

# EVALUATING A CONCEPT FOR AN ANIMAL WELFARE ASSESSMENT SYSTEM PROVIDING DECISION SUPPORT USING QUALITATIVE INTERVIEWS

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## Abstract

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*Qualitative interviews of farmers were carried out as part of a project focusing on developing animal welfare assessment systems (AWASs) in dairy, pig and mink production systems (26 farms in total). The aims of the interviews were to investigate farmers' perceptions and experience of how an AWAS worked, and to explore their expectations for future use of AWASs. All interviews were taped, transcribed and analysed using a grounded-theory approach. The importance of different elements of the AWAS differed between farmers, and between farmers and the AWAS project implementation group. More direct associations between welfare assessment and production results (and other 'common measures') were requested by farmers. The whole AWAS 'package' was viewed as being too complex and expensive for most farmers, particularly as it involved multiple assessments over time. A range of themes emerged from the analysis. One of these, here referred to as 'us and them', is explored and discussed in this paper. Farmers were concerned that the AWAS could be used negatively in relation to consumers and political decisions, and they underlined that if the AWAS was to be used as a decision support tool (ie a system to assist them in making decisions about improvements in their herds and to guide their initiatives and improvements), it should include dialogue and details of local farm conditions. Qualitative interviews were found to provide valuable insight into farmers' perceptions and expectations of animal welfare assessment methods.*

**Keywords:** *animal welfare, animal welfare assessment, decision support, farmer perception, qualitative interviews*

## Introduction

Animal welfare assessment systems (AWASs) have recently been introduced in various versions and with different aims throughout many farming systems in many countries (Johnsen *et al* 2001). In Denmark, a concept for an AWAS was introduced in intensive pig production, conventional cattle production and mink production (presented in Bonde *et al* 2001; Hansen & Møller, 2001; Møller & Hansen 2001; Rousing *et al* 2001). The aim of this AWAS was to develop an on-farm advisory tool. This distinguishes it from a number of other AWAS concepts, which are used for quality control or assurance purposes. The main end-users in this case are intended to be the farmers and their advisors. It is intended that this assessment system forms an advisory dialogue to support the farmers and their advisors in

the way they make decisions about improvements in their herds and to guide their initiatives and improvements.

In order to evaluate the success of this AWAS, farmers were interviewed regarding their perception and experience with the AWAS after a project period lasting approximately 18 months. The aim of this paper is to present the results of an interview study focusing on farmers' reflections and perceptions of animal welfare based on their own experience with an AWAS applied in their own herds. One of the main themes that emerged from the interviews will be presented and discussed, as will the potential of qualitative interviews as an evaluation method of AWASs.

## Materials and methods

### *Selection of farmers*

Ten dairy farmers, nine pig farmers and six mink farmers participated in the final interviews. The results presented here will focus on the sample of pig farmers.

### *Interviews*

The interviews were semi-structured and ranged in length from 1 to 1½ hours. The herd owner and up to two herds men participated in each interview. The interview guide is presented in Table 1. All interviews were taped and transcribed in full. They were then analysed across interviews using the grounded-theory approach (Kvale 1996; Strauss & Corbin 1997). This enabled division of topics across individuals' results in order to achieve a list of 'themes'.

**Table 1** Themes covered in the interview guide used for interviews in pig farms.

#### *Theme 1. The experience with AWAS*

How have you experienced the conduct of AWAS in your herd?

- In general
- The specific recordings
- Results (learned what? Areas of specific interest?)
- The report and visit to your herd

#### *Theme 2. The meaning of AWAS in your daily practice*

How have the recordings or the AWAS process influenced you in your daily life ...

- In your daily management?
- With regard to changes or priorities, breeding goals, housing systems etc in the herd?

Which thoughts may have come to you after the completion of the project with regard to changes or changed priorities?

#### *Theme 3. The meaning of the term 'animal welfare'*

- How do you understand the term 'animal welfare'?
- How do you create conditions in your herd which meet your understanding of 'good animal welfare'?
- Do you perceive yourself influenced by the project with regard to your understanding of 'good animal welfare'?

#### *Theme 4. Communication*

Do you perceive the project activities in this project to be of importance in your contact with people outside the farm? (elaborate if relevant).

## Results

### *The topics and themes*

The number of topics identified per interview ranged from 56 to 81. These were categorised into seven inter-related themes, including the 'us and them' theme.

### *The project process experienced by farmers*

The welfare indicators used in the AWAS were introduced by researchers, and farmers' perceptions of these were judged. Whilst some farmers asked questions and discussed these indicators with project technicians during the study period, other farmers paid less attention and in some cases disagreed with the use of some of the indicators. The assessment of fearfulness provided an example of this disagreement. Some farmers disagreed with the perception of this indicator by the assessors, as they did not recognise their animals as being 'fearful'. Farmers had been involved in measuring some of the indicators; this was perceived as a burden by a few farmers and as acceptable or interesting by others.

At the close of the project a final report was sent to each farmer followed by a visit from project researchers. Some farmers had not found time to read the report before the visit, and in some cases the report arrived just a few days before the visit. All farmers viewed this dialogue as essential to their understanding and interpretation of the AWAS.

### *Farmers' expectations of future needs for the AWAS*

Farmers viewed the whole AWAS 'package' as complex and expensive. They wanted more 'problem oriented', smaller packages, with more direct connection with production results. Some felt that the AWAS could provide a 'trouble shooting program', either during periods of trouble or within specific sections of the farm (eg the weaning unit) when needed.

### *'Us and them' — a main theme across the interviews*

A major concern of the farmers was the potential use of the AWAS by 'others'. In Table 2, a number of viewpoints are presented. The perceived aim of the AWAS had a major impact on the farmers' expectations as to how it could be used by themselves and colleagues, how readily they were prepared to participate in the process, and how comfortable they felt with the welfare indicators used.

It appeared critical to farmers that they could actively use, benefit from, question and discuss the AWAS, with regard to the indicators as well the results and the perception of 'what is animal welfare'. On the other hand, if they felt that the AWAS was performed for 'them', ie for others, they were less inclined to feel open and secure with those conducting the AWAS, and their perception that they had no influence was enhanced. The feeling of lack of influence strengthened the tension between the farming society and the 'outside world', particularly with regard to consumers' judgement and political decisions, which enhanced the feeling of 'us versus them'.

### *Other themes*

Six other themes were identified in the analysis of the interviews. Titles were given, for example 'Feeling of influence on farm and future', 'Traumatic animal freedom versus total control', and 'Caretaking versus overview + management decisions'. As with the theme 'us and them', these themes were composed of a number of sub-themes.

**Table 2** Interview analysis according to ‘us and them’ conflicts between using AWAS as an advisory and dialogue tool for farmers and using AWAS as a control tool, for example for consumer groups.

	AWAS for ‘us’	AWAS for ‘them’
<i>Who?</i>	Farmers (Advisors in some cases; depending on which person it is)	Science/scientists (able to define animal welfare) Consumers and politicians (Person dependent: advisors)
<i>Animal welfare</i>	To be discussed with ‘us’ ‘We can see if animals are ok’	Defined by ‘them’ (them mainly as ‘scientists’): ‘They can define and measure what animal welfare is’
<i>The role of AWAS</i>	An on-farm advisory tool	A control tool for control bodies
<i>AWAS in daily practice</i>	Allowed to go close and find weaknesses in order to improve	Has to show ‘the nice version of the farm’ to the outside world
<i>Results</i>	To be discussed with advisors in order to find possibilities for improvements	To be judged by somebody from outside
<i>Farm conditions</i>	Possible to include on-farm conditions	Blind to farm conditions Across-farm evaluation
<i>Farmers’ concerns about the use of AWAS based on project experience</i>	Too comprehensive Better connection between AWAS and production results wanted Elements from AWAS can be used in case of problems	Consumers’ disconnected and romantic perception of today’s farming Who defines animal welfare? Indicators decided ‘from without’ Blind to local farm conditions

## Discussion

### *The possible role of qualitative research interviews as an evaluation tool*

The farmers were the primary end-user group of this AWAS, and hence it was relevant to explore how they perceived it and how they expected to use it in the future. The qualitative research interviews explore human ‘life-worlds’ and see a given topic or theme from inside this group. It is therefore necessary to incorporate the end-user groups into the evaluation process.

A range of experiences and perceptions were identified and contrasted through a number of interviews. Several themes emerged, of which ‘us and them’ successfully illustrated possible constraints for openness to the AWAS, and underlined the importance of dialogue and active use of the AWAS in the improvement of the herd. In this way, qualitative research interviews revealed aspects of the AWAS which could only be expressed by the farmer. Although it illustrated the value of this approach, the ‘us and them’ theme was only one of a number of important themes. Again, many of these could only have been identified through participation of the farmer in the evaluation process.

### *‘Us and them’ in the context of Danish pig farming*

The feeling of ‘us and them’ was caused by the farmers’ perception of taking part in a production system that receives close scrutiny and criticism from the outside world. A very low percentage of the Danish population is involved in farming, and the farmers’ perception

of disconnection between ‘farming life’ and ‘urban life’ would thus appear justified. A further factor may be the apparent demand from consumers for high standards of welfare at a low retail price. Given the importance of consumers to the perceptions of welfare assessment by farmers, it seems appropriate, and potentially of great value, to explore this area in more detail, through interviews of consumers and other stakeholders categorised as ‘them’ by farmers.

### ***Animal welfare understood as fractions or as a whole***

Farmers liked the idea of using the AWAS as an on-farm decision support tool, but felt it was too comprehensive and that it would be better to use it in case of problems or to supplement production results. This suggests that farmers actually perceive animal welfare as something which is ‘an additional area of interest’ — next to productivity, for example. Their suggestion was to use the AWAS almost as a ‘trouble-shooting tool’, as though animal welfare were not associated with ‘holistically expressing the well-being of animals’ but rather as fractional and as ‘elements independent of each other, to be checked if things go wrong’. It points to the necessity for a profound dialogue between the users of AWAS — in this case, farmers and their advisors — in order to make it clear that animal welfare is a more holistic concept. For example, ‘problems in the weaning unit’ may very well arise from welfare problems in another unit of the herd. This fractional view of animal welfare may mirror the farmers’ perception of how welfare was measured in a herd: as a number of indicators, which will be better linked together when used in practice and in the daily advisory dialogue.

### ***Future use of the AWAS***

This AWAS was created as a decision support tool. Dialogue between the conductors of the AWAS and farmers seems crucial. This dialogue should also involve discussion aimed at a mutual understanding between farmers and advisors (AWAS conductors) regarding the choice, rationale and importance of the various animal welfare indicators used in the applied AWAS.

It may appear to be a rather ‘artificial discussion’ to question the possible future use of this AWAS without actively demonstrating its use as an advisory tool over time. However, in the future development of the AWAS system, the concept of using it together with production results, or using specific elements from it, should be considered. If the aim of the AWAS is to encourage efforts to improve animal welfare on a more overall farm level, this should be clearly emphasised and built into the AWAS, and the holistic approach to ‘animal welfare’ should be maintained.

Seeing AWAS as an advisory tool adapted to local farm conditions should be a primary aim. Furthermore, if the primary aim of an advisory tool is a communication platform for farmers and advisors, all findings should be open to discussion and dialogue.

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### **References**

**Bonde M, Rousing T and Sørensen J T** 2001 Structure of the welfare assessment report for communication with farmers. *Acta Agriculturae Scandinavica (Section A — Animal Science)* 30: 58-61 (Suppl)

- Hansen S W and Møller S H** 2001 The application of a temperament test to on-farm selection of mink. *Acta Agriculturae Scandinavica (Section A — Animal Science)* 30: 93-98 (Suppl)
- Johnsen P F, Johannesson T and Sandøe P** 2001 Assessment of farm animal welfare at herd level: many goals, many methods. *Acta Agriculturae Scandinavica (Section A — Animal Science)* 30: 26-33 (Suppl)
- Kvale S** 1996 *InterViews: An Introduction to Qualitative Research Interviewing*. Sage Publications: USA
- Møller S H and Hansen S W** 2001 Assessment of mink welfare at farm level. NJF seminar No 331, Snekkersten, Denmark, 1–3 October 2001, p 8
- Rousing T, Bonde M and Sørensen J T** 2001 Aggregating welfare indicators into an operational welfare assessment system: a bottom up approach. *Acta Agriculturae Scandinavica (Section A — Animal Science)* 30: 53-57 (Suppl)
- Strauss A and Corbin J** 1997 *Grounded Theory in Practice*. Sage Publications: USA