

Farm benchmarking is important, but ensuring the right things are benchmarked is invaluable

SAOS's Robert Logan explains why, without insight, data is just 'noise'

Never have we had more information available to us. Keynote speaker at the SAOS 2020 Annual Conference in February, Anna Woodley from Agrimetrics, noted that more data has been generated in the last ten years than the in the rest of time before that. The conference was a tremendously positive event, with the topic inviting delegates to consider the value of on-farm data capture.

Much is made about the potential of data. Whilst it can all seem rather removed from daily farming life, large and successful examples already exist such as livestock breeding, cereal varietal testing, nutrient management and yield mapping. Meanwhile, the reducing cost of existing, and new, data-logging technologies make data capture an increasing and more accessible trend for all.

But to what end? Our headline conference speaker, Billy Tiller of GiSC (a Texan farm data co-operative), presented working examples where groups of American farmers were harnessing the potential from their collective data recording and analysis.

A key message, however, was that 'the only goal of data is to find solutions'. This seems obvious, right? But large and increasing amounts of data capture can be overwhelming or potentially distracting. This brings us to realise that the magic is not in the complexity of technology, but in its correct application.

Benchmark to define 'good'

To harness the full benefits from data, we must first get the basics right. This enables the less 'in vogue' form of analysis – farm benchmarking – to come into its own and means that it is as relevant today as ever.

We all know farming needs to transform to meet the many challenges it faces - lack of profitability, reducing support, climate emergency, changing consumer expectations, just for starters. The question for most farmers is where to start? Without knowing your technical performance, production costs, your strengths and weaknesses – where do you put your effort? This is the real value of benchmarking - it shows where you're at now. From this point, it's easy to identify the 'low hanging fruit', the things that provide the best return for your effort.

Business goals will vary with time but should remain measurable and given a deadline. Possible goals will vary but may include a defined level of expansion, delivering more family time, reducing debt, lowering costs, succession planning, reinvestment. Increasing profit, for example, is not a goal as such, but tends to be the necessary function to delivering personal and business objectives/goals.

Business and technical targets are then required to meet those goals. In other words, we need to become confident in determining how we define 'good' within our own farming businesses.

This is no different from the journey of continuous improvement we go on with Scotland's farm co-operatives and farmer groups, setting challenging targets based on their business objectives, identifying actions, then reviewing them against actual performance. It is the only way to progress.

Benchmarking

Business benchmarking is the process of capturing specific technical and/or financial performance information to create a baseline for comparison on the year or against similar farm types.

Informal benchmarking happens all the time – observing or hearing of near neighbours achieving high yields, or adopting a new cultivation method. What this does not do is appraise whether it added profit or made life altogether simpler.

One of the simplest methods of benchmarking is to compare year on year technical and business performance within the business. There is also value in comparing farm performance against similar businesses or enterprise types - but beware of inadvertently converging on any particular production system, rather than remaining true to your own business and personal objectives. Benchmarking needs interpretation.

The benchmarking process adds most value if targets are created, and aligned, to realistic but challenging business and personal goals. This is much more effective in driving progress. Writing these things down makes them more likely to be acted on too. Clearly defined targets are easier for the whole farm team to focus on.

Benchmarking groups are also useful in providing that additional level of constructive challenge and learning. Being committed to a group provides a discipline that will sustain momentum.

The power of defined goals in Scotland's Pig Sector

Driven by a combined welfare and economic ambition to be amongst the healthiest pig herds in the world, Scotland's pig farmers have achieved this through collective group benchmarking and delivery through individual attention to detail.

Improved herd health has seen national performance jump 30% in only ten years. This is something that could not be achieved without ambition and determination, driven through recording, benchmarking, clear targets, group discussion and shared vision.

It is estimated that fewer than 20% of Scottish farmers currently benchmark and actively set targets. This gives a good idea of the scale of the opportunity.



One of the benefits of being a member of a co-op, particularly a marketing co-op, is that they can do a lot of valuable benchmarking for you. Not only will members see their own key metrics, but they also see how they compare against the mean, and the top 25% across all members. This is a very powerful management tool.

In Conclusion

Time will demonstrate how data can offer a new business dimension, especially if aggregated from across farms, and remains farmer controlled. Some of the highest potential value – in terms of economic, animal welfare, safety, environmental or social goals – have still to be identified. And that is where it gets exciting. First though, let's quickly ensure our farming businesses are fundamentally sound and you can take confidence in direction of travel through goal setting.

Sensor Technologies Enabling Scotland's Farms of the Future

Three focus farms have been chosen to be part of a new 'Digital Farm' project, led by SAOS, and delivered in partnership with SmartRural, Scottish Natural Heritage and RSABI.

The one year project will look at how low-cost sensor technologies can be used across different farm types to capture data that will facilitate better business decision making and provide solutions to important challenges facing the sector, including health and safety and management of the natural environment. The work is funded by the Scottish Government and the European Union through the SRDP Knowledge Transfer and Innovation Fund (KTIF).

Jim Booth, Project Lead and Head of Co-op Development at SAOS explains: "Farmers are facing a future in which agricultural subsidies are likely to decrease and have a greater emphasis on rewarding practices that protect and enhance the natural environment.



A SmartRural mast in situ on farm.

"Parallel to this is a growing interest, at a consumer level, in knowing that the food they consume is of high quality, known provenance and has been produced in a manner that is respectful of the environment. It is imperative that Scottish farmers avail themselves of new technologies that allow them to meet the challenge of becoming more productive and profitable, whilst at the same time preserving and enhancing Scotland's natural capital."

Project partner SmartRural has installed LoRaWAN networks on the three Scottish family farms. Working closely with the farmers, a bespoke package of sensors will be installed on each farm to capture a range of data that will be used as the basis for improved decision making across the enterprise."

In addition to learnings from data recording and sensors around farm to improve technical performance, an area of significant interest will be how sensors can be used to provide insights that allow for better management of natural capital.

Transfer of knowledge will be enhanced by showcasing the technologies and their benefits to other Scottish farmers to raise awareness and increase uptake. Supporting this will be a programme of open farm events, case studies and short videos.

Focus farmers involved in the project are Neil and Debbie McGowan, Incheoch Farm in Alyth, whose main enterprise is suckler cows and breeding ewes; Russell and Hilary Brown, Inverdoval Farm, Newport-on-Tay who operate intensive arable units focusing on cereals and potatoes; and Peter and Elaine Robertson, Ednie Farm, St Fergus, who have a mixed farm, a large area of woodland, mixed habitats and a major renewable energy business.

Scotland's experts on farmer co-ops and food industry collaboration, At SAOS we work with food and farming businesses to make them more profitable, competitive and sustainable.

For more information go to: www.saos.coop or call us on 0131 472 4100

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