

Promar matters

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providing food for thought

INVESTMENT SPECIAL



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INVESTMENT IN FOCUS

Where will you put your next million?



Neil Adams
Managing Director

Promar Managing Director Neil Adams looks at the trend in dairy farm investment and highlights the importance of careful planning.

In the last ten years the investment on UK dairy farms averaged 5.4 pence per litre. At this rate, and assuming you produce two million litres per year you are going to be writing cheques for £1.1m over the next 10 years. It sounds a lot but with medium sized tractors costing £100,000, land at £10,000 per acre and a decent sized milking facility costing in excess of £300,000 it is easy to see how money could be spent. But the investment decision is never easy, it involves anticipating the future and estimating returns.

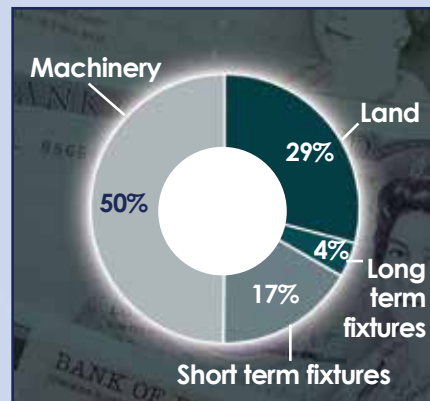
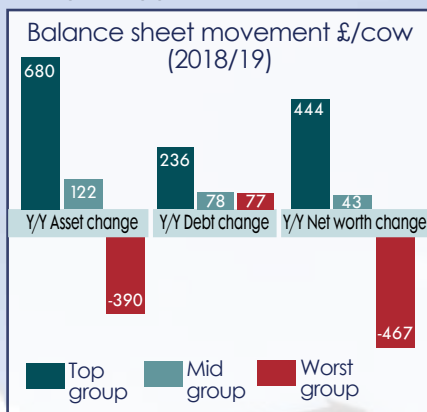
Done well, investments generate positive returns, are self-financing and create a virtuous circle of increased cash generation that delivers even greater investment. On the flip side some businesses overstretch themselves, new assets generating little or no additional return are purchased and have to be financed from what limited cash is already being generated.

Where insufficient cash is generated, a downward spiral of increasing debt gathers pace which only ever gets solved by multiple episodes of bank refinancing and eventual asset sale of stock or property.

In our Farm Business Accounts (FBA), perhaps predictably, we see the strongest most profitable businesses investing the most and the weakest the least. In one year we see a difference in investment of £1070 per cow between the most and least profitable farms.

Servicability

More profitable farms take on more debt but they are also able to afford it. They grew net worth by £444 per cow compared to the least profitable farms whose net worth declined by a similar amount. This suggests the gap between the most efficient, fastest growing businesses who invest a lot successfully and the weakest farms which invest little and have no scope to raise finance can only get bigger.



So what will be on your shopping list in the next decade?

Analysis of FBA accounts shows that machinery absorbs the greatest level of investment, followed by land and finally fixtures. This is interesting because in most cases investing in fixtures, rather than the other assets, allows the expansion of herd numbers through the buildings and facilities needed to house and milk more cows successfully.

The conclusion from FBA is that investments will need careful planning and assessment to ensure they have the best chance of being self-financing and building net worth.

We hope you enjoy this edition of Promar Matters. Our intention is to give you food for thought that will help you consider your future investment decisions. Of course, we are here to help and advise you.



Top 10 tips for securing investment funds

Major investment plans always need the support of your bank. Andrew Suddes, Farm Business Consultant, says there are several factors that can increase the success with investment proposals and secure the funding you need.

1 Make their job easy.

It is reasonable for a bank to want to get back the money they lend and to make a margin, but they do want and like to lend. To secure the funding you need, your job is to persuade them their capital is not at risk and that you can afford repayments. Do this well and the price of the loan can be really low. Sow doubt and the cost of debt will increase with more onerous lending terms.

2 Produce regular budgets.

These should demonstrate that the business can meet its obligations, and if it cannot, that something will be done to ensure it can.

3 Be realistic.

The first thing most bankers will look for and ask about a budget is **"What is assumed?"** They will want to know the prices of items sold and costs of inputs bought. They will expect to see a realistic explanation of the performance levels underpinning the budget and how the investment will create improvement.

4 Provide evidence.

Most banks lending to farmers employ agricultural specialists. They may use unfamiliar banking terms, but they also know what good and bad looks like and can sniff out unrealistic assumptions.

5 Show affordability.

If you can show the investment will pay for itself by expressing the payback term and return on capital you will have clearly demonstrated the funding requirement makes sense.

6 Stress test.

Make sure you can show how different events might impact on the plan and how you would react. Be realistic and be prepared to talk about how the business would respond to events such as a lower milk price or poorer crop yields. If the plan involves improved technical performance, show how risks will be managed and the effect on debt levels if full improvements are not realised.

7 Always have a plan B.

If you are looking at a major expansion or taking on more debt, the bank will want to know what will happen if the plan does not work. Be clear about how you will repay the bank and how much risk you are taking on. All of your assets could be at stake.

8 Understand your reliance on subsidy.

Schemes are changing and subsidy levels are reducing. Every business will have different opportunities and attitudes to the new schemes being proposed. If your business is currently reliant on subsidy, you can expect a few questions around this.

9 Don't be a stranger.

See the bank as a key component of your business and don't just go to them when you need something. Share your plans, strategy and progress so they maintain an understanding of the business and help cultivate a positive relationship.

10 Employ a challenger.

Involving a consultant in helping develop the plan can avoid many pitfalls and result in a plan which is better received. Plenty of investments fail to deliver expected benefits. A good consultant will challenge you, suggest alternatives, give you honest independent feedback on your investment proposals and help with the implementation of the plan.

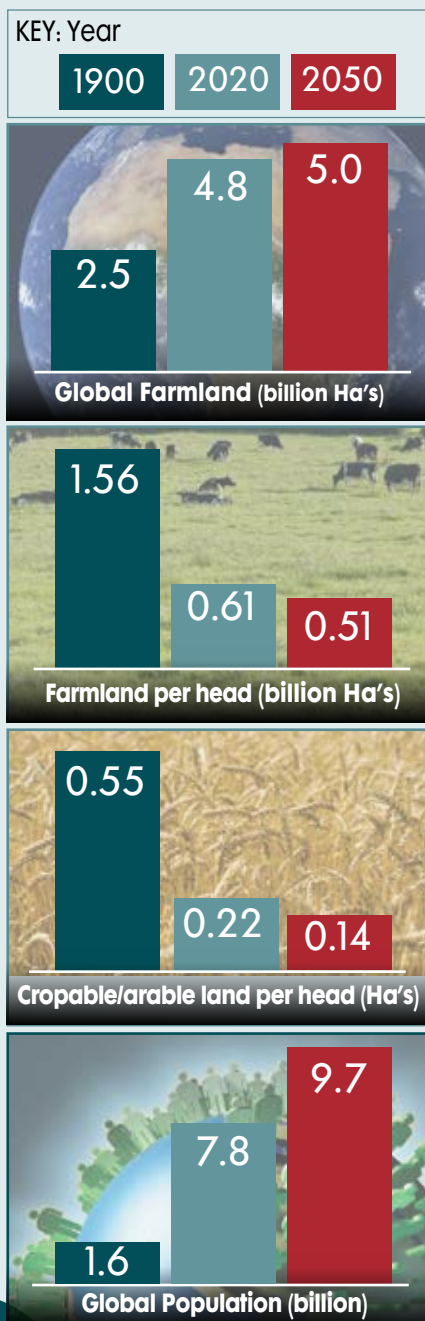


Andrew Suddes
Farm Business Consultant

What are the megatrends shaping investment decisions?

Caroline Dawson, Senior Agri-Food Consultant, takes a look at the overarching issues which will impact on how farm businesses will develop and the implications for investment strategies.

In the last century technological advances in genetics, plant nutrition and mechanisation transformed our industry. Intensification of production was prioritised as successive governments around the world prioritised economic growth above any other factor. People, in developed economies, saw their lives transformed with better education, the ability to travel the world, improved transportation and the transformation of the home into a place for receiving entertainment. Cooking from scratch became a hobby and most food was highly processed or eaten outside the home.



Since the beginning of the 20th century the global population has multiplied fivefold from 1.6 to 7.8 billion and this, coupled with globalisation and increasing living standards places our natural resources under enormous strain. Over the same time period the global land area for farming has increased from 2.5 billion hectares to 4.8 billion hectares. Today, half of the world's land is farmed, every human has 0.61 hectares of agricultural land to sustain themselves, down 40% since the beginning of the last century. However, increased productivity has helped ensure food production has, and continues to increase.

Little expansion in farmland

The population is expected to increase to 9 billion by 2050, with most growth occurring in cities, and experts believe we have reached peak agricultural land (unless more deforestation is allowed). Global warming will accelerate the potential of land further away from the equator and equally potentially reduce the productive potential of land near the equator. There will be very little expansion in total farmland meaning productivity gains must continue to be made.

The question becomes what does this mean for global agriculture and domestic production? How will the industry need to align?



Caroline Dawson
Senior Agri-Food Consultant

At the global level we believe there are a number of megatrends which will influence national and local policy and impact on strategy at a farm level too.

All four megatrends will be linked. Human expertise is needed to install, manage and maintain the digital platforms. The digital platforms will measure and monitor production and environmental impacts in order to improve productivity in ways that solve the biggest challenges facing mankind.

Digitisation

While to some this may seem far-fetched, we can already see genomics, robotic milking, precision farming and tools that collate and compare performance increasing. While the transition won't take place immediately there will be a steady migration over the next twenty years towards a more digitised form of agriculture that delivers safe, nutritious food in an environmentally responsible way.

Our vision is that farming in the future will reflect sustainable intensification that benefits animals, agro-ecosystems, and humankind through production of key nutrients for human consumption. Farm investment strategies will increasingly be affected by the megatrends.

Megatrend 1:

Population growth, ageing and urbanisation

Global demand for food will increase and diversify, influenced by non-nutritional factors e.g. veganism, immunity boosting, carbon reducing characteristics.

Only 10% of global food calories are supplied by fruit and vegetables, this may increase slightly but as poor nations get richer diets will diversify and consumers will choose nutrient dense foods like meat and dairy.

33% of all food grown is currently wasted and while 11% of the global population are undernourished, 13% of adults are obese.

What this means for food producers:

- New systems of production – e.g. vertical farming
- Intensification and productivity
- Less food wasted across the chain
- Increased differentiation
- Regions with comparative advantage will export more
- Continued focus on healthy eating



Megatrend 4:

We will be digitally transformed

Increases in computing power have grown exponentially, doubling every 1.5 years. The cost of storing data is now close to zero. Expensive calculations performed 10 years ago, like sequencing the human genome, can now be computed cheaply. As computing power increases devices, machines, robotics and information technology will combine to make food production more efficient.

What this means for UK farmers:

- Genomics will lead to more robust animals with better health, production and longevity
- Water, pesticides, fertiliser will not be applied uniformly across fields
- Innovations using microbial and biological pathways will improve soil and animal performance
- The use of sensors coupled to digital decision-making tools will reduce waste, help manage disease and maintain optimal feeding and housing conditions
- Robotics will increase and hands free farming will evolve and many menial tasks (e.g. fruit picking) will be displaced



Megatrend 2:

Food and farming must reduce its environmental impact (EI)

Food accounts for **25%** of global GHG emissions. Agricultural practices reduce air quality, use **70%** of global freshwater withdrawals, causes **78%** of fresh and sea water eutrophication and is a threat to **24,000** animal species.

What this means for UK farmers:

- Farmers must reduce emissions
- Practices relating to land degradation will be banned
- Consumers and retailers will incentivise the consumption of foods with a low EI
- Supply chain traceability will reduce the use of products linked to deforestation
- Carbon taxes and subsidies for sequestration will emerge – land will become a carbon sink
- Sustainable packaging will become the norm



Megatrend 3:

The future workforce will require more than traditional agricultural skills

By 2050, two-thirds of the world's population will live in urban areas, reducing the rural workforce. New technologies will be needed to ease the workload on farmers: Operations will be done remotely, processes will be automated, risks will be identified, and issues solved. A farmer's skills will increasingly become a mix of technology and biology skills rather than pure agricultural.

What this means for UK farmers:

- Educational programmes and development initiatives will need to develop broader skills
- More collaboration will be needed between the suppliers of inputs, data platforms and farm decision makers
- Integrated sensors, robotics and automation will replace manual labour on farms

Reimagine the future



Tom Gill
Head of Sustainability

Imagine a technology that would collect cow manure as soon as it is produced. Could anything else be as transformational to the cow and the farmer?

If we rethink dairy farming, many of today's difficult issues could be massively reduced if there was wider adoption of technology and best practice, to improve the sanitation and quality of the animals' environment. Mastitis, respiratory diseases, sole ulcers, digital dermatitis would hardly exist if cows didn't lie or walk in slurry and manures.

Greenhouse gases

Separation of solid and liquid fractions, or the use of pH reduction technologies would massively reduce ammonia and nitrous oxide emissions. The latter is a major contributor to greenhouse gas emissions from dairy farms.

Ideally we would like to keep urine and excreta separate, or better still, slurry/manure would be removed from the cows' environment within minutes of defecation. It would then be transported and stored in a sealed container that prevents emissions and preserves valuable

nutrients which could be applied with precision as and when crops need them. Current technology is fundamentally flawed in achieving these goals and new practical solutions have yet to be developed.

On a typical dairy farm slurry and manure is scraped across concrete, it is never completely removed. With poorly maintained scrapers high residues are often left in passageways, harbouring infections. Clearing manure from beds is never sufficient to prevent animals accidentally lying in the manure.

Because manure isn't removed, more and more expensive bedding is needed to act as a buffer, primarily existing to act like a giant kitchen roll soaking up effluent as best as it can. Rainwater and urine mixes with the solid portion of manure to create an enormous storage and disposal headache.

Refocus innovation

It occurs to us that a great deal of innovation currently taking place in our industry is not really about re-imagining what a future dairy could be. Comparative to European counterparts, not enough effort or expense is being invested in technologies that solve root cause problems. Holland and Denmark are embracing technologies that solve these problems far faster than we are.

Moving forward, we need technologies that know where and when an animal defecates and a robot, probably equipped with a manure vacuum and small storage tank, which quickly and effectively cleans up the mess.

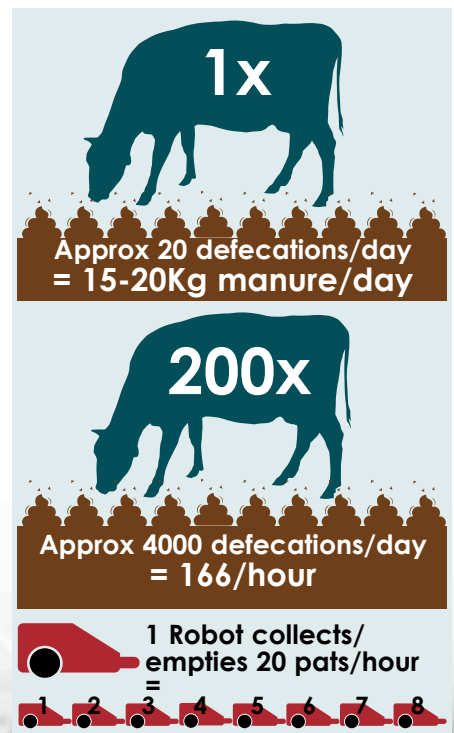
We need to look at pH reduction systems in a similar way to the

Danish model, dealing with the issue at source and removing ammonia issues.

We need to connect slurry management with evaporation technology to condense the material into a more nutrient dense form and reduce the size of tanks/receptors which cost vast sums of money. This technology can also be used to generate heat and power. We also need to look at what works with other species.

For example, in modern Dutch pig production systems technologies have been developed to dissipate the ammonia within the local atmosphere of the building.

Stall and loose housing facilities will be cleaned, bedded, and managed by robotic equipment to collect waste from bedding surfaces, tend the bedding substrate, and provide fresh material as needed.





blog

The following are extracts from our website blog, where Promar staff discuss the major issues facing UK farming. For the full articles and the complete range of blog posts, go to www.promar-international.com/blogs



COVID-19

During this unprecedented, and ever-evolving time, we are committed to serving you in whatever capacity possible while maintaining the health and safety for your operation, your employees and our team. We will follow all health regulations at local and national levels, and plan to keep providing you with service as regulations allow.

In every situation and in our dealings with you we will:

1. Follow local and national health regulations
2. Contact you before visits and only visit with your permission
3. Ensure the safety of our employees and yours as much as possible, with proper hygiene and distances

If you have not already done so, talk to your local Promar representative and/or team to ensure we are carrying out business with you according to your business expectations and as health and safety regulations allow.

Neil Adams
Managing Director



BRITISH AGRICULTURE IS PART OF THE SOLUTION TO THE NET ZERO CHALLENGE

There is no doubt that farming has to take its responsibility in the climate change challenge seriously by delivering reductions in GHG emissions.

Although farming may be an emitter of greenhouse gases, the fact is, it is one of the few industries that is a truly circular or closed-loop system meaning it has the potential to offset emissions too.

This means that farming systems have a significant role to play in absorbing greenhouse gases and helping address climate change. Ultimately, the UK needs to lead the way and show how a net zero approach is achievable and can be delivered on a global scale. And I believe farming can be at the forefront of the charge.

Heather Webb
Senior Environmental Consultant



OBSESSIVE COMPULSIVE FARMING DRIVES PROFITS

Like the Sky cycling team progressive farmers live and breathe the notion of "the aggregation of marginal gains", it is this obsessive attention to detail that drives success.

Working with my clients I like to identify the top two or three things to focus on in order to build a successful business. With a client last week we decided the focal point for farm success would be achieving a 24% pregnancy rate, a daily output of 32 litres per day at a maximum feed rate of 0.34Kg/l. The next, really exciting bit of my job, is working closely with my client to build the plan of activity that will deliver these results. Doing this doesn't guarantee we will hit those goals but it does make it a lot more likely.

Victoria Craig-McFeely
Farm Consultant



Our services

Promar International is a leading provider of consultancy services to dairy farmers, agriculture and food supply chains. Our in-depth knowledge, data and expertise gives us the ability to make business decisions based on fact. Our highly skilled team delivers practical improvement services to meet the needs of customers in all sectors, helping them build more efficient, profitable and sustainable businesses.

To find out more about our comprehensive range of services, go to www.promar-international.com or call us on **01270 616800**.



Herd management

- Nutrition and forage
- Animal health
- Rearing



People

- HR partner
- Training
- Succession and leadership



Milking & infrastructure

- Parlour testing and maintenance
- System design and evaluation
- Mastitis control plan
- Diagnostics



Finance

- Farm business accounts
- Analysis and appraisal
- Benchmarking
- Financial planning
- Funding advice



Environment

- Emission reduction
- Nutrient management
- Compliance



Supply chain

- Contract and agreements
- Market assessments
- Market insight
- Supply chain development
- Industry insight

