

Tight focus delivers results

When his son Anthony returned to join the family business, Ian Godwin realised performance would need to improve to cover the additional labour unit. With the help of Promar Consultant Giles Bristol significant improvements have been achieved in a short timeframe.



Anthony and Ian Godwin

The Godwins rent the 110 acre Forty Farm near Cirencester from Gloucestershire County Council and an initial assessment by Giles Bristol indicated some key areas where improvements could be made reasonably quickly to allow more cows to be carried and margins to be increased. Over the last three years significant benefits have been realised.

"We identified the average feed rate was higher than we would like to see and all concentrate was fed through the parlour. There was scope to make more from forage and to boost overall energy levels," Giles explains. *"Mastitis problems were leading to high amounts of discarded milk."*

To help overcome forage shortages an additional 35 acres were rented with half put down to maize and the balance to two year grass leys to increase total silage production. The maize acreage has been increased to 37 acres in total and in addition 12 acres of wheat are grown for wholecrop.

The extra land also helped to mitigate any NVZ Nitrogen loading issues. The increased maize acreage has also allowed a reseeded programme to be introduced to replace old meadows and improve grassland quality.

Having increased the range of forages available the decision was made to move to a partial TMR and a simple

blend is now fed with mixed silages. This has increased total energy intakes while reducing the dependence on parlour compounds. The winter base diet is formulated to give M+25 litres. In addition to revising the feeding system, the decision was taken to milk the cows which calve all year round three times daily from September to December. *"There is a slight bias to autumn calving and this was a way to get more milk and use the extra labour that was available. It has also allowed us to make more of the seasonality bonus offered by our milk buyer,"* comments Ian Godwin.

Numbers have also been increased and the herd now totals 90 cows with a target of 100-110. Although cows and in calf heifers were purchased in the past, more youngstock are now being reared with the aim of being self-sufficient for replacements. In future they may look to sell surplus heifers.

Close attention has been paid to cow comfort. A low cost sand bedded cubicle building was erected for dry cows and there was an immediate reduction in problems with dry cows calving down with mastitis. Overall cell counts reduced as well, leading to less discarded milk. The Godwins are so pleased with the results that all cows are now bedded on sand.

The family have also focussed on fertility and the combination of higher feed levels, tail marking and a closer involvement with the vet have resulted in a 6% increase in calving percentage.

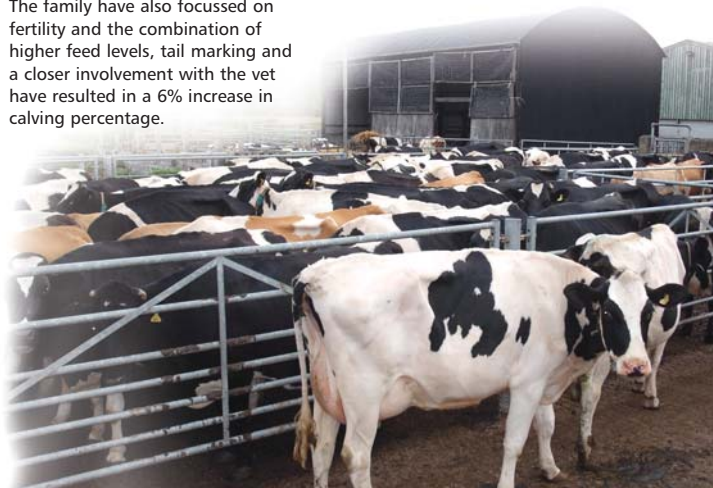
Together the changes have added up to a big increase in performance. Yield per cow has increased by 4 litres per cow per day with rolling yields 1,500 litres higher than when Giles Bristol started working with the Godwins.

Yield from forage has increased from 1,400 litres to 3,795 litres and total concentrate use per cow has remained unchanged although feed rate per litre has declined.

Margin per cow has increased by over 25% and the extra output per cow, combined with the 15% lift in cow numbers has led to a 33% increase in herd margin over purchased feed.

"The secret to the Godwin's increase in performance has been a combination of careful planning, a lot of hard work and focussing on the elements that are within their control," Giles continues. *"Every change was budgeted and then progress was monitored regularly to make sure the benefits were being delivered."*

"The extra land allowed a restructuring of the ration and the investment in a low-cost second hand mixer wagon has been justified several times over. There hasn't been any grand plan, rather careful investment and a focus on the basics of managing healthy cows well."



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Where is your focus?

Time to consider renewable energy?

The uk dairy sector - not operating in a vacuum any more

Tactics to reduce the impact of higher feed prices

Cellsense helps preserve milk bonuses

Ensuring early spring grass

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Where is your focus?

With a volatile trading economy it can be hard to maintain a clear focus, but looking at some farm data recently convinces me that more than ever before it pays to focus on the areas within your direct control.

Looking at the performance to March 2011 of the farmers shortlisted for the Milkfinder Manager of the Year Award it shows a clear picture about how these businesses are reacting to the current economic climate.

The milk price: feed price ratio is still a major influence on dairy farm profits, and with feed representing over 40% of the cash cost of dairy farming it is imperative that it is used effectively. The latest analysis shows that our leading farmers have developed a successful strategy to achieve this.

The results show that the shortlisted farmers achieved a 10% increase in margin per cow despite a 4% increase in concentrate price and just a 2% increase in milk price. Financial pressures have been compensated for by a number of technical improvements and attention to detail.

These successful businesses have increased output, giving more litres over which to spread overheads but the biggest movement in managing performance has been an increase in yield from home grown forage which has leapt by a massive 48% to 4,037 litres per cow.

These farmers are producing 47% of output from forage compared to the Milkfinder average of 30%. The stocking rate has remained largely unchanged so these farms have responded to the threat of feed cost increases by growing and utilising better quality forage and so insulating their business from external price factors.

The attention to detail on these farms has been impressive. Milk quality and hygiene have remained good so that the farmers are collecting all available bonuses to help increase milk price.

Furthermore despite producing more milk and more from forage, calving percent has remained unchanged which indicates that fertility has not been affected.

These results show that even in adverse trading conditions it is possible to drive businesses forward and these farms are in a better position to survive a further price squeeze with excellent margins from stress-free, healthy cows.

Focussing on the areas within the farmers' area of control has resulted in a significant increase in herd and cow margins and there is a lesson here for all dairy farmers.

Proud of Dairy

From a whole industry perspective, we need to get out and tell the consumer what a good and committed job dairy farmers are doing.

The farming industry is focused on delivering high standards of animal welfare, with continuous improvement in terms of the environmental challenges such as reducing carbon output from milk production. With this, we can have a sustainable industry which gives a good return, allowing for reinvestment and drawings.

Proud of Dairy, is a Dairy UK initiative. It will be promoted at the Dairy Event embracing dairy

farmers, their suppliers and partners, DairyCo, processors and others in the supply chain and gives everyone in the industry something to stand behind. It gives the whole industry a focus and we can start building an understanding that our industry focuses on high standards of performance and production, and that the diversity of production systems in the U.K. is a good thing.

Proud of Dairy embraces dairy farmers, their suppliers and partners, processors and supermarkets. Together we can all create a consistent message that UK Dairy farmers produce some of the best quality milk in the world, particularly when measured against animal welfare and environmental standards, the nutritious quality of the milk, and that dairy farming helps to support jobs and GDP to the U.K. economy. It will be good to have a positive economic story when the broader UK economic outlook is a little less encouraging!

Andrew Thompson
Managing Director



Andrew Thompson

Time to consider renewable energy?



Senior Environment Consultant Tom Gill explores the opportunities for investment in renewable energy sources on farm.

In the current economic climate it is essential to assess the cost of all resources used by the business to see where economies can be made. Take energy as an example. Farming is an energy intensive industry with dairy farms particularly reliant on electricity for milking and milk cooling in particular.

Agriculture is vulnerable to fluctuations in fuel and energy prices, whether direct costs like diesel and electricity or indirect price increases in inputs such as feed, fertiliser and agro-chemicals. In the last 12 months crude oil costs have risen by 12% and now seems to be stable at above \$100 per barrel.

So is renewable energy an option? Certainly the Government seems to think so. The introduction of the 'Feed-In Tariff' (FITs) in 2010 and the Renewable Heat Incentive (RHI) from the autumn of 2011 are aimed to catalyse demand and provide an incentive for businesses to introduce renewable technologies.

The options for 'on-farm' energy generation typically include wind and solar power but there are also opportunities for anaerobic digestion and hydropower. Ultimately, the best return on investment is usually achieved by utilising as much of the energy generated on farm rather than exporting it back to the grid. In other words energy generation should be seen as a cost reduction opportunity rather than as an income stream.

In terms of costs and returns, a 15kWp wind or solar technology system will cost around £50-70,000 and will generate electricity to the value of approximately £5,000 per annum, giving a return on investment of 7-9% and a payback period of 8-9 years at current prices. Clearly as electricity prices continue to rise so the economics are likely to improve.

In many cases renewable energy generation can benefit the bottom line of the business as well as helping reduce the Carbon Footprint, something that will become increasingly important.

Areas to consider

Like any major business investment, it is vital to plan carefully before making a decision to invest in renewable energies. Having worked with numerous businesses it is possible to develop a sound case to convince the planners and the bank.

The starting point is to consider the suitability of your location and whether there are any significant planning restrictions in place. Is the farm suitable for a wind turbine?

Once you have decided if renewables are a real option the next stage is to decide how much power you want to generate and therefore the size of the installation. Do you want to try and become self-sufficient in electricity or is it better to try and generate a proportion? Part of this decision will be an assessment of power use – is it a reasonably level profile or are there significant peaks and troughs?

Once you know the size of the installation it is time to produce a business case to determine the total cost and how it will be funded. While many farmers look to develop installations on their own, funded by the bank we have also worked with farmers to develop joint ventures and leasing opportunities. As is often the case with new technologies there are a range of options available so plan carefully to decide on the best approach.

For many businesses renewable energy generation is a viable way to reduce exposure to volatile power costs and well worth considering.



The UK Dairy Sector - not operating in a vacuum anymore



John Giles

John Giles, Divisional Director of Promar International's agri food division considers some of the key developments in the UK and international dairy supply chains.

The UK dairy sector is more exposed to international market forces than ever before. As well as keeping a firm eye on matters close to home, if farmers and processors are to thrive in the future it is essential they have an appreciation of what is happening in other parts of the EU and further afield.

When you look at just some of the key developments in the sector it is clear that there is a huge amount of change going on. This is unlikely to diminish in the short to medium term.

Key Developments Milk production

World milk production in 2010 reached 710 million tonnes, an increase of 1.6% from 2009, but below the 2.1% average annual growth seen in the past decade. In terms of the key producing regions of the world, the quickest growth is being seen in the emerging markets, while in the EU and US, growth is more modest.

UK annual milk production is now about 13 million tonnes, approximately 1.8 % of world production. Asia is the largest global region with 257 million tonnes. Pakistan is the 4th largest producer in the world of milk and India was forecast to produce of 114 million tonnes, a 4% increase. China increased production by 10% to 44.2 million tonnes. North America's production increased by 1.1% to 87 million tonnes while the EU increased by 1% to 133 million tonnes. Despite the drought, milk production in Russia reached 32.9 million tonnes. New Zealand's production grew 6% to 17.8 million tonnes. Australian growth was 2% giving an output of 9.2 million tonnes.

Milk prices

Dairy prices are always close to farmers' hearts. They have generally been high over the last 12-18 months, not least in the US where they have reached record levels. The UN Food and Agriculture Organisation (FAO) forecast agricultural commodity prices are likely to remain high but volatile through to the beginning of 2012.

Strong prices are linked with rundowns on stock and little overall production increases for most crops. The peak global dairy prices seen in 2011 are expected to ease as demand and supply gradually re-adjust. With global milk production increasing, global milk prices will fall. Closer to home, farmers in the Tesco Sustainable Dairy Group are currently being paid their highest price since the scheme started four years ago. Marks & Spencer have introduced a new milk pricing formula which considers the cost of production, as well as the retail price, with additional payments to producers who meet the highest welfare standards.

Regulation

The EU Commission is proposing a five year ban on the production of food from cloned animals, although this will not prevent meat and milk from the offspring of animals cloned outside the EU entering the European market. Cloning for R&D purposes will still be allowed in the EU to ensure Europe does not fall behind in technology developments. A new Commission dairy sector reform paper looks to help EU farmers



during the phasing out of quotas. The main proposals include optional written contracts between milk producers and processors to be drawn up in advance of deliveries. These exist in the UK already, but are less common in other EU 27 countries.

A Free Trade Agreement (FTA) between Russia, Belarus and Kazakhstan is likely to bring mid to long term trade benefits for the European dairy industry, especially for the more export oriented suppliers. Full FTA negotiations with New Zealand, Russia and its Custom Union (CU) partners, Belarus and Kazakhstan are also to begin. New Zealand has also agreed similar arrangements with China.

Investment

International markets are always looking at new ways of doing business - Fonterra in New Zealand is opening its globalDairyTrade auction system to other companies and has already had interest from major producers such as Arla Foods, FrieslandCampina and Murray Goulburn, California Dairies and Dairy America. Since its launch in July 2008 sales at globalDairyTrade have totalled US\$ 3.2 billion. It currently trades around 600,000 tonnes of Fonterra products a year and has more than 300 registered bidders from 58 countries.

The issue of large farms is here to stay and is full of controversy. The response to the need to feed considerably more consumers in the world has been to develop large scale dairy farms. In parts of the US,

such as California, dairy herds of up to 30,000 are not uncommon. It is worth noting though that the role of the small scale family farm in the US is still critical with over 75% of them still with less than 100 animals. One of the leading fast food chains in the US has declined to source milk from a large scale dairy farm and there is ongoing concern about the role of big farms in some other elements of the supply chain.

At a company level huge change continues to take place at all levels of the supply chain. In the UK, Arla has announced plans for its new dairy facility in Buckinghamshire with a planned investment of some £150M capable of processing 1 billion litres of milk per annum.

Globally, supply chain investment is a permanent feature of international business competitiveness. On the Continent, French based Lactalis has taken over its Italian rival Parmalat, creating the world's second largest specialist dairy business with an annual turnover of €14 billion.



Buffalo on Indian dairy unit

In Asia, Fonterra is working with other leading organisations to conduct a feasibility study into creating a pilot dairy farm in India with a herd size of 3-5,000 cows. Fonterra are also looking to expand their operations in China, more than doubling the number of cities it provides for.

The Chinese dairy processor Mengniu (with which Genus plc has a joint venture) is planning to invest €96.6 million in 2011 in developing raw milk sources and expanding their existing dairy farms. The Indian company Kaira is looking to establish production facilities in both the US and Europe.

What does this all mean to the UK dairy sector?

The UK dairy sector is still in the top 10 or so producers in the world, but nearly all the growth at a global scale is coming from the likes of India, Pakistan, China and Latin America. With less than 2% of global output, the UK is a niche player.

The EU Commission still shows a willingness to intervene in the operation of the market, as it explores how support is provided to dairy farmers post quotas. Key trading blocks are negotiating better and preferential access to international markets which will increase competition between farmers and processors still further.

As well as increased access to international markets, dairy farmers and processors will examine new ways of doing business including the use of more sophisticated auction systems and futures exchanges.

Regarding pricing, it seems that international prices might ease over the next 12 months. UK retailers are currently paying a premium price for securing the supply base they want and need for the future. A wider view of costs of production is being taken.

A clear view on the role of animal cloning seems some way off, but the EU seems aware of the need not to fall behind other parts of the world in terms of R&D and the potential technical benefits. The issues surrounding the development of large scale farming will not go away and the UK is not alone in trying to work out the best way forward.

Finally, investment by international dairy companies is part and parcel of building and sustaining a modern dairy sector and should be seen as positive and be welcomed.

We often hear farmers saying 'we are different'. A look round the world shows that actually UK dairy farmers are being exposed to the same sort of forces for change as their international counterparts and probably have far more in common with them than they sometimes imagine.

Tactics to reduce the impact of higher feed prices

Jonathan Hill, Regional Consultant in the North considers how to limit the impact of higher feed prices on margins this winter.

There is no doubt that we are facing a winter of high feed prices which, combined with variable forage stocks, will make for a difficult winter for many dairy farmers. There is still time, however, to take steps to minimise the impact of feed prices on margins.

Work out what you need and buy carefully – the sooner you enter the feed market, the wider the range of feeds likely to be available, giving more options for diet formulation. Some feed such as molasses has been looking good value but it is important to work out the types of feeds you need and shop around. A cheap feed is not a good feed if it does not fit your system or complement your forages.

Retaining flexibility will be important. Consider straights where possible or, if using blends base the diet on two blends, one high in energy and one high in protein so you can re-balance the ration should the quality of forages vary.

Set parameters for what you want in your dairy cake and shop around for the best price. Protein will be expensive this winter so aim for a maximum of 18% protein in the cake. It is possible to get high energy cakes without increasing protein content. Think about joining a buying group to give more negotiating power.

Make the most of forage – silage will be your cheapest feed this winter so look to get the most you can from forage. Get it analysed regularly to make sure you exploit its potential and that it is correctly supplemented. Target 11kg forage DM per cow per day and ensure cows are able to consume large quantities. Aim for 50cm trough space per cow and push feed up regularly so that it is within reach as this will maximise intakes.

Ensure an adequate clean water supply – cows can drink in excess of 100 litres a day.

Reduce wastage – if purchased feeds are expensive and forage stocks are low then it is even more important to reduce the amount that is wasted. Make sure that all storage areas for straights are vermin and weather proof.

Calibrate parlour feeders regularly, at least monthly and ideally after every new load to ensure compounds are being used accurately and going to the cows that need them.

Look after the clamp face to reduce silage losses. Keep the face clean and tidy and work off a narrow face with a shear grab. Take shallow grabs and aim to move across the face quickly, ideally in no more than five days.

Moist feeds should be well sheeted to reduce storage losses.

Avoid wastage by cleaning out troughs at least weekly to prevent old food contaminating new loads.

Feed a nutritionally sound ration it may seem like common sense but the best way to make the best use of feed ingredients is to make sure the ration is correctly balanced to maximise rumen performance, so take independent nutritional advice.

Get the silage analysed regularly and use the results to fine tune the diet and hopefully save costs. Maximising forage intakes will be key.



If the ration is well balanced and formulated you should be able to reduce the temptation, or need, to add 'goodies' to the diet which will help save money. Many supplements basically compensate for poor diet formulation. Keep the diet simple.

If using a feeder wagon, make sure you don't over mix the diet as this will have a big impact on rumen health. An open mix is essential to maximise intakes and feed use. Be prepared to challenge late lactation cows. Make them work harder off the outside diet and reduce the amount of parlour feed.

Set targets and monitor performance - one of the keys to making efficient use of expensive feeds is to keep a close eye on performance. Know what you are expecting to see in terms of output and margins and make sure you get the expected results.

Don't be tempted to chase 'milk in the tank'. Focus instead on margins and check them regularly, certainly weekly and use a service like Milkfinder to give a detailed assessment on a monthly basis.

Early planning, attention to detail and regular monitoring of performance should help protect your business from the impact of high feed prices this winter.

Cellsense helps preserve milk bonuses

One Lancashire farmer has seen the advantages of an early warning system for high cell count cows.

David and Eileen Wallbank and their son Alan run a herd of 240 Holsteins at Tills Farm, Wyresdale. The cows average over 9,000 litres per cow with milk sold to Arla Tesco whose payment scheme includes a bonus of 0.6ppl for cell counts below 250,000 cells/ml.

Cell counts at Tills Farm average around 150-160,000 but Mr Wallbank knows that it only takes three or four problem cows to move this over the threshold.

"Milk records do identify high cell count cows, but each month it can be a different group of cows so we could have been adding high cell count milk to the bulk tank for several weeks and not known it," explains David Wallbank. *"We need to keep on top of problem cows and want accurate data more quickly and without additional work."*

Following discussions with Promar Principal Consultant Richard Hooson, the Wallbanks decided to fit the Cellsense system to the 17:34 parlour in March 2011. Four test units were fitted meaning that 24% of the herd are tested each milking.



Cellsense is an automated test system which allows a rapid assessment of individual cow cell counts with no disruption to milking routines. A small sample of milk is analysed with the result displayed using a traffic light system so the user has an immediate warning of high cell count cows.

"We now know immediately a cow has a raised count and can tail tape her and stop milk going into the tank straight away. Cellsense allows us to take faster actions to preserve the bonus. We just get on with the milking and the traffic light system clearly indicates any problems allowing us to act quickly."



David and Alan Wallbank

Ensuring early spring grass

Paul Henderson, Regional Consultant in the Midlands offers some timely advice on how to ensure good quality early season grass.

It may be August but now is the time to start planning for next spring because decisions made this autumn will have a big impact on next season's early grass quality and quantity.

If you want to maximise the availability of early season grass you need to leave fields in the right condition this autumn. Ideally fields need 3-4" of vegetative growth with the minimum of stems and seed heads. Leafy growth is not affected by winter kill but stems will be killed off becoming unpalatable dead material in the spring sward.

Fields should be grazed hard or topped to remove all seed heads before they are shut up with a cover of leafy growth of 1,750 -1,850kg/ha (3-4") depending on stocking rate. Close fields up in the order you will open them again in the spring so that the early grazed fields have the most grass on them.

Grass will start growing above 5°C and it is important that this early growth is there for the cows, and this means being prepared to move tack sheep off early. If sheep are grazing cow fields then they should be gone by no later than 1st February, sooner on farms which can turn out early.

While sheep may tidy up old stemmy swards they much prefer eating the new season growth, and the cost of this will far outweigh the income received. Most farmers will receive around 50p per sheep per week and graze them at around five ewes per hectare giving a monthly income of just over £10 per hectare per month. Early season grass will grow at around 45kgDM per hectare per day, equivalent to 1.4 tonnes per month. With grass worth £50/t DM, this monthly growth is valued at £70/ha, way in excess of the income from sheep grazing. Keeping sheep too long costs you money and will restrict early season grazing for cows.