

## **The consequences of introducing animal based welfare assessment in legislation and official control – an interdisciplinary seminar at SCAW, SLU 4<sup>th</sup> October 2011**

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### **Economic consequences of changing to a more animal-based welfare assessment in legislation and official inspection**

**Abstract/summary:** As a part of the ENCAW-project initiated by the Swedish Centre for Animal Welfare, the economic consequences of changing to a more animal-based welfare assessment in legislation and official inspections are examined in the present report. The current more resource-based system is compared with the more animal-based system proposed by the Welfare Quality® (WQ) project. The report examines how a change to the latter affects i) the costs of official inspections for the inspection authorities, ii) the direct costs to farmers associated with being audited, and iii) the indirect costs and benefits to farmers associated with a change to a more animal-based welfare assessment.

The cost of official inspections of animal welfare at farm level depends on the time required on-farm to conduct the inspection (audit), as well as the time for preparing (pre-audit) and processing (post-audit) the audit. Information concerning the time required in the current system was obtained through a survey sent to the County Administrative Boards. The survey showed that the time required on farm made up roughly 25-45 % of the total time required to conduct an audit. The considerable proportion of the total time required for administrative work may partly be explained by the recent reorganization of the Swedish inspection system. Hence, it may be reasonable to assume that the time required off-farm in the current system will subsequently decrease.

The time required on farm in the more animal-based system was primarily based on the Assessment protocols developed in the WQ project. The time required for administrative work was assumed to be system independent. Our analysis showed that the time required on the farm to conduct an audit according to the more animal-based system developed by Welfare Quality® is approximately: 3.5 - 3.9 times that in the current system for dairy cows, 2.5 - 4.2 times that in the current system for fattening cattle, 2.2 - 3.5 times that in the current system for sows and growing/finishing pigs, 2.2 - 2.6 times that in the current system for laying hens and 1.4 - 1.7 times that in the current system for broiler chickens. For most types of animals examined the differences between the two systems were negatively correlated with the size of the herd/flock. It should be noted that a considerable proportion of the time required in the WQ system are attributable to specific measures for “Appropriate behaviour” (e.g. expression of social behaviour, good human-animal relationship, positive emotional state) that have no direct analogy in the current inspection system. The relative cost disadvantage of the Welfare Quality® system is smaller when the time for preparing and processing the farm visit is taken into account (assuming that such administrative work does not depend on the type of inspection system).

It is clear that considerably more time is required in the more animal-based system. However, it should be noted that the Welfare Quality® system continues to be refined and improved, a priority being to reduce the time required for on-farm assessments of animal welfare. Furthermore, although the Welfare Quality® system was developed to enable an overall assessment of animal welfare it was not specifically developed to be used in official

inspections. It is also important to note that one argument for a more animal-based welfare assessment is that it would measure animal welfare more accurately than the current system. In the longer term this could potentially reduce the frequency of inspections needed to assure the level of animal welfare set out in legislation which would reduce the costs associated with a more animal-based welfare assessment in official inspections.

The direct and indirect consequences for farmers of a change to a more animal-based welfare assessment are discussed based on a conceptual model describing the economic and behavioural effects. The results of this part of the study in addition to the previously mentioned survey rely on a literature survey and interviews.

The effects of a change to a more animal-based assessment in official inspections has on the direct costs of farmers, i.e. the costs directly related to being audited, depend on the time the farmer spends on the audit and the fees incurred for the audit. Our study shows that farmers in the present system are given limited time to prepare for an audit and that they generally participate during the entire audit. According to the interviews, participating during the audit provides farmers with an opportunity to answer any questions the inspector may have as well as to ask the inspector for advice. Having an open and ongoing dialogue between farmer and inspector can lead to continuous improvements in the long term. However, it can according to the interviewees also be problematic as the formal roles of inspector and farmer become more diffuse due to their social bond becoming stronger over time. Although farmer presence may be undesirable when assessing certain criteria in the Welfare Quality® system farmers are, based on our findings, assumed to participate throughout the inspection. For farmers the change in the direct costs associated with being audited are consequently estimated to be of the same magnitude as the previously mentioned changes in the times required on-farm for conducting an audit.

Indirect costs are incurred due to changes in farmer behaviour, leading to changes in resource use as well as management practices. The outcome of the decision-making process regarding these changes determines the level of the indirect costs. If the decision-making process initiated by the outcome of the audit includes all the relevant items and correlations, both animal welfare and legitimacy could be improved, which would potentially decrease production costs and increase producer prices. Hence, it is pivotal to better understand how legitimacy is created, hereby synchronising the view on animal welfare, held by the consumers and farmers, respectively. If this is reached, the value chain will work better. However, it is important to take a long-term view of this process of change.

Hence, we find that a more animal-based welfare assessment in the official inspection would increase the direct cost to farmers in terms of the time taken by the audit. However, there are also potential benefits, e.g. greater degrees of freedom concerning resource use and managerial practices. Furthermore, the introduction of a more animal-based system could lead to improved animal welfare, improved animal health, increased legitimacy, etc. Although it is difficult to measure the economic value of the potential benefits, these may be sufficient to outweigh the additional costs.

Finally it should be emphasised that neither system consist of exclusively one type of measures and that each of the systems discussed include specific aspects not present in the other system. Future policy discussions and research should consequently not be limited to which type of measures to use (and it is definitely not an issue of either animal-based or not) but should fundamentally concern which aspects of animal welfare that should be included in legislation and official inspection. This is especially important as any transition to a more animal-based assessment given the existing legislation is likely to be gradual.