

Examination of the impact and effectiveness of herd health and welfare assessment in improving animal welfare on organic dairy farms, using qualitative interviews.

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Abstract – During winter 2002-03, 15 organic dairy farms in SW England participated in a herd health and welfare assessment and benchmarking study. A second assessment was carried out on 14 of the original 15 farms and on 14 new farms during winter 2003-04. The effectiveness of the herd health and welfare assessments and benchmarking in delivering animal health and welfare improvements was investigated by means of qualitative research interviews. The interviews were conducted between August and November 2004. The average length of interview was one hour and fifteen minutes. Five common themes were identified and headed 'Sensitivities and misgivings'; 'Acceptability of scoring methodology and indicators assessed'; 'Raised awareness and motivation to improve'; 'Veterinary support and herd health planning' and 'Value of assessment and benchmarking'. It was apparent that farmers, who took part voluntarily in the study, took the results of the herd health and welfare assessments very seriously and were clearly motivated by the process. The main focus for change was related to housing issues. The main constraints to welfare improvement were a shortage of finance to affect change beyond relatively simple alterations and a lack of information on the identification of changes likely to improve animal welfare in given situations.

INTRODUCTION

In response to recommendations of Whay *et al.*, (2003) and to assist farmers to meet legislative requirements, promoting farm animal welfare, the effectiveness of herd health and welfare assessment and benchmarking as a farm management tool was investigated, by means of farmer interviews. Recommendations for practical application and future work were made.

BACKGROUND

Benchmarking of production performance has been actively used by many farmers to compare their achievements with those of others and to target areas for improvement with the aim of increasing financial returns from dairy, beef, sheep and other farm enterprises. A protocol to apply this benchmarking concept to farm animal health and welfare has been developed using animal based observations. By observing the animals it becomes possible to compare production systems with different resource provisions, such as quality of flooring, amount of trough space and stocking density, and management methods. This approach facilitates the identification of strengths and weaknesses in the different management systems assessed and through comparison with others, can demonstrate what it is possible to achieve and where improvements might be made. Qualitative research interviews enable the researcher to gather insights on the interviewee's perception and opinion. They allow the beliefs and concerns of interviewees to be ex-

plored and enable the consistency and weight of the story told to be evaluated. This technique has been used in a range of subject areas including in a farm animal welfare context. However this method for collection of information provides a descriptive account based upon the observations and interpretation of the interview material by the researcher, rather than attempting to quantify opinion or experience. It cannot be used to provide statistically valid numerical data. As part of a previous study, 15 organic dairy farms in SW England took part in a herd health and welfare assessment and benchmarking project, during winter 2002 to 2003. The participants' response to the benchmarking process was evaluated by qualitative research interviews. Farmers had implemented changes and asked that there should be a repeat assessment to identify any effect of the changes on cow welfare on their farms. In response to this request, fourteen of the original fifteen farms and 14 newly recruited organic farms took part in a second assessment during the winter housing period 2003 to 2004 (Huxley, 2005).

OBJECTIVES

The objectives of this study were to use qualitative research interviews to evaluate farmer responses to the welfare assessment and benchmarking and to assess the impact and effectiveness of the welfare assessment and benchmarking in delivering animal health and welfare improvements.

METHODOLOGY

Semi-structured qualitative research interviews were used to obtain feedback from all 28 organic dairy farmers who took part in herd health and welfare assessment and benchmarking during 2003-04. Interviews took place between August and November 2004, on a one to one basis either in the farm house or in the farm office, by the same interviewer. The interviews were recorded onto mini-discs then transcribed in full. Data were analysed using a 'Grounded Theory' approach in which common themes occurring across interviews were identified.

RESULTS

The average length of the research interviews was one hour and fifteen minutes (range, thirty minutes to two hours and thirty minutes) from which, five common and inter-related themes were identified:

Theme 1. Sensitivities and misgivings

Some participants experienced feelings of exposure and vulnerability during the assessment, whilst others were shocked or disappointed about the assessment outcome. There were concerns about the potential for misinterpretation of the results if taken out of context, without clear understanding of the assessment process and that the findings might be used in the development of new legislation or farm quality assurance schemes.

Theme 2. Acceptability of scoring methodology and indicators assessed

The measures used for the assessment were considered to be relevant to herd health and welfare. However, farmers were critical of the scores and questioned the relevance, at low/mild levels, of indicators assessed to animal health and

welfare. This was particularly true of mild degrees of dirtiness, lameness and injuries from the environment where the assessment was considered to have been marked 'severely', 'overly critically' or 'harshly'. Some were particularly distressed that their efforts to keep their animals clean had apparently failed and were at a loss as to what steps could be taken to improve the situation further. Whilst farmers acknowledged that lameness was a major herd health problem, they suggested that as detection of very mild lameness was extremely difficult, the measure was impractical and had no relevance to day to day management of herd health and welfare. Injury to hocks was also scored at three levels of severity and interestingly, there was greater acceptance of the significance of mild levels of incidence of hock injury.

Theme 3. Raised awareness and motivation to improve

Participation in the assessment had raised awareness about animal health and welfare and of factors that might affect animal health and welfare within individual farming systems. Most participants had been keen to affect improvements with causes of lameness, dirtiness, injuries from the environment and condition scoring the main foci for change. The main drivers for change on the farm were the health and welfare of the cows and financial considerations. Constraints to improving animal welfare on farm were largely related to housing issues and lack of finance to implement change in both old and new housing systems.

Theme 4. Veterinary support and herd health planning

Whilst some participants had a very good working relationship with their veterinary advisors, others were dissatisfied with the service they received and had become reluctant to involve their veterinarians in routine aspects of herd health and welfare management. The degree to which Herd Health Plans had been developed as a useful management tool was clearly linked to the level of interest and quality of veterinary support available to the farmer.

Theme 5. Value of assessment and benchmarking

Attention focused on the identification of strengths and weaknesses and how improvements to weaker elements might be affected. Keen to improve year on year, farmers were interested to learn if changes introduced had led to improved herd health and welfare and improved performance within the benchmarking league table. However, it was suggested that breed, calving pattern, herd size, housing and other system differences made benchmarking between farms less useful than it might at first appear. Instead year on year within farm comparison was considered the more useful measure to determine where progress had been made.

DISCUSSION

The five cross cutting themes reflect the main issues about herd health and welfare assessment and benchmarking for the participating farmers. Sensitivities and misgivings expressed were comparable with findings of Vaarst, (2003) who considered that welfare assessment should be used as an advisory tool adapted to individual farm conditions. This view was reflected in the fact that the scoring system used, based on zero tolerance of the presence of indicators assessed, led farmers to develop their own view of the seriousness and relevance to welfare of problems encountered. This response by farmers is supported by Ellis and Hovi, (2003) who suggested that evaluation of animal welfare should be objective, repeatable and practical at farm level and that the significance of certain factors to animal welfare and acceptable tolerance levels should be determined. Farmers were clearly motivated to make changes, often related to housing issues, and strive to improve animal welfare. However, there was often conflict between the will to improve and the ability to finance the improvements. Furthermore, changes made had not always resulted in improvement (Huxley, 2005), highlighting the need for support, advice and follow-up assistance with the management of changes to ensure the desired outcome. Before this can be achieved there is a need for new knowledge on the identification of changes likely to improve animal welfare and the timescale within which improvements can be expected to occur. The influence of veterinary support on attitudes to herd health plans cannot be understated. Farmers considered that veterinarians were sceptical of and

lacked interest and basic knowledge in organic production. This was in accordance with sentiments expressed by Danish organic dairy farmers (Vaarst, 2003) and supports the view that there is a need for the veterinary profession to deliver cost effective disease interventions and preventative medicine programmes with the aim of reducing disease and improving health and welfare standards (Huxley, 2005). Benchmarking introduced a competitive element for farmers and created motivation to succeed. However, as a significant improvement in animal welfare might be difficult to achieve in the short term, it was considered that the time interval between assessments should be greater than one year in order that successes could be reliably identified and enthusiasm and motivation of farmers maintained. Crucial to this is the degree of reliability and consistency of assessments that could be achieved. The farmers shared the view that the degree of inter and intra-observer reliability required would be difficult to achieve and that this had the potential to reduce the value of the comparative assessment process. In accordance with this viewpoint, it is acknowledged that a certain degree of assessment error between observers is inevitable (DEFRA, 2004). The importance of training, monitoring and regular updating of assessors to reduce the potential for error and minimise the impact on farming businesses should not be underestimated.

CONCLUSIONS

A strong interest and willingness exists amongst farmers to access outside opinion about animal health and welfare on their farms. Comparative assessment enabled discussion and provided motivation to examine weaker points in farming systems and find solutions, in order to improve animal welfare. It is important that the goals set for improvement are realistic and achievable within the constraints of individual farming systems if this interest and enthusiasm is to be maintained. It was apparent that the main focus for change was related to housing issues. The main constraints to welfare improvement were a shortage of finance to affect change beyond relatively simple alterations and a lack of information on the identification of changes likely to improve animal welfare in given situations.

ACKNOWLEDGEMENTS

Funding support from the Department for Environment, Food and Rural Affairs is gratefully acknowledged. This study would not have been possible without the support of the 28 participating farmers or the previous study, funded by Organic Milk Suppliers Co-operative Ltd., Mole Valley Farmers Ltd. Milk Link, British Cattle Veterinary Association and Objective One (EAGGF and DEFRA). Thanks to Dr Jon Huxley, Dr Becky Whay and Dr David Main, University of Bristol for their collaboration in this earlier work.

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