of fresh mains water.

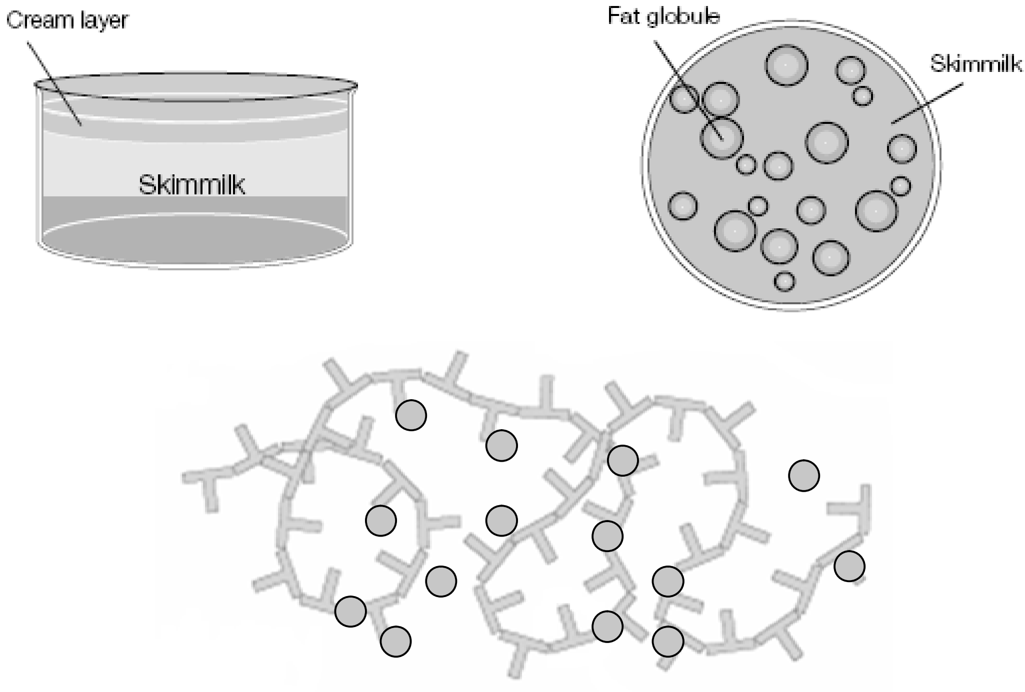
Improved Selling Price

The increase in raw material costs has not just affected Clawson, it has affected the majority of food manufacturers, the food price inflation we have seen recently has been as high as 30%. As a result consumers are becoming increasingly sensitive to both wastage and the price of the products they purchase. Working with the national multiples we have reviewed sales and sales trends by product, the analysis showed a need to reduce piece size e.g. reduce from 250g piece to 175g piece. This reduction in piece size would both reduce the potential for wastage for the consumer and reduce the piece price. It may sound easy reducing the piece size, however this posed significant technical problems with wastage both in terms of cut optimisation and crumbling of the cheese. Over a period of around 18 months Clawson has worked diligently with a number of equipment manufacturers to encompass new technology into the cutting process. Although not yet complete Clawson aims to offer smaller pieces at a higher price per kg which recovers the cost increases, but which gives the consumer a lower piece price and reduced wastage.

Composition and Seasonality of Milk Supply

As discussed earlier milk consists of fat, protein and mainly water, when making cheese it is the protein that 'twists up' and binds the fat into the cheese curd. There is an ideal ratio of fat to protein. If there is insufficient protein to bind the amount of fat present then the fat is lost in the whey.

Figure 1. The fat consists of globules which during the cheese making process are trapped in the protein strings



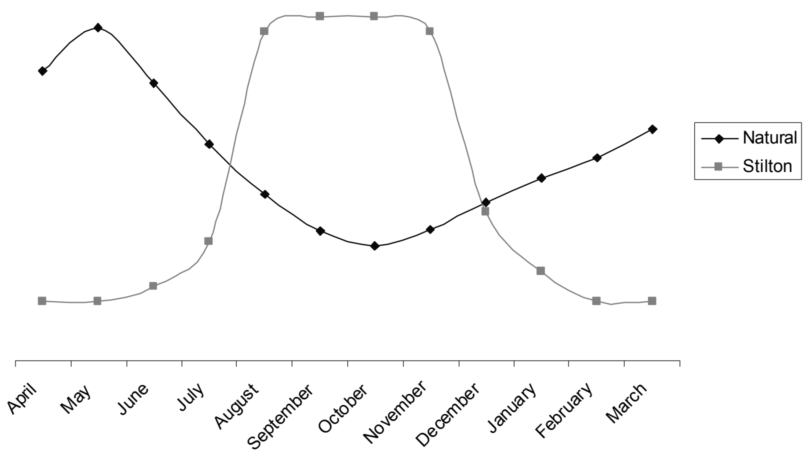
We work with our farmers to look at ways of improving the fat and protein within the milk that the dairy receives, there are two main ways in which fat and protein can be improved, namely;

- Alteration to the cows diet
- The type of cow used or breeding

The dairy has worked with feed providers and consultants to establish trial groups of farmers. These groups of farmers have been used to review various feeding regimes impact on both fat and protein. Certain breeds of cow have been found to produce increased levels of fat and protein, however the specific type of fat and protein does vary. The dairy has been running trials with individual farms to make cheese from specific types of milk and mixes of milk to establish if there are any constraints on the breed of cow. Although all these trails are still ongoing it has become evident that feeding can produce short term gains, but longer term larger gains are possible through breeding. However, there are limits on the gains through breeding for example 100% Channel Island Milk (Guernsey and Jersey) does not produce a good quality Stilton cheese.

In addition to the milk composition there is also the issue of seasonality as the natural cycle for a cow is to give birth in the spring and produce milk when there is plenty of lush grass available. The consumption of cheese, particularly Stilton, is significantly influenced by Christmas demand which requires milk at an 'unnatural' time of year, as shown below in Figure 2;

Figure 2. The natural seasonality of milk production against Stilton production demand (source Clawson data)



The further complication is that a cow does not merely turn on and off milk and has no regard to working within a 12 month calendar.

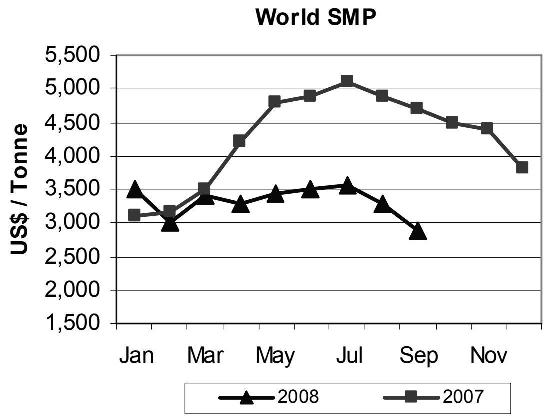
Working with our farmers Clawson has developed a payment mechanism that pays additional premiums for when the dairy requires the milk, this is designed to offset the additional feed costs that are incurred in feeding the cow rather than letting it graze in the fields. Within the past few years and months we have all seen the cost of animal feed rise and as a result Clawson has started to see a trend towards reducing feed costs. This has resulted in additional milk being produced in the spring, we are monitoring the situation carefully and reviewing our payment schemes as it appears the previous incentives for autumn milk production may no longer be applicable.

Looking Forward

Milk availability

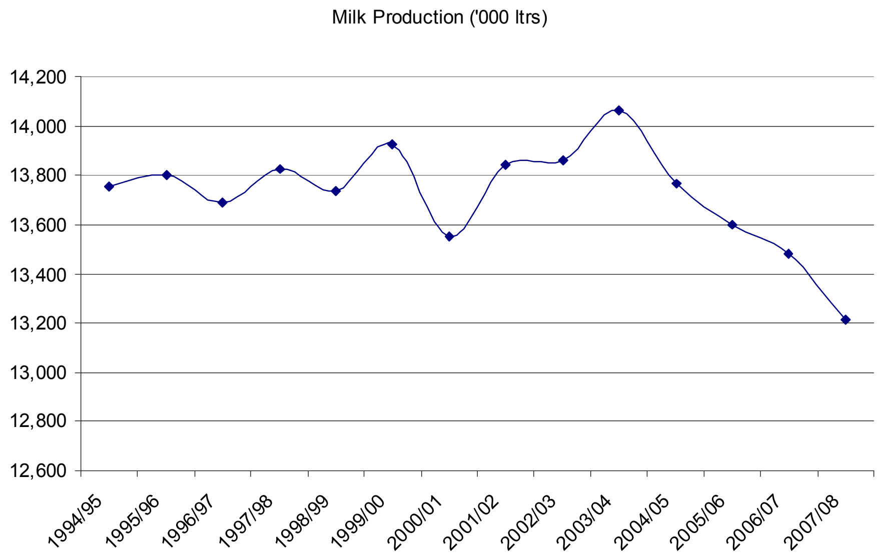
Following the reduction in subsidies from the European Union the amount of dairy products being sold into intervention has been drastically reduced, as a result the large stockpiles of skimmed milk powder and butter no longer exist. These stockpiles used to effectively smooth the world prices by supplying demand as soon as it arose. The price for the products would naturally increase as demand outstripped supply, products would then be sold from the stockpiles which would re-balance the supply/demand equation and thus the price would reduce. We are now in a different situation where as the world demand for dairy products rise or supply falls this has a direct and quick impact on price. Milk can effectively be diverted from low margin products to higher margin products as happened in 2007 when skimmed milk powder prices increased by over 40% (see figure 3). This has a direct impact on the price that Clawson has to pay for milk, if Clawson pays an insufficient price its farmers will choose to sell their milk elsewhere.

Figure 3. World Skimmed Milk Powder price (source MDC datum)



Milk supply in the UK over the previous 4 years has been falling at circa 1.5 – 2.1 % per annum (see figure 4), as a result of farmers ceasing milk production mainly due to farm profitability, a lack of succession (family members to run the farm), and the change in policy regarding subsidies. Following the mid term review of the Common Agricultural Policy there were intervention price cuts in July 2004, 2005 and 2006 for butter and SMP; and in July 2007 for butter only. Looking forward over the next 5 to 10 years it is quite possible that in the autumn, when milk production is at it's lowest (see figure 2) there will be a shortage of milk. As a business Clawson has actively recruited additional farmers to ensure it has sufficient milk both for now and the future

Figure 4. UK milk production 1994 – 2007 (source MDC datum).



Provenance

The recent trend in food provenance, or more precisely the geographical origin of what we eat, and the methods used to produce it, has assumed increasing importance, partly as a result of a series of food scares and partly through the growing media focus on food-related matters. It has also tied into the wider trend for 'premiumisation' across both the in-home and eating out markets or to put it in the language of the major multiple retailers the 'finest' or 'taste the difference' ranges. However, the rules surrounding claims of provenance can be complex, and with statements of origin or logos certifying adherence to quality assurance schemes jostling for space on pack with other information regarding issues such as nutritional content, there may be a risk of the consumer being presented with too much information (source Mintel Food Provenance, UK, March 2008). Which ever way you analyse provenance Clawson being a farmer owned co-operative and sourcing its milk from local farmers is well placed to seize this opportunity, through branding and other marketing activities. We have launched a brand named after our founding chairman, named Thomas Hoe Stevenson. The brand is targeted at traditional products and aimed at the premium end of the market, using wording and images to link to the heritage of the company and products, typical imagery is shown in figure 5.

However, for many years the majority of Stilton has been sold as retailer branded products. Many of the retailers brands can be strengthened by co-branding these products, hence gaining the strength of both brands. This provides the provenance and history that the retailer brands can lack, together with the market presence and consumer acceptance that new brand cannot easily replicate. Examples of co-branding are shown in figure 6.

Figure 5. Thomas Hoe Stevenson brand imagery.

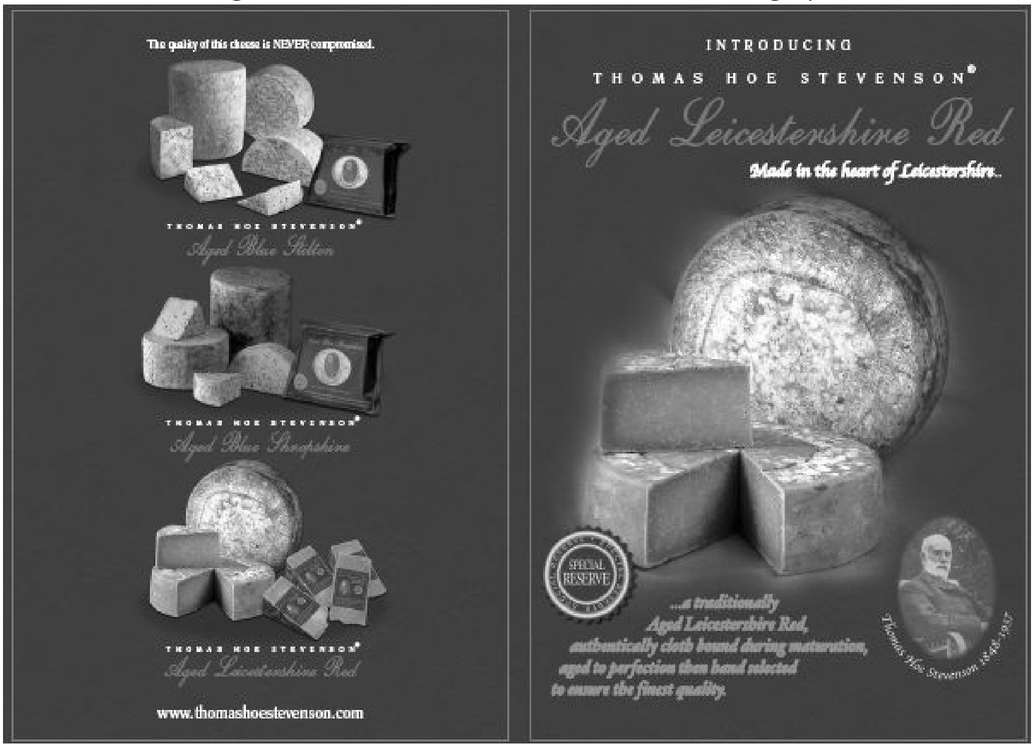


Figure 6. Retailer and Supplier co-branding.

Recession

The biggest immediate market challenge facing Clawson is the current impending recession, and looking at current projections the effects of this could be felt for many years. If you segment products into value, standard and premium you can analyse movements and trends in the market both current and historical sales. Our analysis has shown that during a period of lower consumer spending there tends to be a down trade from standard products to value products, however the premium product sales have traditionally held firm. We have observed consumers down trading during the week and ‘treating’ themselves at the weekend. The significant change that has taken place in the past few years is the significant growth of the premium products market share, as a result it is likely that this segment will suffer greater than it has previously. For Clawson this is a significant problem as the majority of our products are either premium or standard range and the ethos and culture of the company has been to focus on the ‘best of the best’. Following our review of the market and ourselves, we have had to redefine what quality means to us and the consumer. We are now actively developing a range of value products to balance our portfolio of standard and premium products. These value products are being value engineered to reduce the cost of ingredients and manufacture, but achieve a price/value equation that matches a consumer demand. To achieve the development of these value products it is essential to work with raw material suppliers and customers to target areas where costs can be engineered out of the supply chain, not only in terms of raw materials but also packaging, transport and other supply chain costs.

Conclusions

Although Clawson is a relatively small dairy Co-operative based near Melton Mowbray, Leicestershire it is increasingly being affected by the ‘Global Economy’ in particular;

- Input costs – volatility and price of particularly milk and fuel
- Sales – the economic climate combined with changing consumer demand and preferences

Being a Co-operative has helped Clawson work with both customers and suppliers to improve the supply chain and deliver consumer targeted product offerings. It is this ability to adapt that will see Clawson change and develop to take advantage of the changes, rather than entrench and suffer. Although for many years we have been focussed on premium products delivering the ‘best of the best’, the business has now challenged itself to produce ‘value’ products to complement the existing premium portfolio. With the ever increasing costs both on farm and in the dairy it is essential now more then ever before that every last ounce of value is squeezed from the supply chain, thus our projects on milk usage and seasonality will be further developed.

Our export business currently accounts for around 18% of our business and is growing strongly, again our ethos has been to work together. We work with agents and distributors from the relevant countries rather than using an expatriate shipped into to that area from the UK. Although it maybe possible to extract a higher margin without the additional cost of an agent, we have found that the benefits of market knowledge and the way in which business is conducted brings a significant benefit. Any weakening of the pound should provide a further boost for UK exports, and we intend to take full advantage where possible.

As a result of many years of working closely together Clawson is a well invested business with the ability not only to move quickly to seize short term consumer trends, but also make those difficult decisions for the long term future of the business.

About the author

Martin Taylor (martin.taylor@clawson.co.uk) is the Chief Executive of Clawson, a farmer owned dairy co-operative which processes around 50 million litres of milk per annum, from 60 farms. Clawson manufactures Stilton and other award winning cheeses supplied to Tesco, Asda, Morrison, Sainsbury, Marks and Spencer and wholesale and export customers, both own label and branded products.