A method for the economic valuation of animal welfare benefits using a single welfare score

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Abstract

Unless the benefits to society of measures to protect and improve the welfare of animals are made transparent by means of their valuation they are likely to go unrecognised and cannot easily be weighed against the costs of such measures as required, for example, by policy-makers. A simple single measure scoring system, based on the Welfare Quality® index, is used, together with a choice experiment economic valuation method, to estimate the value that people place on improvements to the welfare of different farm animal species measured on a continuous (0–100) scale. Results from using the method on a survey sample of some 300 people show that it is able to elicit apparently credible values. The survey found that 96% of respondents thought that we have a moral obligation to safeguard the welfare of animals and that over 72% were concerned about the way farm animals are treated. Estimated mean annual willingness to pay for meat from animals with improved welfare of just one point on the scale was £5.24 for beef cattle, £4.57 for pigs and £5.10 for meat chickens. Further development of the method is required to capture the total economic value of animal welfare benefits. Despite this, the method is considered a practical means for obtaining economic values that can be used in the cost-benefit appraisal of policy measures intended to improve the welfare of animals.

Keywords: animal welfare, benefit valuation, economics, methodology, policy, welfare score

Introduction

Government intervention will always be necessary to protect the welfare of animals. There are three main economic arguments for this (Bennett 1995; Bennett & Thompson 2011). (NB There are, of course other arguments from ethical and other viewpoints). These are: (i) animal welfare is not a ‘market good’, although a number of animal products may be perceived as having animal welfare attributes, and so people’s wants for animal welfare cannot be adequately catered for in markets; (ii) animal welfare is an externality of our use of animals for economic purposes, such as farming, with animal suffering taking the form of an unwanted by-product; and (iii) animal welfare is a ‘public good’ where the knowledge that animals have good or poor welfare affects the human welfare of many people in society who themselves may have little influence on how animals are treated.

There are many ways in which governments can, and do, intervene to protect animal welfare (FAWC 2008). Legislation has been a major policy instrument within Europe (Bennett & Appleby 2011). Within Europe, the European Commission requires an assessment of the potential economic, social and environmental consequences of any new policy initiatives (European Commission 2011) whilst, in the UK, impact assessments are generally required for all UK Government interventions of a regulatory nature. Core to an impact assessment is an economic assessment of the proposal’s social costs and benefits (HM Treasury 2003) in order to ‘be confident that taxpayers’ money is being properly spent’ and that ‘public funds are spent on activities that provide the greatest possible economic and social return’ (HM Treasury 2011).

Thus, for any policy designed to protect or improve the welfare of animals, an economic assessment is needed of the costs and benefits associated with it. The costs of an animal welfare policy are often relatively straightforward to estimate — for example, in terms of the additional resources (labour, bedding, building and equipment costs etc) required to provide improved conditions for animals. However, assessment of the benefits of policy in terms of improved animal welfare and the value that we in society place on it is somewhat more problematic.

There is a number of economic tools that can be used to value ‘non-market goods’ such as animal welfare. Bennett et al (2011) provide a review of these methods in the context of animal welfare. Stated preference approaches such as contingent valuation (CV; Mitchell & Carson 1989) and choice experiment (CE; Louviere et al 2000) methods have been used to elicit people’s willingness to pay (WTP)