Latest news and views from **December 2022**

The Dairy Group

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Farm finance

John Twyford, Senior Dairy Business Consultant

Debt can play two very different roles in the life of farm businesses. Farms that are overwhelmed by debt find that they have very little cash available to meet their monthly commitments, which is very stressful. On the other hand, debt allows farmers to exploit economic opportunities, meet regulatory requirements or weather unexpected circumstances. A healthy relationship with debt is essential for peace of mind and places a farm business in a position of readiness when new opportunities or threats emerge.

There are three really simple but effective measures to establish the health of your business and its relationship with debt. The first is return on tenant's capital. Return in this context means net profit with all finance charges added back to the profit. Tenant's capital refers to all the assets that a tenant would typically own, such as machinery and livestock. By adding back finance charges and considering only tenant-type capital, comparisons between farms can be made regardless of whether they are owned or tenanted and regardless of their level of debt. Farm businesses should target a return of at least 20%.

A second measure, the debt coverage ratio, considers the farm's ability to generate sufficient cash to meet its commitments as well as capital and interest (bank debt) repayments. EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) is a measure of the cash generated by a business and so is a starting point that banks frequently use to calculate the debt coverage ratio. The debt coverage ratio is the cash available to service bank debt divided by total bank debt repayments (capital + interest charges). It is obviously important that this ratio is greater than 1, but a ratio of 1.5 or more is healthy. When banks extend new finance, they typically expect this ratio to be at least 1.25 (including the new debt) after stress testing at higher interest rates (lenders have recently been stress testing at rates as high as 8%) and at lower milk prices. If your debt coverage ratio is already close to or below 1.25, securing finance will be challenging. Banks look at three-year averages from farm accounts, so having a trading history that demonstrates a healthy debt coverage ratio is important otherwise robust forward budgets must be presented that demonstrate strong debt coverage.

The third measure, loan to value, measures the ratio of all debt (HP and bank loans) to the value of land and immovable assets (buildings and improvements to property) and therefore applies to farm owners. To get a proper measure it is important that land and improvements have been recently and professionally valued. Banks will be reluctant to extend new loans to farm businesses that have too much debt relative to the value of the land and buildings. The amount of loan debt as a percentage of land value that banks require to support lending varies,

EDITORIAL

Welcome to our December 2022 newsletter. The successive rises in interest rates this year means that consultants have been reviewing debt and finance provision with clients which is the topic of the 1st article.

The 2nd article covers dairy emissions and MCi developments whilst the 3rd covers measuring and monitoring the efficiency of the milking process.

DEFRA recently announced the details of the Slurry Infrastructure Grant which is covered in the 4th article.

As always, the in brief section covers a range of topics including grants, maize seed, a report from the National Farm Management Conference as well as congratulations to two of our colleagues.

I hope you and your families enjoy a very happy Christmas and best wishes for 2023!

Christine Pedersen

If you would like to discuss any of the topics featured in this newsletter, please speak to your consultant or ring the office on 01823 444488.

but typically ranges between 60 and 70%. If you are already close to this ratio, raising additional finance becomes more difficult.

In summary, it is really important to find a balance for farm debt, a balance that supports the farm in meeting its needs and exploiting opportunities whilst not overwhelming it with worry and placing it in an insecure position with respect to future threats and opportunities. A first step toward achieving balance is to establish your current debt position with confidence, followed up with a plan to re-balance your debt position if necessary. This often involves looking for opportunities to improve farm performance. Establishing your cost of production and benchmarking against similar farms is an important tool for identifying improvement opportunities. Gross margin budgeting is another useful tool that allows you to understand your enterprises better and carry out "what-if" scenario planning to understand the impact of improvements or changes to your business.

John provides financial management advice with a special interest in organic farming. He can be contacted on 07889 720399.

MCi and dairy emissions

Ian Powell, Managing Director

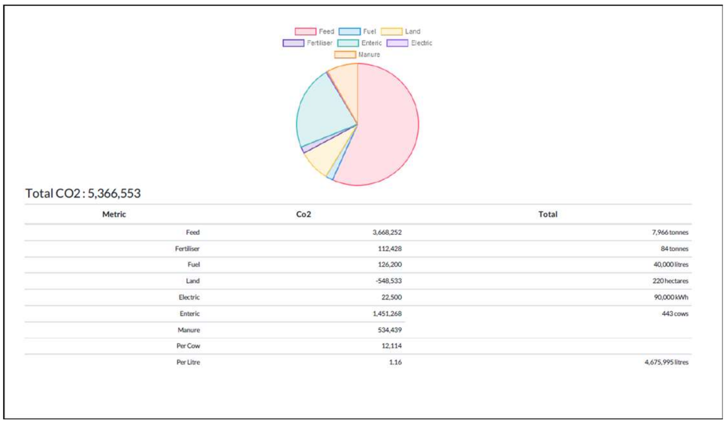
The announcement by Arla to incentivise sustainability provides financial motivation to reduce dairy emissions which could in time be worth around 2.6ppl, with payments starting from 1st August 2023. The 'Arla Sustainability Incentive Model' is a points based system which will pay 0.03 eurocent/kg milk with up to 100 points available from a range of activities which include feed efficiency, land & fertiliser use, protein efficiency, animal robustness, feed monitoring, soy use, biodiversity & carbon farming, manure handling and renewable electricity. No soy or deforestation-free soy would be worth 0.33 eurocents/kg.

From our recent Net Zero fellowship with The Trehane Trust we found that emissions reduction was also consistent with increased business profit. Every dairy business will need to get a better understanding about their current emissions and the opportunities for cost effective reductions. As usual the problem is having the data available to easily calculate emissions from a farm. MCi already allows a dairy farm to record all the data needed for emissions analysis from routine monthly data.

- Livestock numbers imported from CTS
- Feed
- Fertiliser
- Electricity
- Fuel (farm and contractor)

To improve the quality of data provided, farmers are encouraged to ask their feed suppliers (straights and compounds) for the Carbon Footprint (kg CO2eq/tonne) including Land Use Change), including delivery to farm for the products they are supplying.

As part of an Innovate UK REMEDY project working in conjunction with QMMS and Nottingham University we are currently testing a new module in MCi which calculates the carbon footprint from data recorded on MCi for any time period, which also allows for data collection through the MCi APP. An example of the emissions for a typical dairy farm is shown here:



Total CO2 : 5,366,553

Metric	Co2	Total
Feed	3,668,252	7,966 tonnes
Fertiliser	112,428	84 tonnes
Fuel	126,200	40,000 litres
Land	-548,533	220 hectares
Electric	22,500	90,000 kWh
Enteric	1,451,268	443 cows
Manure	534,439	
Per Cow	12,114	
Per Litre	1.16	4,675,995 litres

The advantage of using MCi is the ability to report on the physical actual data for any time period, so that the data can be used for any emissions model.

As part of the REMEDY project the emissions data will then allow 'what if' modelling to look at different scenarios for the dairy business including changes in feed use and animal performance. All the data recording is available now on MCi which will allow the emissions model to be generated.

Ian is responsible for our dairy cost database and MCi and works with clients across southern England. He can be contacted on 07831 617952.

Effective evaluation of milking systems

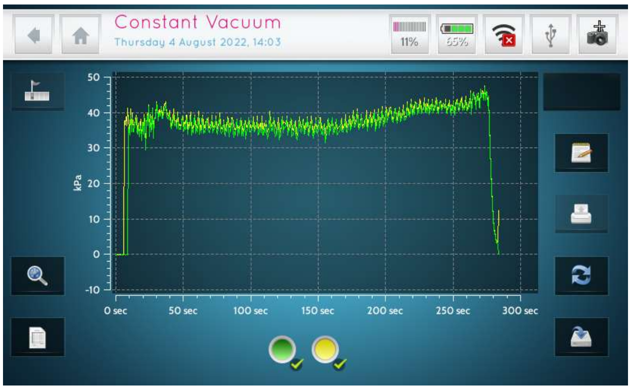
Ian Ohnstad, Milking Technology Specialist

As new milking installations become more complex and the financial consequences of inadequate milking performance become more serious, the technology and methods adopted to measure and monitor the efficiency of the milking process need to adapt at the same speed.

As well as slow, incomplete milking, a poorly installed, operated or maintained milking system can lead to issues of teat condition, mastitis, elevated SCC's and bactoscans. Whilst many farmers consider their annual obligatory static test of the milking equipment to be sufficient, this can be compared to buying a new vehicle without a test drive; a full evaluation of the milking system should involve 'test driving' the parlour and assessing the complex interaction between the machine, the operator and the cow.

The Dairy Group has advocated the benefits of a comprehensive milking time assessment for many years and continues to invest in the latest testing technology to ensure we are able to provide the most complete evaluation of the system performance possible. Using portable in-line milk flow meters to plot the milk flow curve at various milking points, advice can be offered as to the most suitable routine to employ to achieve complete, quick milking.

Remote monitoring of the vacuum level, using simultaneous four channel vacuum recording in the milking cluster (e.g. in the clawpiece, short pulsation tube and liner mouthpiece chamber (front and back teats)) allows a comprehensive analysis of the milking process. This is an example of a short milk tube vacuum recording:



- Are the ACRs set correctly to remove the milking unit promptly at the completion of milk flow?
- Is the vacuum level suitable to achieve quick, complete and gentle milking?
- Is the most suitable liner being used which fits the teats, promotes good teat condition without leading to teat end and barrel congestion.
- Is the vacuum level stable during milking when clusters are applied and removed?
- How well is the inverter working on the variable speed vacuum pump or how sensitive is the vacuum regulator?

All of these questions can be answered by a comprehensive miking time assessment or milking system 'test drive'. Ultimately, an efficient milking system should milk all cows quickly and efficiently, but most importantly protect the integrity and condition of the cow's teats to provide the most effective barrier possible to prevent the introduction of new mastitis infections.

Ian is an internationally recognised specialist in milking technology working throughout the UK and worldwide. He can be contacted on 07774 267900.

Slurry Infrastructure Grant

Christine Pedersen, Principal Consultant

DEFRA recently announced the details of the Slurry Infrastructure Grant. The grant will run over multiple years to give as many farmers as possible in England the chance to upgrade their slurry systems. Grants of £25,000 - £250,000 are available to help replace, build additional or expand existing slurry stores to provide 6 months' storage You can apply for a Slurry Infrastructure grant if your farming system already produces slurry, and you farm dairy, beef or pigs. The grant can be used for slurry stores including tanks, lagoons and concrete stores fitted with impermeable covers (fixed or floating) or large permanent slurry bags. You cannot use the Slurry Infrastructure Grant for a cover alone although you can apply for a self-supporting or floating cover through Countryside Stewardship. The Slurry Infrastructure Grant will also fund items necessary for the basic functioning of new or expanded slurry stores, such as reception pits, slurry pumps and agitators. The grant uses standard costs i.e. a fixed contribution towards the cost of the items you need and the storage you plan to build.

Stage 1 of the application process: Before you complete the online checker, you must have a good understanding of your current and future slurry storage requirements. The AHDB Slurry Wizard tool (developed by The Dairy Group) can help you do this. Then, use the online checker to see if you're eligible and to check how much grant you might get, based on your storage needs. If demand is high, RPA will prioritise projects that have the greatest environmental benefit, based on location. The online checker will open on 6 December 2022 and close on 31 January 2023.

Stage 2 of the application process: If you're eligible and your project is prioritised due to its environmental benefits, you'll be invited to make a full application which will result in a grant offer if it is eligible and you meet all the conditions.

Your consultant will be able to help you through the application process and understand the conditions of the grant. The first step is to calculate your storage requirements.

Christine provides nutrition, dairy technical and business management advice to clients across southern England. She can be contacted on 07831 172940.

News in brief...........

Sustainable Farming Incentive (SFI) is open for applications and the standards remain unchanged, predominantly focusing on soil management. You can apply for SFI online and there is no closing date for applications. We are expecting additional standards to be added in 2023 which will focus on hedgerow management and nutrient planning.

We expect **Countryside Stewardship** (CS) to open for applications early in 2023 with a start date of 1/1/24. CS includes Higher Tier, Mid Tier and Capital Grants. We are recommending that clients review capital grants available through CS and compare the revenue that could be achieved through Mid Tier to SFI. The future of CS is under review and its relationship with SFI.

Due to drought, there is expected to be a shortage of **maize seed**, particularly later maturing AD varieties this year. We work with an independent agronomy group to source maize seed for our clients and are expecting prices to be released shortly. Our recommendation is to confirm maize areas, select appropriate varieties and secure seed as soon as prices become available. Your consultant can help you compare varieties and select those that offer best value for money.

Senior Dairy Business Consultant Susie Felix represented The Dairy Group at the **Institute of Agricultural Management's National Farm Management Conference** in London in November. This conference is attended by 400 delegates representing farmers, farm managers, professional organisations and Government bodies. Some of the key points discussed that maybe of interest to clients include:

- Food security in the UK is not just about producing food but must also align alongside other policy and criteria such as environmental policy, fuel and energy security, Net Zero policy, social policy and social affordability.
- Natural Capital, that being the part of nature that directly or indirectly underpins values for the environment, ecosystems, people and the economy, remains a key area for farmers to explore to add an additional income stream. This is not just about how much food can one field produce, but also includes how much carbon can be stored, the value of the biodiversity in the field, water & soil quality and hedgerow management. Therefore, one field could provide more income and value to the farm business than solely relying on livestock or crop production.

Finally, **congratulations** to two consultants from The Dairy Group:

Director of The Dairy Group **Ian Ohnstad** was recently awarded a Fellowship of the Royal Agricultural Society at the House of Lords for his contribution to milk harvesting and milk quality in the UK.

Independent breeding consultant **Kevin Lane** has been invited to join the UK Genetics Advisory Forum (GAF). This forum made up of industry and farmer representatives, evaluates industry data to formulate indexes and modelling to improve the bull proofs and offer assistance through the AHDB portal and the farming press to educate and inform breeding decisions.

The Dairy Group consultants work across the UK providing a wide range of independent dairy technical and business advice. Please contact Karen or Anne in our admin team on 01823 444488 or visit our website for further information or to contact our consultants.

Email: enquiries@thedairygroup.co.uk

Website: www.thedairygroup.co.uk, **Dairy herd management: www.dairy-mci.com**

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