



THE ECONOMICS OF ANIMAL WELFARE

Paper No 1. Thinking like an economist

Paper No. 1 of our series on animal welfare: an economic perspective

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INTRODUCTION

Animal welfare issues have been in the headlines regularly in Australia and around the world in recent years. Examples include Australia's live animal export trade, both in cattle to Indonesia and in sheep to the Middle East (see Coorey & Allard, 2011; Taylor, 2012), calls to ban or curtail hunting of ducks in Victoria, Australia (Patterson & Levy, 2012), or of lions in Africa (Goldenberg, 2011). The European Union delighted animal protection groups by placing a ban on battery hens for egg production earlier this year (Singer, 2012).

With video cameras shrinking and social media expanding, this trend seems set to continue. Images of animal cruelty spread like wildfire on the web and incite an instant reaction from the public. Only days after footage of Indonesian slaughterhouses was shown on Australian television and the internet, the Australian government acted to suspend the export of live cattle to Indonesia, as a response to the massive public outcry. Similar reactions are expressed all over the world after similar incidents.

Nobody likes to see these images. No one endorses cruelty to animals, though clearly standards of what constitutes "cruelty" differ widely between people. So when controversy around an animal welfare issue emerges, often it is not the cruel practice itself that is defended, but the economic necessity of it that is insisted. Just a few examples include:

Australia's live export industry in 2009 earned \$996.5 million and supported approximately 10,000 jobs in rural and regional Australia (Department of Agriculture, Fisheries and Forestry, 2012).

Live export of sheep was valued at \$323 million in 2010, with the Middle East being Australia's biggest overseas market importing 99% of Australian sheep exports (LiveCorp & Meat and Livestock Australia, 2011).

Hunters and hunting actually benefit Africa's lions — as well as its humans. Revenues from hunting generate \$200 million annually in remote rural areas of Africa. (Rudolph & Hosmer, 2011)

[Duck hunting] generates more than \$70 million each year and supports jobs in hospitality, the supply of vehicles, boats, firearms and ammunition, plus camping and hunting equipment (Walsh, 2011)

However, while economic values are often cited by defenders of "cruel" practices, it is not right to simplify these issues as being a matter of "dollars vs. animals" or the "economy vs. animal welfare". To try and put some perspective into the economics of animal welfare, we hope this will be the first of several short papers to explain how economists think about animal welfare.

Defining animal welfare

There is no one definition of "animal welfare" that encompasses all characteristics of maintaining animal health or happiness. One that has received broad acceptance and usage is the "Five Freedoms of Animal Welfare" which define the needs of animals.

1. **Freedom from hunger and thirst**
Ready access to fresh water and a diet to maintain full health and vigour.
2. **Freedom from Discomfort**
Providing an appropriate environment including shelter and comfortable resting area.
3. **Freedom from Pain, Injury or Disease:**
Prevention or rapid diagnosis and treatment.
4. **Freedom to Express Normal Behaviour:**
Providing sufficient space, proper facilities and company of the animal's own kind.
5. **Freedom from Fear and Distress:**
Ensuring conditions and treatment which avoid mental suffering.

Source: (Farm Animal Welfare Council, 2009)

Economics and animal welfare

Economics is a social science, concerned with human values and the allocation of resources for human use. So it is important to notice that it takes an anthropocentric viewpoint and considers animal welfare only to the extent that it impacts on human welfare. It would be ideal to incorporate how animals feel about their welfare and what values they place on tradeoffs between items that effect their welfare. Some economists such as (Matthews & Ladewig, 1994) have tried to do this, but such ideas are still far from the mainstream of economic assessment.

Economics can contribute to animal welfare discussions, however, because animal welfare so clearly does influence human welfare. This is

obvious from the public reactions discussed above, not to mention public support for animal welfare organizations, markets for products such as free range eggs and even our tendency to keep pets. The knowledge that there is a high standard of animal welfare has value to the public and hence is of interest to economists.

Economists consider animal welfare to be a form of “public good”. Public goods are things such as street lighting, clean air or national defense, things that are “non-rival” and “non-excludable”. Unlike a normal good, enjoying a public good does not depend on preventing other people from enjoying it. Indeed the nature of public goods is that you cannot prevent others from enjoying the benefits derived from a public good. Unlike a piece of cake, where my enjoyment of it is dependent on me eating it and other people not eating it, a good standard of animal welfare in society can be enjoyed by everyone who is interested in animal welfare.

Similarly, a decline in animal welfare, possibly caused by battery hen production is:

...like smoking in a restaurant. Although a smoker enjoys a few puffs with dinner (just as the purchaser of cage eggs enjoys paying a lower price), they make the non-smokers' meals less enjoyable (just as the purchase of cage eggs makes hens and animal lovers less happy). (Norwood & Lusk, 2011, p.294)

These reductions in the happiness of animal lovers and non-smoking diners are what economists call “externalities”. Externalities are impacts on the welfare of people who are external to a transaction. As an example, buyers and sellers of battery cage eggs may have few concerns about hens' welfare, but other people in society are concerned. When the cage egg buyer encourages such production through their purchase, people external to the transaction are affected, knowing that more hens are likely to be confined to battery cages.

Conversely, a free range egg farmer may be able to sell their eggs for a higher price as the buyer enjoys knowing that their purchase supports higher animal welfare standards. But the enjoyment of these higher standards not only contributes to the welfare of the farmer and the purchaser, but also to animal lovers in the general community. Unfortunately for the farmer, the external nature of the benefit of his

free range farm means that while the price paid by the buyer may be higher, the farmer is not rewarded for increasing the welfare of others concerned with animal welfare.

Because people can't be excluded from enjoying the benefits of improved animal welfare and producers are unable to be rewarded the public's full value on their efforts to improve animal welfare standards, markets are unlikely to provide adequate levels of this public good. While products such as free range eggs or pork show that there is market support for animal welfare, they are likely to be under provided without government intervention.

Governments should, and do, legislate to ensure animal welfare standards are to the levels that society expects. Changes to such legislation should strive to improve the welfare of society overall, which involves consideration of the value of animal welfare as well as costs to producers expressed in monetary terms.

Conclusion

Because animal welfare is a public good, markets will generally undersupply it. As a result, governments should legislate to correct this market failure. Advocates for improved animal welfare should not feel that economics is against them, that industry revenues or hunter expenditure figures mean they do not have an economic case to make. Economists do see animal welfare as valuable and something to be incorporated into decision making.

The obvious question is, therefore, how much is animal welfare worth? Is an improvement in animal welfare worth risking revenues or other benefits? In future papers we will look at some attempts to value aspects of animal welfare through various methods.

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