The figures can stack up if you take a pence-per-litre approach

Make your investment pay

Herd expansion requires considerable investment, but plan it right and it may be more affordable than you think. Here's some useful information to arm yourself with if you're planning an expansion research trip to this year's Dairy Event.

text **Rachael Porter**

Better milk prices are persuading more producers to expand their herds, but they should consider carefully what that investment will cost and what it will add to the business. So says Promar's senior dairy adviser Paul Henman. "Current low interest rates mean that borrowing £250,000 over a 20-year period from the Agricultural Mortgage Corporation (AMC) could cost as little as 1.5ppl for a 150-cow herd producing 7,800 litres of milk a cow a year," he says. "That sort of sum would make a big difference to an expanding herd. And we can demonstrate that, with good planning, the gains required to make a return on this investment are readily achievable."

His colleague Tim Archer says that a business must be 100% sure that the end results of an expansion will be beneficial. These benefits are often seen in three key areas.

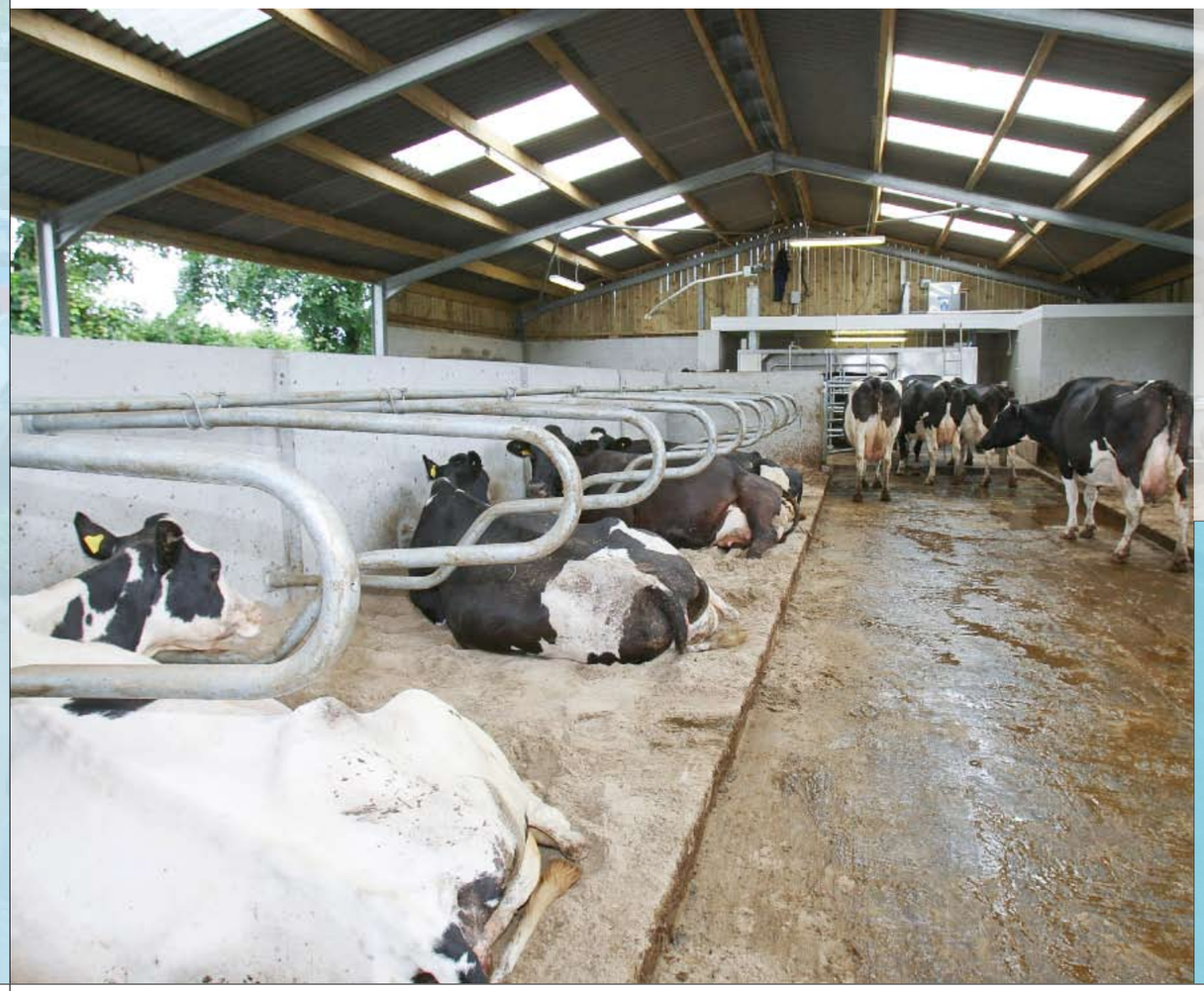
There's the achievement of the strategic objectives of those involved in the business. For example, allowing sons or daughters to take over from father, allowing him to retire.

And then there's the improved financial performance of the business in terms of profit, cash flow and net-worth growth.

Finally there's improved work and time balance, resulting in less physical work and more time for management and attention to detail.

That said, the benefits of an expansion will be specific to each business.

"You need to plan for the unit you want in 10 to 15 years time with room for future expansion," says Mr Henman. "Take account of what future legislation requirements might be and also plan to build in flexibility. For instance, can cubicles be converted to straw yards or vice versa?"



Andrew Connah

Paul Henman

Tim Archer

Planning permission

There are other more immediate issues that also need to be factored in. All but the simplest expansion will probably need planning permission and the more complex the investment the longer that process will take.

The logistics of continuing to milk while expanding are also important.

"You cannot build a new parlour on a pit full of silage, and you cannot build a new silage pit on your old parlour while you are still milking," says Mr Henman.

Mr Archer urges producers to generate a 'capital shopping list', prioritising investments in order of importance and effectiveness.

"In Promar's Farm Business Account data there's not a huge difference in the depreciation or reinvestment levels between the top 25% by profit and the others.

The difference is in how the capital has been spent, with the top quarter investing in the 'must haves' rather than the 'nice to haves'.

Besides the cows, Mr Henman breaks an expansion investment down into three key areas: accommodation, feed storage and parlours.

The average cubicle cost is £1,000 a cow. A straw yard on its own will be cheaper, but the floor area will be bigger, on-going bedding costs higher and extra straw storage will be needed.

As for feed storage, more cows mean more silage. An intensive summer-based system may require 8 tonnes/cow/year, while a long winter feeding and extended buffer feeding system may need 12 tonnes/cow/year. Costs are likely to be in the region of £30 to £35/tonne for an open pit and £40 to £45/tonne for a roofed pit.

There is a huge variation in parlour costs depending on what systems are installed.

Producers need to keep one equation in mind when investing in a parlour – cows milked per man hour and not cows milked per hour.

The needs of the cow should be at the heart of any investment, he argues.

"The better the environment and the more comfortable the cow the more productive and healthy she will be. A good environment will also make it a more satisfying place for staff to work.

As well as carefully planning what you are investing in, you also need to plan how you are going to finance that investment, stresses the Agricultural Mortgage Corporation's Andrew Connah.

"We are urging producers to consider their investments on a pence-per-litre basis and look at the return on investment they should be getting.

To help in that process, we have calculated that borrowing £250,000 over 20 years would cost just 1.5ppl for a 150-cow herd producing 7,800 litres of milk a cow a year."

Interest rates

He adds that the AMC has had a substantial number of recent enquiries from dairy producers investing in their business and says that current low interest rates mean that it is a good time to be borrowing on either a variable or a fixed-rate basis.

"An AMC loan gives you the opportunity to switch from a variable rate to a fixed rate one. And another scheme means that borrowers can apply for a 0.8% reduction in interest payments, although there is a limited time for which they can do that." |

Example return on investment from an expansion

Assume

- 100 cows increased to 150 cows
- Annual production increase from 780,000 litres to 1,170,000 litres
- Associated increase in replacement heifer numbers and forage area
- Associated increase in overhead costs (such as labour, electricity, water and fuel)
- Funded by £250,000 20-year fixed-rate loan costing £17,625/year (equivalent of 1.5ppl)
- £250,000 spent on 50 extra cows plus fully-prioritised capital items.

Comments

Difference between profit gain and cash-flow improvement: this is due to repaying loan capital, plus extra income tax on higher profits.

Difference between profit gain and net worth gain: this is due to extra income tax on higher profits.

Producers will primarily feel the cash benefit as they run their businesses on a day-to-day basis, rather than the extra profit or net worth gain.

Expansion plans should not be purely based on additional profit, but also changes to cash flows and net worth gain.

Table 1: Return on investment from expansion (source: Promar)

	profit	cash-flow	net worth gain
benefit of expansion	+£20,300	+£3,700	+£16,200
rate of return on £250,000 investment	8.1%	1.5%	6.5%