Sustainability: what does it mean for an Irish dairy vet?

In a follow-up to last month's article on sustainability and the Irish dairy industry, Shane McElroy BVSc MRCVS CertDHH, Glanbia veterinary practitioner, provides an insight into the role of animal health and welfare in sustainability programmes worldwide, and looks at what it means for dairy clients of Irish vet practices to be participants in the Bord Bia SDAS and GII Open Source programmes

INTRODUCTION

The structure of the international dairy market has changed over the past decade, and with it the environment in which milk suppliers, their advisers and everyone in the dairy industry must operate. There is a growing and powerful global sustainability agenda that is market-driven, customer-led and consumer-focused.

SUSTAINABILITY: WHAT DOES IT MEAN?

Sustainability has different meanings from different perspectives. What defines a business (including a farm or veterinary practice), process or any supply chain as sustainable, is its ability to endure and be successful over time. The economic viability of a business or process is therefore very important, but there are many other factors, largely dependent on the type of business, that will affect its survivability over time.

Sustainability in the longer term means that every business has a responsibility to the needs of its customers and suppliers. Veterinary practitioners play an important role in Irish food production but, as with any business, responding to the often changing needs of the customer is key to the long-term sustainability of the veterinary practice.

BORD BIA SUSTAINABLE DAIRY ASSURANCE SCHEME

Increasingly, purchasers of Irish dairy products are requiring proof that the milk is produced sustainably, on farms that are certified members of an accredited quality-assurance scheme. The Sustainable Dairy Assurance Scheme (SDAS) has been developed by Bord Bia, industry, producers and processors, and other technical experts.

The criteria for the scheme have been established, taking into account Hazard Analysis and Critical Control Point (HACCP) principles as they apply to the production of milk on a farm.

The SDAS is an accredited scheme and has been designed to assess and record data to demonstrate the sustainability of Irish dairying in a systematic way at individual farm level. It provides the necessary proof to customers of dairy products that milk has been produced under the sustainability and quality-assurance criteria.

The farm visit is conducted by an independent auditor on every member's farm at 18-month intervals, and a report is produced on the performance of the farm under these criteria.

The two main components of the SDAS are:

- Quality assurance – the scheme is accredited to the European Standard for Product Certification (ISO2 17065: 2012). During the Bord Bia farm visit, the farmer's compliance in areas relating to legal, quality and customer requirements, including farm safety, food safety, traceability and animal health and welfare, are assessed; and
- Sustainability – during the farm visit, the auditor will collect additional information about the farming enterprise that will enable milk processors to substantiate claims with regard to carbon footprint, water use, etc. This information will be used by Bord Bia to assess the environmental sustainability performance of the farm.

SDAS commits Irish dairy farmers to best practice in:

- Animal identification and traceability;
- Animal health, welfare and disease control;
- Safe farming practices;
- Land management and protection of waterways; and
- Production of safe milk.

OPEN SOURCE SUSTAINABILITY PROGRAMME

Following a €235m investment programme in milk processing, and the recent commissioning of Europe's most modern dairy processing facility at Belview, in south Kilkenny, Glanbia Ingredients Ireland (GII) is now focused on marketing the expanded volumes of the highest-quality dairy products and ensuring that milk suppliers get the supports they need to produce the extra volumes of milk.

To meet the specific needs of customers, GII has developed an on-farm sustainability programme called 'Open Source'. The GII Open Source sustainable dairy programme builds upon the Bord Bia scheme and includes

a more focused approach to herd-health management and other areas of importance to dairy customers.
GII is acutely aware of the need for sustainable farm practices to promote the growth in milk output that suppliers have committed to. To this end, the GII Open Source programme is well resourced, with a team of sustainability advisers who are supporting GII milk suppliers through the sustainability audit process.
This team of advisers will work alongside the GII farm-development and milk-quality teams, and together will support milk suppliers to produce expanded volumes of the highest-quality raw milk in an efficient and sustainable way.
The scope of SDAS extends to the following areas relating to animal health and welfare:

- Animal feeds and water;
- Specified animal management tasks;
- Housing and transport;
- Herd health planning and biosecurity;
- Animal remedies and record-keeping; and
- Milk supplier capability and competence.

ROLE OF ANIMAL HEALTH AND WELFARE

Animal health and welfare plays a central role in sustainability programmes worldwide. The reason for this is twofold: firstly, consumers want to ensure that the animals from which their food is produced are farmed in a responsible way, with welfare needs being fully met; and, secondly, the health of animals in any farming system will have a direct effect on their growth or production performance. Therefore, healthier animals will produce food more efficiently, making the farming enterprise more sustainable over time.
Important animal health areas of SDAS include:

- Record-keeping and traceability – records of purchase, usage and prescriptions for all animal remedies must be retained for five years;
- Prudent and targeted use of animal remedies, particularly antibiotics and anthelmintics;
- Herd health management and annual health plan;
- Producer capability and competence in specific animal management tasks – disbudding, castrations, etc.; and
- Records of mortality and major health issues, with remedial actions identified for improvement.

HERD–HEALTH MANAGEMENT IN DAIRY FARM SUSTAINABILITY

The health and welfare of the animals in a dairy herd are critical to farm output performance. As convertors of grass and other feeds to milk solids, the health of cows has the potential to be the biggest blocker to farm efficiency, profitability and, therefore, sustainability. Healthy herds, managed using preventative medicine to control clinical and subclinical losses, will be the most efficient at producing milk from feed inputs.
Proactive herd-health management will allow for optimal production and, therefore, farm profitability; but it is also this approach to animal health and welfare that is important to dairy product customers and consumers.
While herd-health management services will be valuable to the farmer's business, an important role for vets engaging in this proactive health management work, and to make it sustainable, is to show the value that it creates for the farm business and to be remunerated for it accordingly.

IMPROVING HERD PERFORMANCE AND FARM PROFITABILITY: THE VET'S ROLE

Many dairy farmers in Ireland have indicated their intention to expand their dairy businesses and increase milk production. While herd expansion will likely lead to increased milk production, it is not a given that this will lead to increased profits. It is the recurring message of many in the Irish dairy industry, of late, that dairy farms must improve efficiency before they expand.
While generic animal health information is increasingly available to farmers from many sources, the role of the private veterinary practitioner (PVP) has not, and will not, change with respect to the unique ability of the local vet to provide specific animal health advice to an individual herd, based on in-depth herd knowledge. The importance of this unique partnership between vet and herd-owner will increase as herds expand, and the role of the vet in creating improved farm efficiency through herd-health management will be key to sustainable dairy farm businesses.
As continuing professional development (CPD) has become the norm for veterinary practitioners in many countries, milk suppliers to a number of processors, particularly UK retailers, are increasingly required to attend training courses and other educational events as part of their milk-supply contract. While this is not currently an SDAS requirement, it is a recommendation to farmers in the GII Open Source programme. Information meetings, on-farm workshops and lunchtime meetings are being organised by many Irish vet practices on important animal health topics – and are appreciated by farmers.

PRODUCTION DISEASES AND THEIR ROLE IN HERD PERFORMANCE

Where an infectious disease has been shown to be a risk on a particular farm, the benefit of using vaccination as a control method is well recognised. What is more likely to be of greater threat to farm efficiency, though, is losses in herd performance due to production diseases such as milk fever, mastitis, lameness, etc.
Taking prevention as being better than cure, for production diseases, it is the identification of their occurrence on each individual farm, and the introduction of effective control measures as necessary, that will reduce losses and improve herd performance.
As losses from production diseases are often hidden due to their subclinical nature, it can be difficult to quantify the reductions they cause in herd performance, and to show improvement following the introduction of the control measures. Herd performance monitoring in the areas of fertility, milk production, mortality and cow longevity will be important in this respect.

HERD–HEALTH MANAGEMENT

The health-planning process includes four key steps as part of the herd-health cycle:

- Plan and set farm goals;
- Implement;
- Monitor performance; and
- Review progress and update plan.

Setting animal health targets within the health-planning

process will allow for improvements, based on current performance. The targets that are set should be achievable and established on an individual farm basis, in conjunction with the farmer. Aiming for realistic, yet challenging, targets will ensure that the process of continual improvement is achieved, eg. 50% reduction in the number of calves with scour next spring.

A key step in the process is the monitoring of animal health performance on the farm. This information forms the basis of the herd-health reviews and will allow further development and improvements in future health plans. An annual review of the health of the herd will be important in the development of the herd-health plan for the coming year. Treatment and mortality records may be compared with data from the previous review to monitor improvements. This information will help to determine whether current management controls for specific conditions are effective, and should continue, or need to be further refined.

Specific areas include:

- Nutrition – important for milk production, fertility, immunity and growth;
- Production diseases – infertility, mastitis and lameness – often the reasons for young cows leaving the herd;
- Infectious disease control – bulk milk disease screening and individual animal testing, as required; and
- Calf-health management and heifer rearing.

A working herd-health plan provides the assurance to consumers of food products that animal health and welfare are being addressed on the farm, with specific protocols for routine preventative care. The annual review and completion of a health plan is a requirement of SDAS for all dairy farms. In addition, the GII Open Source programme requires that the rates of mortality, involuntary culling and major health issues are recorded, and that remedial actions to reduce recurrence are described, where appropriate.

CONCLUSION

The structure of the international dairy market has changed over the past decade. While milk price volatility has become the norm, significant opportunity exists for the Irish dairy industry to expand and benefit from Ireland's natural agricultural advantages of a temperate climate, plentiful rainfall, rich soils and productive farmer-owned dairy farms. Increasingly, in recent years, global food companies and consumers want to know that their food ingredients are produced using responsible and sustainable farming practices at producer level. Animal health and welfare plays a central role in sustainability programmes worldwide, and the management of herd health by farmers, in conjunction with their local vet, is key to ensuring that herd performance and farm efficiency is maximised.