

DATA INSIGHT: what is your flock telling you?

A poultry farm generates a lot of data, day in day out, seven days a week, 52 weeks a year. Daily water and feed intake, egg production, first quality eggs versus second grade eggs are just few of the data being recorded on the poultry farm. This data can be of great value to your management, as it might tell you a lot.

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Managing this data can be a challenge, as it is different compared to managing your flock. Fortunately, more and more innovations in data technology and data collection have become available to the egg and poultry industry. They not only help you to store the data in a structured way, but also help to visualise the data, resulting in better data analyses.

Data collection

Pre-Covid-19, technical poultry specialists, such as poultry feed representatives, veterinarians, and poultry stock suppliers would regularly visit the farm and advise on the management of your flock. But with the presence of Covid-19 together with the avian influenza, it is more difficult than ever to physically visit farms without encountering any health and biosecurity issues. Data collection and data sharing has proven to be extremely valuable in these times. When data is collected in a standardised way, it is easier for the



egg producer and the technical experts to understand the actual situation at the farm. In large parts of the world, data is still collected by making use of pen and paper.

Recently, we developed an application (PRIMA) in which most of the day-to-day data generated at the farm can be stored easily on your mobile phone or tablet. This structured way of data collection, and data visualisation allows you to be in control of your flock(s) 24/7.

Remote access

Online data does not just allow you to be 24/7 in control of your flock(s), it will also help you to keep all your stakeholders in the loop via remote access. Remote access allows your technical support providers to continue doing their job when the situation does not allow for on-farm visits.

It is well known that regular farm visits to have an eye on the flock and their performance indicators are very important to verify that the flock is doing well in terms of health and productivity, and that they will continue to do so in the future. When you grant technicians the access to your data, they can serve

as an extra pair of critical eyes looking over your shoulders.

They can support and advise you on the farm management, setting procedures and help you to identify the early warnings that your flock is giving you. This digital data sharing functionality of PRIMA can help you to steer in time and save money through the entire production cycle.

Data analysis

Accurately collecting data is essential, but if you want to make the best use of this data you need to analyse and interpret the data coming from your flock. Today's available applications visualise the data as they are producing descriptive graphs and visuals, often plotted against the breed standard.

Visualisation will help to better understand how your flock is performing and responding to your management. The more advanced tools will provide alerts and warnings if unexpected drops in egg production, water consumption or feed intake occur, but also when mortality shows a significant increase. These tools can offer you timely insight into what is happening with your flock.

It is important to remember that poultry farmers work with living animals, with all chickens present in the house being unique creatures that can respond differently to their environment and the management interventions.

Understanding that proper data analyses is only possible when accurate and reliable data are collected is crucial in modern

poultry farming. Data collection is an essential part of good day-to-day management, collecting in a structured way daily and quickly scanning the data will detect the early warnings that the flock is telling you. Collecting and registering the data at the same time will improve the stability of the data greatly, resulting in less fluctuating results.

The benefit of today's available tools is that your data is stored in a structured way, allowing you to compare easily between flocks, whether you have multiple houses at the same time in production, or from previous flocks stored in the system. Consequently, you can review and finetune your management, as you can see what is working and what is not.

Data is getting more substantial, but never forget the biological understanding of this data. Chickens are living creatures, and you must observe the flock's behaviour daily, as not all information your flock is telling you can be captured in data.

Benefit to the entire egg sector

The data is a precious asset not only for egg producers but also for the entire egg industry, as it can play a prominent role in the overall improvement of poultry farming. For example, the breeding companies can benefit from accurate field data as it represents a 'window' looking at breed performance on a global scale.

Such insights help to objectively identify the challenges laying hens face in the various parts of the world with the result of adjusting the future breeding goals.

Not only breeding companies but also poultry feed and additives suppliers, housing equipment manufacturers, and pharmaceutical companies can benefit from data collection used for product improvement and new innovations.

Finally, sharing data and communicating more efficiently between the different stakeholders, resulting in successful results at the farm level, will make the egg sector more resilient and sustainable. ■

It is preferable to collect data daily and simultaneously enter the information in your data collection application. This will allow you to better understand what is going on in the poultry house at that moment. When you collect data on a weekly basis, you are always running behind the facts. From the human perspective, one week does not seem to be too long, but from the birds' perspective it is a significant time, especially when you rear laying hens or keep broilers.