

Changing the animal welfare culture: instigating an animal health and welfare programme for New Zealand farmers

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Abstract

Animal welfare has both a strong ethical and legal perspective in most countries. New Zealand has a progressive animal welfare legal framework. However, in all countries, as urbanisation continues to grow, there is a greater separation of food consumption from food production. The growing rise of social media and the development of the ‘*post truth*’ environment means that what is scientifically or evidentially correct may no longer be sufficient.

For a country whose largest industry is primary production, the perception of any compromise to animal welfare presents a high risk. Thus, animal welfare must not simply be upheld, it needs to be seen to be upheld. Surveillance of animal welfare should be considered as important to New Zealand’s primary sector as surveillance for disease.

WelFarm® is an animal health and welfare programme which has been developed for dairy farms in New Zealand, and has been successfully operating for four years on around 100 dairy farms in a limited scheme nationwide. More recently, WelFarm has been expanded to the inclusion of a far greater number of farms, with the aim of it becoming an integral part of all dairy farms and, possibly, all farms. WelFarm incorporates some global dairy welfare indices, and has been developed to also capture data such as antimicrobial and anti-inflammatory use, as well as benchmarking aspects of calf health and welfare. Ultimately, WelFarm will aid in pasture to plate security and provide consumer reassurance.

This paper will elaborate on the WelFarm programme and identify its role in a globally sustainable agricultural industry that values food safety, animal welfare and veterinary oversight.

Keywords: *animal welfare, surveillance, dairy, benchmarking, monitoring*

Introduction

New Zealand’s primary industry is its largest single industry and largest exporter. It is not only a significant contributor to the country’s GDP, but it is also a significant employer. Whilst the vast majority of New Zealand’s primary industry is strongly pastorally based, the dairy industry in particular has experienced strong recognition globally around the perception of New Zealand as ‘clean and green.’

Alongside that is the assumption by consumers that animals are well looked after- appropriate animal welfare is seen as

being more readily achieved in an extensive, pastoral system than in an indoors and intensive system.

However, animal welfare is a nebulous concept. For many years, we have considered the ‘Five Freedoms’ as being the pillars of animal welfare (1,2). More recently, however, other approaches have been taken such as the single concept that a domestic animal should experience ‘*a life worth living*’ (3,4). This move from an objective to a subjective approach to determining animal welfare is consistent with the societal move away from evidence based approaches to a more values- based framework.

Primary industry exists to sell to consumers, and consumers are increasingly seeking to influence the terms and conditions of the production of their food. Legal animal welfare regulations provide an operating framework within which consumers may be satisfied with the conditions of production, but they do not provide evidence of such. There have been a number of high profile animal welfare or food-quality related reputational risk issues that have affected the New Zealand dairy industry in recent years, and it is likely that there will be more. Greater transparency is required within the primary industry, and more importantly a desire to be proactive and present the positive aspects of the industry rather than always be reactive and focussing on the (relatively few) negative aspects.

The WelFarm programme was developed to be a proactive benchmarking and monitoring programme which allows all sectors of the industry- farmers, regulators, consumers, other stakeholders- to have greater assurance around the animal health and welfare situation on farms. The goal is not to dictate for every possible animal welfare index, but to measure, monitor and benchmark, and in so doing effect a culture change on farm where farmers and staff seek to always do the best thing and place animal welfare as a high priority, because it is the right and best thing to do.

The programme

Currently, the WelFarm programme is a voluntary, farmer-paid programme developed for dairy farms. Six major veterinary clinics have been involved in the development of the programme and in funding the software and resources required. The programme consists of a suite of annual monitoring tasks throughout the year, and these data are uploaded to a web-based benchmarking programme.

Farmers and veterinarians then have access to the web-based dashboard at any time. Farmers can see only their farm or farms; veterinarians are able to see all of their clients who are enrolled on WelFarm.

The programme consists of some key objective, repeatable measures such as body condition score (BCS), locomotion score (LS), tail score (TS), performed by veterinarians or by trained technicians. In addition, the programme records novel indices such as the number of veterinary visits per year per 100 cows (an indication of animal welfare risk- low levels have previously been associated with a greater risk of an animal welfare incident). The programme also records mortality rates and replacement rates, as well as reproduction indices such as six-week in calf rate (ICR) and proportion empty. There are also milk quality indicators such as bulk milk SCC and the number of grades.

One of the key surveillance attributes incorporated into the programme has been to measure antimicrobial (AM) use at a farm level, something that has proved invaluable as New Zealand seeks to progress its goal of removing unnecessary AM use towards 2030. These data have demonstrated, for example, that dairy farms enrolled in the programme in the year 2014-15 used a mean of 8.65mg ai/PCU (5). More recently, the programme has also started to capture NSAID use.

All of the data can be tracked and compared through the year at a farm level; and can also be compared against the regional and national data (mean). In addition, all data can be compared temporally both within the same year and against other years within the same farm; and in other years for regions and nationally. Measures such as BCS can also be analysed alongside days calved, and compared with other farms, regionally and nationally, thus removing the confounding associated with stage of lactation. The data can also be downloaded as data tables or as graphs for summary reporting or analysis.

Discussion

The WelFarm programme was developed by veterinarians in conjunction with dairy farmers. It was developed to be of value not just to farmers, but to consumers, stakeholders, regulators and all associated with the industry. Because farmers pay a small amount even though the programme is currently subsidised by the participating veterinary clinics, the measures included have to be measures where the farmer sees value from potential productivity gains. Thus, it is possible to translate improvements in BCS status into an economic effect.

However, the value of a national programme such as this is greater than the value that may be realised within the farm gate. It forms both a type of farm assurance programme and also a farm surveillance programme. In addition, once these data are captured in a robust and standardised fashion, other use can be derived for other stakeholders. Its value in

assessing and analysing AM use for example has already been discussed.

The long term sustainability of New Zealand's primary production sector is dependent on many things, but consumer demand is a given. Consumer demand can be fickle, and with the growing rise in technology and travel, transparency of production will become of greater importance.

Regulation is important, but ultimately change will only happen with a cultural shift. To drive lasting and continuous improvement in animal welfare standards requires changing the culture of staff and farmers, in the same way that many enterprises have successfully changed their culture around occupational health and safety.

This is the first step, but the second key step is to demonstrate this change. This is where there needs to be an active monitoring and benchmarking programme which demonstrates the current state of animal welfare and also hopefully illustrates continual improvement. Demonstration therefore requires a mindset change amongst veterinarians towards almost a surveillance perspective. Animal welfare surveillance and benchmarking should be as integral to the primary sector as (exotic) disease monitoring and surveillance should be.

WelFarm has demonstrated its value to both farmers and broader stakeholders. It is slowly broadening into a truly national programme, and is being developed now for the red meat sector, and it is hoped that it will become an integral aspect of monitoring and assurance of the whole primary sector in the near future.

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