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The Valuation of Animal Welfare in Human Society

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Introduction

The value which people place on a commodity or other aspect of their environment could be assessed in terms of money or of time, energy, or social costs. Where the objective is to improve some aspect of animal welfare, amongst possible actions, people may pay more for a product, buy an alternative product, spend time keeping animals in a better way, spend time studying the keeping of such animals or some other aspect of the production system, write letters to Members of Parliament, advertise their convictions in a public way, or adopt dietary habits which complicate their life and affect the attitudes of others towards them. Hence while measurement of the expenditure of money is a useful measure of the valuation of **animal welfare, there are other, perhaps more important, measures of expenditure** in its widest sense.

The question of how to assess public valuation of animal welfare depends upon the meaning of the concept so this will be presented in the first part of this paper. The use of the concept depends upon units of measurement so these are **also discussed**. The second section of the paper is a discussion of the public view of the agriculture industry and in the third part, various examples of evidence concerning current animal product consumption are mentioned.

Animal welfare: definition and assessment

A definition of welfare is **required for scientific study, for legislation and for other practical use**. The definition must refer to a characteristic of an animal which is measurable in such a way that scientific measurement can be clearly separated from moral judgement. The origin of the word welfare concerns how well the individual fares in life at that time. Taking **account of the range of systems** which animals have for trying to cope with whatever conditions they may encounter during life, welfare is defined as follows. The welfare of an individual is its state as regards its attempts to cope with its environment (Broom, 1986). This state refers to how much has to be done in order to cope with the environment, the feelings of the individual and the extent to which coping attempts are succeeding or failing. Welfare will vary over a range from very poor to very good. Some measures of how good or

how poor welfare is are listed in Table 1 and Table 2 and are discussed further by Broom (1988), Fraser and Broom (1990) and Broom and Johnson (1993).

Table 1 Measures of poor welfare

Reduced life expectancy

Reduced ability to grow or breed

Body damage

Disease

Immunosuppression

Physiological attempts to cope

Behavioural attempts to cope

Behaviour pathology

Self narcotisation

Extent of aversion shown

Extent of suppression of normal behaviour

Extent to which normal physiological processes and anatomical development are prevented

(from Broom and Johnson 1993)

Table 2 Measures of good welfare

Variety of normal behaviour shown

Extent to which strongly preferred behaviour can be shown

Physiological indicators of pleasure

Behavioural indicators of pleasure

(from Broom and Johnson 1993)

The welfare of farm animals can be assessed so as to compare the effects of different conditions of housing, management, or transport, or to measure the effects of farm operations like castration, conventional breeding procedures which could lead to some weakness or malfunction, or biotechnology procedures (Wemelsfelder and van Putten 1985, Hemsworth et al 1987, Mellor and Murray 1989, Gregory and Wilkins 1989, Broom 1991, 1993).

The results of such assessment have greater impact on the public, on farmers and on legislators than mere subjective impressions of welfare.

One result of welfare research has been the finding that increased production efficiency is sometimes, although not necessarily, associated with more welfare problems. The fast growth rates of broiler chickens, turkeys, pigs and beef cattle can lead to leg problems or respiratory problems (Broom, 1993). This is clearly relevant to any attempt to further increase animal production efficiency using biotechnology products or transgenic procedures.

The public view of agriculture

The agriculture industry in the United Kingdom has declined in public esteem during the last thirty years. Public concern about agriculture is greatest with reference to the quality and safety of human food. Other issues which have contributed to the decline in esteem are the welfare of farm animals and the effects of farming on the human environment. At times, worries about human food have been of almost over-riding importance but the public attitude that animals are often kept or treated in such a way that their welfare is unacceptably poor has increased steadily in importance.

Specific problem areas which are perceived to exist in UK animal production are: occasional direct neglect and cruelty; housing of calves, sows and hens; transport; farm operations like castration; and slaughter procedures. In addition there is a general concern that many farm animals may be pushed too hard and there is some antipathy to the use of genetic engineering.

The agriculture industry is seen by the public to be very secretive. Few people have seen inside modern farms or slaughterhouses and some people have been actively deterred from doing so. This is bad for the image of the industry and display farms with real production methods on view are a good way of solving this problem. The idea, often misguided, that farmers are concerned only about profit and not about the welfare of their animals will take some time to dispel.

The ethical view which is widely held amongst consumers is that if we interact with animals or use them in any way, we do have severe moral obligation towards them. We should avoid direct cruelty to any animal and should avoid using procedures or housing systems which have some effects on the animals. Most people would see the need for a balance between the effects of any procedure or system on an animal and the benefit accruing to man. They would like to avoid poor welfare in animals which we use and would condone adverse effects on animals only if the benefits were seen to be considerable.

Evidence for public attitudes about animal welfare

The most dramatic evidence for public concern about animal welfare is that UK Members of Parliament and Members of the European Parliament receive more letters about animal welfare than about any other topic. Even if a proportion of the mailbag is contributed by a relatively small number of dedicated letter writers, this is still impressive. A higher proportion of the animal welfare topics mentioned are now about farm animals than was the case ten years ago. Most of the letters are demands for legislation which would improve welfare.

A second kind of evidence may also be promoted by public letter writing and this is the extent of press coverage of animal welfare matters. Some of this coverage is promoted by some specific event or some piece of investigative journalism. An example of an event with considerable impact was the report of many thousands of sheep dying on a New Zealand ship, the Cormo Express bound for the Middle-Eastern and Arab market. This was reported on the front pages of British and Dutch newspapers and the event resulted in some action by the New Zealand government.

Surveys of consumers give some information about public attitudes and what people will buy. One example of such a survey carried out as long ago as 1986 by the Dutch Foundation for Statistics and the Tros Broadcasting Corporation provided figures, which might well be more dramatic now, which included the following:

Do you think that the keeping of laying hens in batteries should be completely be forbidden or do you think that this is not necessary?

yes, should completely be forbidden	70%
no, not necessary	24%
do not know, no opinion	<u>8%</u>
	100%

If we consider the rearing of pigs and chickens would you be prepared as a consumer to pay more for pork or chicken for the sake of the welfare of the breeding animals, or would you not be prepared to do this?

would be prepared	86%
would not be prepared	8%
do not know/no opinion	<u>6%</u>
	100%

This kind of survey does not tell us what people actually do buy but does provide a barometer of public concern.

More significant indicators of disquiet about meat production are the increase in the number of vegetarians or vegans and actual meat consumption which is lower than expected. If meat consumption had followed increasing public affluence in the UK during the last twenty years, the consumption would be considerably higher than that which is now reported. The British animal production industry has lost a very large amount of revenue as a consequence of worries about meat as a product. Some of these worries are about saturated fats and other factors which might affect human health but a considerable part of the lost revenue is attributable to disquiet about animal welfare.

Specific changes in purchasing can be related more directly to perceived welfare problems. Veal consumption has declined and free range egg and meat consumption has increased, largely because of information about the ~~welfare of veal calves~~, laying hens and pigs. Niche markets have arisen for the Real Meat Company, as well as for free range eggs. As a consequence, the E.C. labelling Directive was passed. Supermarkets have come to realise that their image could be improved if they did not sell products which could be criticised on moral grounds and they have started to respond to customer pressure. A non-farm example is the refusal to sell net-caught tuna because of the catching of dolphins and other cetaceans in such nets. In Holland the Albert Hein supermarket chain decided to stop selling eggs from hens kept in battery cages. Their eggs are now all 'Scharreleie', from percheries or other rearing conditions where the birds can scratch around in the litter or ground, but their sales have held up well. The current Freedom Food initiative by the RSPCA in conjunction with supermarkets will provide a welfare based quality control which may affect all animal product consumption.

Consumers have recently become more aware of and informed about animal welfare. This cannot be ignored by retailers or producers. These attitudes are also leading to considerable legislative activity in the European Community and in several countries outside the Community.

Conclusions

Animal welfare is now a more precise concept and its measurement in properly conducted scientific studies means that the public, farmers and legislators can take action based upon evidence whose quality is increasingly good. The welfare problems perceived to exist in animal production have resulted in: (i) many expressions of concern, (ii) less meat consumption than would have been expected from people's relative affluence, (iii) avoidance of or preference for specific products, (iv) development of welfare based premium price sales, and (v) legislation in many countries. The agriculture industry must halt the decline in the quality of its image by improving animal welfare and demonstrating, in a way which is convincing to the public, that those involved in the industry are concerned about the welfare of farm animals.

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