DIFFERENT APPROACHES TO ASSESS THE WELFARE OF CATTLE IN SMALL ABATTOIRS; CRITICAL CONTROL POINTS USED BY SOME LARGE COMPANIES VERSUS ETHICAL AUDITS APPROVED BY NATIONAL ANIMAL WELFARE ORGANISATIONS

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Background

Many consumers are concerned about the welfare of slaughter animals. Two different approaches to objective assessments of animal welfare in slaughter plants will be discussed briefly.

1) **Critical Control Points** (CCPs) based on the American Meat Institute Guidelines and used by some large companies
2) **Ethical Audits** developed by the Danish Meat Research Institute (DMRI) to assess and improve the welfare of slaughter pigs in 1995. Norwegian Meat Research Centre (NMRC) co-operated with the DMRI to develop the Ethical Audits for use in slaughterhouses in Norway handling cattle, sheep and pigs (1997-2000). The system is also adopted in Sweden (pigs and cattle 1998). The system has been approved by national animal welfare organisations in Denmark and Norway.

To improve animal welfare it is essential to identify factors causing problems, to suggest improvements and sometimes to change attitudes among the personnel responsible for the animals.

Objective

To give a brief description of experiences regarding costs and benefits by two different approaches to assess animal welfare in small abattoirs.

Methods

The system with CCPs is based on observation of a 100 animals on critical control points in the slaughterhouse. The following parameters are counted: Vocalisation, slipping or falling, use of electric goads or striking, dragging of sensible animals, ineffective stunning and sensible animals in the bleed rail. The Audit concludes that the abattoir has failed the test if one or more of these critical behaviours exceeds a fixed number. NMRC has tested CCPs in one Norwegian slaughter plant specialised on cattle and slaughtering a 100 animals a day.

In Ethical Audits we observe critical behaviours as well as other aberrations. The lairage area from reception to sticking is divided into 8 smaller areas. In each area 5-27 checkpoints are defined. Each checkpoint gets a score from 1-4; ranging from "best known practice" to "unacceptable". Criteria's qualifying for the different scores are formulated explicit to ensure objective assessments. To get a representative impression the survey is based on 2-3 days observations. The Ethical Audit is summarised in a graphical presentation where all critical points are weighed according to estimated costs of improvement and consequences for the animal welfare. A total score of less than 50 % within an area is unacceptable, whereas a score of 75 % or more is regarded as acceptable. NMRC has performed Ethical Audits in 16 plants slaughtering 71 % of the cattle in Norway and the DMRI has made Ethical Audits in Danish slaughterhouses.

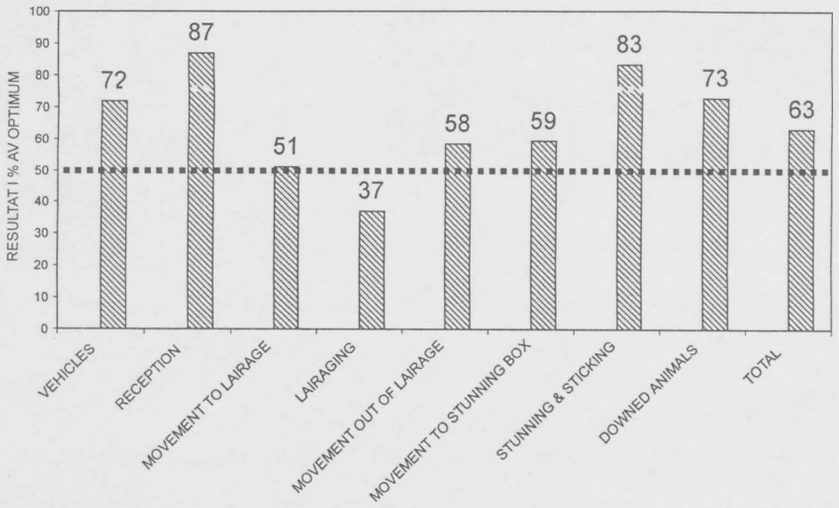


Figure 1. Graphical presentation of an Ethical Audit for Cattle

Results

The gross impression of costs and benefits with Critical Control Points and Ethical Audits in small plants is given in Table 1.

Discussion

Many Norwegian slaughter plants do not slaughter more than 12-15 cattle per hour, and hence our experience with Critical Control Points is rather limited. Given a plant with a slaughter capacity of ≥ 100 animals per hour, the system might be an efficient way to document the animal welfare standard, but in small plants it does not seem justified to invest the required time as the only outcome of the audit is "passed" or "failed". An Ethical Audit requires many working hours as well, but as we do a thorough survey of major and minor aberrations which may add up to cause serious problems, this seems justified.

Evaluations from the Ethical Audits show that both management and operators find that the report provide a better basis to improve animal welfare and the operators claim it has a positive effect on their attitudes towards animal welfare.

Table 1. Comparison of costs and benefits for *small* slaughter plants using the two methods

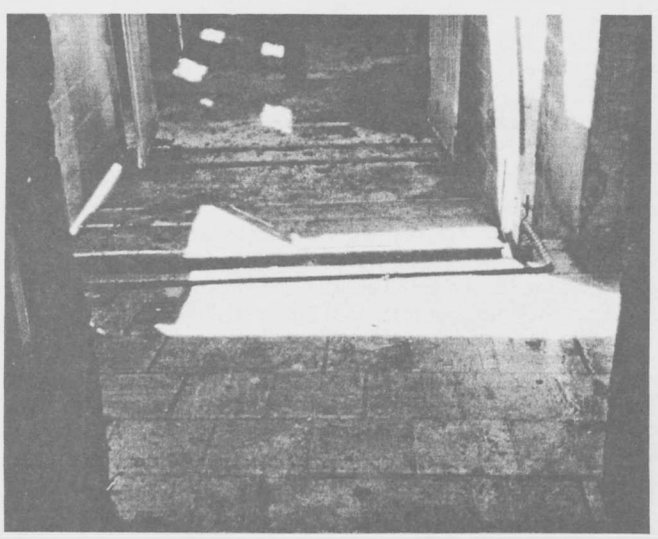
Costs & Benefits	Critical Control Points	Ethical audits
Costs	15-30 working hours	15-25 working hours
Appropriate in plants of all sizes	No	Yes
Objective assessment of animal welfare	Yes	Yes
Focusing on causes	No or partial	Yes
Recommendations for improvements	No or partial	Yes
Positive effect on attitudes & motivation	No	Yes

Conclusions

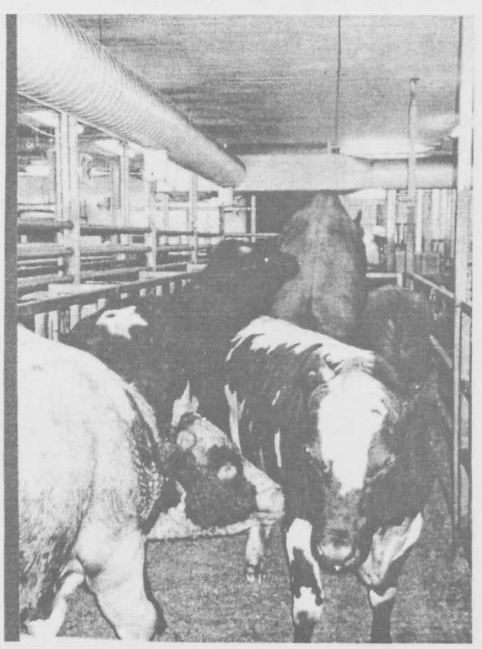
Audits exclusively based on CCPs may be an efficient way to assess welfare in plants with a high throughput, but the method is not applicable in small plants. Despite extended use of time the audit may not contribute to improve attitudes or find better solutions in problem areas.

Ethical Audits as used in the Scandinavian countries has proved to be a good approach to assess and improve animal welfare in abattoirs of different sizes.

Examples of minor aberrations which may cause problems



Picture 1 Sunlight in the reception area may cause the animals to stop



Picture 2 Mixing of young bulls leads to mounting which may cause injuries and exhaustion.

References

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http://www.grandin.com/ccp.html CCPs of Human Slaughter and Handling presented at the American Meat Institutes Animal Handling and Stunning Conference, February 5. 1999