

## Food chain sustainability challenged

Agri-food consultancy Promar International, a Genus business, claims that 80% of the food and drink supply chain is not yet committed to sustainable production. Therefore, it has launched a whitepaper calling for radical change.

The whitepaper notes that agricultural outputs will need to increase by 20% every decade for the next 40 years to meet rising demand, but warns the industry is not yet in a position to achieve this sustainably. It points out that 23% of carbon emissions are derived from the agri-food sector alone.

The whitepaper uses a case study from McDonalds UK to highlight how the supply chain is investing in change, and also to show what improvements are possible. McDonalds UK invested in its beef supply chain to successfully reduce on-farm emissions by 23%, demonstrating that sustainable food and drink production can be part of a successful business model.

Tom Gill, head of environment at Promar International, suggests that it is vital to prioritise a "total supply chain approach" to continue to produce affordable and nutritious goods in a responsible, secure, resilient and sustainable way. He says: "The increased pressure to produce more food and drink affects everyone in the supply chain, from farmers through to retailers. Consumer attitudes are changing, and it has been reported that around 70% of consumers feel that large companies aren't doing enough to improve sustainability.

"Change in the food supply chain is primarily driven by the customer, and the sustainability agenda should be no different."

Promar launched the whitepaper, which included contributions from the Carbon Trust, at edie Live at the NEC in Birmingham. It is now available online at [Promar-International.com](http://Promar-International.com).

### New whitepaper challenges sustainability in the agri-food sector

New whitepaper challenges sustainability in the agri-food sector : A whitepaper launched today by [Promar International](#) is calling for radical change, as it reports that 80 percent of the food and drink supply chain is yet to commit to sustainable production.

According to the whitepaper, agricultural outputs will need to increase by 20 percent every decade for the next 40 years to meet demand. And currently, the industry is not in a position to achieve this sustainably, with 23 percent of carbon emissions being derived from the sector alone.

Tom Gill, head of environment at [Promar International](#), explains why it is vital to prioritise a 'total supply chain approach' to continue to produce affordable and nutritious goods in a responsible, secure, resilient and sustainable way.

"The increased pressure to produce more food and drink affects everyone in the supply chain, from farmers through to retailers," he explains.

"Consumer attitudes are changing, and it has been reported that around 70 percent of consumers feel that large companies aren't doing enough to improve sustainability.

"Change in the food supply chain is primarily driven by the customer, and the sustainability agenda should be no different."

The whitepaper, which was contributed to by the Carbon Trust, uses a case study from McDonald's UK to highlight where the supply chain is investing in change and to demonstrate the improvement in efficiencies that can be achieved. Through direct investment in their beef supply chain, McDonald's UK has reduced on-farm emissions by 23%. Proving that sustainable food and drink production can form part of a profitable and successful business model.

The whitepaper was launched at edie Live at the NEC in Birmingham on 23 May 2017, and is now available to download online at [Promar-International.com](#).

The Grocer

June 2017

Matthew Brennan

# Sustainable methods 'vital' to hike outputs

Daniel Woolfson

**T**he agrifood sector is failing to commit to 'vital' sustainable production methods in the face of surging global demand, a new report claims.

Some 80% of the supply chain is yet to commit to sustainable practices, despite global agricultural outputs needing to increase by 20% every decade for the next 40 years, according to a white paper by agricultural consultancy [Promar International](#).

For the retail sector, using data to create supply chain efficiencies and improve sustainability could ultimately reduce resource demand, says Matthew Brennan, senior environmental consultant at [Promar](#).

"Many companies that manage supply chains work in isolation, and therefore industries are not collating or sharing data," he says. "Without the transparent collection and collation of data, it's impossible to have a proper understanding of supply chains.

"Consumers are pushing



The report urges industries to share and collate data on supply chains

retailers for change. The sustainability of a product on the shelf is affected by the entire supply chain. A collaborative approach to drive data collection, collation and interpretation is the only way forward."

The report highlights McDonald's as 'pioneering resilience and responsibility' in the supply chain. It purchases ingredients from more than 17,500 British and Irish farmers each year, sources all tea and coffee from Rainforest Alliance

producers, and ensures 100% of potatoes used in its French Fries are grown in the UK.

"Retailers have a duty to inform consumers about what is being done to drive sustainable supply," says Brennan. "They must provide direct clarity so consumers can be reassured that they're buying sustainably sourced produce. It's also the best opportunity to reduce costs, help manage cost of production and maintain costs for the consumer."



# Large investment drives full review of farm system

**When the Goodwin family, who farm at Hollybeds Farm, Earls Croome, Worcestershire, considered expanding their dairy herd two things became clear. The first was that it would require a substantial investment and the second was that major changes to the system would be required to maximise the return on investment. *British Dairying* reports.**

David and Sandra Goodwin and their son Tom farm 323ha (800 acres) with a mix of owned and rented land. The home farm is divided by the busy A38 which has an impact on the availability of land for grazing. The mixed farm carries 280 dairy cows plus followers and a barley beef enterprise with cropping comprising cereals, fodder beet, lucerne and maize. Grassland is divided between around 32ha of two year leys and 100ha of permanent pasture including some river meadows.



*The main shed houses two groups of cows in 236 cubicles.*

## Dairy vital to business

Dairying has been at the heart of the business for over 50 years but the last major investment had been in the 1970s when David installed a 7:14 herringbone parlour for the then herd of 80 cows. The unit had loose housing with cows fed in the parlour.

Over time the herd had expanded to 150 cows putting considerable pressure on the system. Milking times had become extended and despite the addition of ACRs and a cluster flushing system cell counts and mastitis were an on-going issue. Calving facilities were overstretched and trough

space was tight for the TMR and buffer feeding.

"The cows were managed as one milking group," Tom explains. "We grazed in the summer and like to see cows out, but the grazing block is on quite light land and is prone to drying out. With only 40ha accessible for grazing we can't extend the grazing block."

To create an alternative income stream, David had established an intensive beef system in the 1960s. At the time the herd was a flying herd with all cows served to Herefords, then later to Blonde d'Aquitaine bulls. Calves were reared on infirm and high cell

count cows before moving onto a system utilising homegrown cereals. The unit now has 140 spaces with bulls finishing at 15 months and heifers at around 13 months old.

Replacements were purchased from a neighbouring farm, but eight years ago they started to rear replacements using sexed semen on heifers while cows were still served with natural service bulls. Heifers were bred using Genus ABS RMS.

"The business was at a crossroads," Tom admits. "We wanted to remain a mixed farm and despite the challenges we knew from

benchmarking and other activities that dairying was still our most profitable enterprise. It also drove the beef system. The issue was what we should do about it moving forward.

"We knew the current unit had run its course and that any expansion would require not only a significant investment but also a review of the system as we would not be able to graze an expanded herd on the available grazing platform and would also need to drive efficiency."

## Evaluating the options

In April 2012 they started to evaluate options and formulate a plan working with their Promar consultant Caroline Groves. Around this time, 31ha of land came available three miles away and the decision was taken to buy the land to allow the herd to expand without having to downsize the arable enterprises.

"The land purchase put the herd expansion plan on hold for a while but eventually the decision was made to invest in a new unit on a greenfield site which would allow growth to around 300 cows," Caroline explains.

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*From left to right are Caroline Groves from Promar, Tom Goodwin, Ryan Archer from Genus ABS and Sandra Goodwin.*

Sited just below the existing unit, the new facility is made up of two buildings. The first contains the 24:24 parlour, calving facilities and a fresh cow group. The second building contains 236 cubicles split in two groups around a central feed passage.

Dry cow accommodation is in the old loose housing and heifers will be housed here too.

and while yield remains over 28 litres/day. The high yielders will be housed day and night, while low yielders will continue to graze but will be housed at night.

"It is harder to manage high yielders at grazing and as we want to drive efficiency and make the most of the grazing available it will suit us to house the high yielders and graze the lows."

#### Planning flexibility key

"Flexibility was a key part of the planning," Caroline explains. "The herd can now be split into three milking groups with a fresh group, highs and lows. There is no feeding in the parlour but we can now vary the TMR by group. Locking yokes have been installed in the main cubicle building. The pit has been built to allow the parlour to be easily extended to a 28:28.

Tom plans to keep cows in the fresh group for up to 21 days depending on space availability, but certainly until cows are settled into lactation. The high group will house cows until confirmed in calf

#### Building cow numbers

The herd moved into the new unit in September 2016 and Tom purchased a total of 108 cows including 60 French heifers, 20 Dutch animals with the remainder sourced from local farmers.

Caroline Groves says the objectives was to ease the move into the new building and get cows settled.

"When the cows moved into the building we continued to manage them as one group. The whole herd was fed on a single diet comprising grass silage, maize silage, fodder beet, blend, rolled wheat, sugar beet pulp and straw. They were fed once a day using

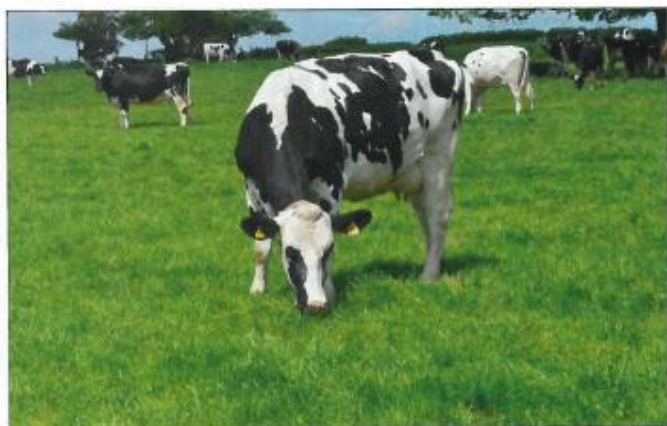
*Continued on page 42.*



*The new 24:24 milking parlour and handling facilities.*

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*Only low yielders will graze, making full use of restricted grazing.*

a Keenan Pace feeder with feed pushed up six times a day.

"We hadn't budgeted for yields to improve and just wanted the cows to settle. In early 2017 the herd was split into the high and low groups with two TMRs fed. The high diet was formulated for M+35 litres with the lows on M+25. Splitting the herd reduced feed costs by £1,000 per month, realising an immediate benefit from the flexibility afforded by the new unit."

Another significant benefit Tom has seen is a substantial re-

duction in cell counts and clinical mastitis which means he has been able to adopt a routine of selective dry cow therapy.

"When we were milking through the old parlour cell counts were running at around 300, but we are now down at 146. We were seeing 15 mastitis cases per month from 150 cows, but now it is one to two cases and we have 280 cows.

"This has allowed us to greatly reduce the use of dry cow tubes. Cows with cells below 50 and with no clinical cases will only get a teat sealant. Currently around 25% of



*Locking yokes were installed and have simplified AI and vet visits.*

cows are getting no antibiotics and we expect this to increase, reducing costs and reducing our total antibiotic use on the farm."

#### Transition management

Drying off cows and transition management will be a major area in the coming months as calving pattern has been significantly tightened following a decision to use RMS on the cows when they moved into the new unit. Over 170 cows will calve between June and November.

"We had been really impressed with the results of RMS on the heifers and I was uncomfortable about using bulls on the cows, in part due to Health and Safety, but mainly because you could never be sure they were working or how effective they were. We had regular problems with laminitis as the bulls were on the dairy diet which isn't ideal for their feet or for semen quality.

"We had a lot of extended lactations which would be holding yields back and could affect the flow of calves into the beef unit, so

we decided we needed to change our approach. The locking yokes would mean cows can be served without having to be shut away from the herd, making AI more attractive."

#### Addressing herd fertility

Following discussions with Ryan Archer, Genus ABS sales adviser, they started RMS in September 2016 and the results have been rapid and significant. RMS technician Andy Baddeley visits the farm daily and initially the challenge was catching all the open cows, many of which were over 100 days in milk.

"Andy was serving up to 20 cows a day initially but things have settled down," Ryan Archer explains. "We have seen a marked improvement in all the fertility KPIs (see table) and improvements continue to be made as we move to the end of the first full year on RMS. We are now working on a 50 day VWP to consolidate the improvements already made.

"Andy works closely with the farm's vet, Olly Morrison of

#### **Fertility performance at Hollybeds Farm**

	Target	Rolling average	Three month average to Feb 2017
Cow numbers		262	258
Heat detection rate	>50-60%	61%	76%
21 day pregnancy rate	20%	24%	28%
Conception rate	>33%	37%	42%
Conception rate at 50-90 DIM	>35%	30%	48%
% of herd served by 80 DIM	>80%	78%	83%
% pregnant at 100 days	>50%	35%	46%
% open at 250 DIM	<10%	15%	7%

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Meadow Farm Vets and produces all the vet lists, ensuring cows are PD'd after 30 to 40 days and that all cows not seen cycling and repeat breeders are checked over quickly."

All heifers and the top 25% of cows are being served to dairy semen, utilising the Genus ABS (GMS) Mating Programme to ensure sufficient replacements. Blond d'Aquitaine semen is then used to produce sufficient animals for the beef unit before switching to British Blue to produce cross bred calves which will be sold.

### Reviewing progress

Fertility performance is discussed monthly with the vet, Andy Baddeley and Caroline Groves all involved in reviewing progress.

"The common information means everyone has a clear picture of progress," Tom comments. "This has been important as we have been aware of the surge in calving due as a result of RMS catching the large number of open cows when Andy started on the



*The top building houses the parlour, handling facilities and fresh cow group with the main cubicle accommodation in the lower shed.*

farm. Far off dry cows will graze away from the unit, coming back at three weeks pre-calving, moving onto a diet formulated by Caroline. We will use Kexxtone boluses on targeted cows as a management tool.

"All cows will be dosed with Reviva immediately post-calving and will get a calcium bolus if necessary. The fresh group means we can keep a close eye on these cows to make sure they are settled onto their feed and clear of any

problems before moving into the main group."

Attention to detail and a strong team are helping Tom Goodwin get the most from the investment in the new unit.

"It is very easy to anticipate or expect production and efficiency will increase in a new unit and to budget for this, but commonly we see difficulties in managing the transition which can mean performance is affected," Caroline Groves observes.

"We did not budget an increase in yield but are hopeful that the management changes Tom has implemented will all help deliver better performance. Certainly the reduced mastitis problems, the greatly improved fertility and ability to split the cows are all helping. Furthermore, the herd is currently 70% heifers so we should see performance improve as the herd matures.

### Controlling costs

"That said, it is important that costs are controlled to maximise margins and ensure repayments can be managed. Tom benchmarks all costs through a scheme operated by local accountants, Crowthers, and we are already seeing costs reduce since the cows went into the new unit. For example vet costs are now 0.98ppl, 7% down on last year.

"The whole business is fertility driven and RMS is providing a strong foundation to allow us to exploit the potential of the herd and the facility."

Farmers Guardian

June 2017

Nigel Davies

## Dairy margins recovering but uncertainty remains

MARGINS were 'beginning to recover' for dairy farmers in April 2017 but currency volatility's effect on feed prices was causing uncertainty, according to Promar.

Promar Milkfinder results for April 2017 showed a £37 increase in margin per cow year on year, due to an improved milk price, lower feed use and a strong milk price to feed price ratio.

Milk yield per cow also improved by almost three quarters of a litre per cow.

Milk prices have increased by 4.54ppl, with margin per litre increasing by a similar amount year on year.

However, feed costs increased by £8/tonne partly due to currency volatility.

Nigel Davies, national consultancy manager at Promar, said national production had continued to rise and the gap to last year's production was 'now closed'.

"The key issue is how well cows could graze this summer in the light of variable, often low growth rates," he said.

"First cut results will give the first insight into winter prospects but currency volatility is almost certain to impact on feed costs making for potentially uncertain times."



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NIGEL DAVIES