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Does present legislation help animal welfare?

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Abstract

Animal welfare is a factor which affects public acceptability of animal production systems and hence sustainability. The scientific assessment of animal welfare, including animal health, has developed rapidly in recent years. Public concern about the welfare of farm animals has also increased substantially. Legislation has an effect on animal welfare if adequately enforced. At present, the greatest effects on animal welfare are the standards set by purchasers of animal products, principally supermarkets and fast food chains. The actions of farmers and others involved in animal production also have major effects on animal welfare. These actions are affected by financial considerations but also by pressure from purchasers, legislation and the attitudes of family, friends, visitors, other farmers and the general public. Those who design and manufacture housing and equipment for farm animal management and those who breed animals for farm use can have substantial effects on animal welfare. Indeed, the consequences of breeding for high production efficiency have caused some of the most substantial of today's animal welfare problems. Legislation is needed in relation to animal breeding and some aspects of system manufacture. The World Trade Organisation should include poor welfare of animals as a criterion for legislation which allows refusal of imports.

1. Sustainability, welfare and health

There are several possible reasons why an animal production system might not be sustainable. It could be because it involves so much depletion of a resource that this will become unavailable to the system. It could be because a product of the system accumulates to a degree which prevents the functioning of the system. However, in each of these cases, and in the case of some other aspects of systems, the earliest effect which renders the system unsustainable is one which impinges upon the general public's values in a way which the members of the public find unacceptable. Where there is depletion of

a resource or accumulation of a product, the level at which this is unacceptable, and hence the point at which the system is unsustainable, is usually considerably lower than that at which the production system itself fails. Unacceptability is often due to effects on other systems.

One major reason why animal production systems may be regarded by the public as unacceptable and hence become unsustainable without some modification, is that the product adversely affects human health, whilst another reason is their effect on the welfare of animals which are used in the production system. There is a point at which the welfare of the animals is so poor that the majority of the public consider the system to be unacceptable. Hence animal welfare and public attitudes to it must be considered wherever the sustainability of an animal production system is evaluated.

The terms "health" and "welfare" overlap in that health is an important part of welfare. The welfare of an animal is its state as regards its attempts to cope with its environment (Broom, 1986). Hence welfare is a characteristic of an individual animal and includes extent of success in coping with all aspects of its environment, failure to cope which may lead to disease, injury and death, and extent of difficulty in coping. The mechanisms for trying to cope include behaviour, physiological systems, immunological systems, a range of feelings such as pain, fear and various forms of pleasure, etc. Health is that part of welfare which concerns coping with pathogens and pathology. Welfare varies on a scale from very good to very poor and can be assessed scientifically, an adequate range of measures being needed (Broom 1991, 1996, 1998, Fraser and Broom 1990, Broom and Johnson 1993). Health also varies from good to poor. Good health involves absence of pathological effects whilst good welfare involves absence of indications of poor welfare, including those of pathology and disease, and indications of contentment, pleasure and happiness. Animal welfare science has developed rapidly in recent years.

Both poor health and other aspects of poor welfare can have economic aspects. Farm animal disease can cause great economic problems and a few farm animal diseases pose a risk for human health. Poor welfare which does not involve poor health can result in reduced survival of young animals, failure to conceive or successfully give birth, impaired growth or impaired production of milk or eggs. Farm animal welfare is therefore a matter of public concern (a) for its own sake, in that people consider that they have moral obligations to animals, (b) because of effects on costs of food and other animal products and (c) because of effects on human welfare. The animal health component of welfare contributes to each of these. The very substantial effects of farm animal health on economics of production and the recent increase in concern about moral obligations to animals have been reasons why animal health has been thought of as a

separate subject from animal welfare but it is logically and scientifically incorrect to speak of health as distinct from welfare.

2. Factors which affect the welfare of farm animals

Legislation has effects on how people house and manage animals but several other factors also affect this. Codes of practice produced by governments, the animal production industry, or companies which purchase the products from farmers and sell them to the public have an effect. So too do other factors which help to form the attitudes of the people who construct animal accommodation, own animals, manage units, care for animals on a day to day basis, transport animals, handle animals in markets, or slaughter animals. Each of these kinds of influence on the treatment of animals, and hence on their welfare, will be considered together with the consequences of efforts to make animal production more economically efficient and the impact of international trade agreements.

2.1 Legislation and the extent to which it is enforced

Legislation is generally initiated by pressure from voters on elected politicians. The politicians would usually seek advice from civil servants before formulating new legislation. In recent years, whenever any legislation on animal welfare is proposed, advice is sought from committees or working groups of scientists. The non-government organisations who lobby the politicians, whether they are producers' organisations or animal protection organisations, will have some access to scientific advice so it is important for the legislators to know the latest state of scientific knowledge on the subject. As a consequence, the European Union has set up, via the European Commission, scientific committees on a range of subjects. The former committee was the Scientific Veterinary Committee, Animal Welfare Section. The present committee is the Scientific Committee on Animal Health and Animal Welfare. There are also various national scientific, or scientific and ethical committees. Indeed the subject matter of much of the possible legislation on farm animal welfare is so complex that it would be most unwise to proceed with it without expert advice. Some E.U. Directives and Regulations are listed in Tables 1 and 2.

Table 1 - Some E.U. Directives and Regulations relevant

to animal welfare : 1. farm animals

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| • 98/58 (20/7/98) | Concerning the protection of animals kept for farming purposes |
| • 74/577 | Stunning before slaughter |

93/119 (22/12/93)	On the protection of animals at the time of slaughter or killing
• 86/113 88/166 (7/3/88)	Laying down minimum standards for the protection of laying hens kept in battery cages
99/74 (16/7/99)	Laying down minimum standards for the protection of laying hens
Regulation 1906/90 (22/6/90) 1907/90 (26/6/90) 1538/91 (5/6/91)	Marketing standards for eggs
• 91/629 (19/11/91) (24/2/97 annex amended) 97/2 (2/1/97)	Laying down minimum standards for the protection of calves
• 91/630 (19/11/91)	Laying down minimum standards for the protection of pigs
• 90/425 91/496 91/628 (19/11/91) 95/29 (29/6/95)	Concerning the protection of animals during transport
Regulation 1255/97 (25/6/97)	Concerning staging points and amending the route plan
Regulation 411/98 (16/2/98)	On additional animal protection standards applicable to road vehicles used for the carriage of livestock on journeys exceeding eight hours

Table 2 - Some E.U. Directives and Regulations relevant to animal welfare : 2. animals other than farm animals

• 78/1027	Veterinary training
• 79/409 (2/4/79) 97/49 (29/7/97)	On the conservation of wild birds
Regulation 3626/82	Wild animals
83/129	Seal skins
Regulation 3254/91 (4/11/91)	Prohibiting the use of leghold traps (imports: humane trapping standards)

Regulation 338/97 (9/12/96)	On the protection of species of wild fauna and flora by regulating trade therein
• 86/609 (24/11/86)	The protection of animals used for experimental and other scientific purposes
88/320 (9/6/88) 99/12 (8/3/99)	Inspection and verification of good laboratory practice
• 99/22 (29/3/99)	Relating to the keeping of wild animals in zoos

Legislation within European countries and E.U. Directives and Regulations have usually been preceded by Recommendations from Council of Europe committees. The committees have representatives from all European countries and observers from non-European countries, the European Confederation of Agriculture, animal protection societies and the International Society for Applied Ethology which provides scientific advice. In addition to ad hoc committees on Conventions on slaughter, transport, laboratory animals and companion animals there has been for 25 years the Standing Committee of the European Convention on the Protection of Animals Kept for Farming Purposes. This last Committee has produced Recommendations on: poultry kept for egg production, pigs, cattle, fur animals, sheep, goats, chickens kept for meat production and ducks. The information in the Convention and Recommendations has formed the basis for legislation and codes of practice in many countries.

The actual effect of legislation on the welfare of animals depends upon the responses of those owning and managing the animals. This response, in turn, depends upon the nature of any enforcement. Some systems for farm animal production will not continue if they are made illegal because they depend upon large manufacturers who are easily forced to change to a legal system. Other aspects of legislation can be enforced only by checks on farm, transport vehicles, markets, slaughterhouses etc. and the extent of law-breaking will be significantly affected by the frequency and quality of the checks. For many transgressions, unannounced inspections are necessary if transgressors are to be discovered. There are regional and national differences in the extent to which legislation is viewed seriously by those involved in the animal production business. The general direction of movement within the European Union in this respect is towards better enforcement in all member states because it is manifestly unfair for there to be significant differences in the extent of compliance with the laws.

2.2. Government-produced codes of practice

Guides to how particular farm animals should be housed, and managed and guides to procedures during transport, in slaughter houses or in relation to particular farm emergencies such as fire or to diseases are produced by some governments. These have a considerable educational value provided that they are made available to people carrying out the relevant work and that they are read. In some countries such codes of practice have a legal status in that they can be referred to in situations where there is a question as to whether a generally-worded law is being broken. However, aspects of codes of practice are sometimes widely ignored by the animal production industry. For example, a statement about maximum stocking density in the production of turkeys or chickens reared for meat may be ignored by the majority of producers during the latter stages of rearing. If there is no enforcement of the statements in the code of practice, or if there is ambiguity about the legal status of the code, its value is greatly diminished. The effect on the welfare of animals may then be very little. The public opinion about the value of a code of practice will be greatly affected by information about its effectiveness. The government department itself is devalued in the eyes of the public if it is perceived that a code is ineffectual in important respects.

2.3. Production-industry-derived codes of practice

There can be important improvements in the welfare of farm animals if good codes of practice are devised by the industry and implemented by the majority of farmers, transporters, slaughterhouses, etc. The public image of the industry can be substantially improved and the sales of products maintained or increased if it is perceived by the public that standards are good and are observed. However, in most countries, at present the public has insufficient trust in the animal production industry to take the word of producers that standards are observed. Some independent checking is needed.

2.4. Retailer-produced codes of practice

Farmers often sell animals or their production of milk, eggs etc. to single purchasers who represent large retail chains or wholesale distribution companies. The increase in direct selling to supermarket chains has led to considerable power being placed in the hands of these supermarket companies. It is possible for these purchasers to lay down conditions for animal production and to enforce these by inspection. The standards set by the supermarket chains are determined by what people will buy and by their reputation with the public.

The public image of large companies which retail food, including supermarket chains and fast-food companies, is of great importance to them. Bad publicity because of a risk to public health, a risk to the environment or the occurrence of poor welfare at any stage of

the production process can be very damaging. Hence it is in the interest of such food companies to avoid any scandal which might threaten their good image. When these companies receive many letters from consumers complaining about a product which they sell, they have to take notice of the points which are being made.

As a consequence of consumer pressure, food retail companies are adopting standards which they impose on their suppliers. In some cases, these standards are quite simple, for example Albert Hein in the Netherlands and elsewhere limited their sales of eggs to "scharreleie" which meant that the hens were reared in conditions where they could scratch in litter. Marks and Spencer in the U.K. and elsewhere stopped selling eggs from battery cages. In other cases, elaborate standards have been described in detail and sent to suppliers. One of the first systematic attempts to provide comprehensive information about the conditions under which animals were kept in the course of food production was the "Freedom Foods" scheme run by the R.S.P.C.A. in the U.K. In this scheme, the standards for housing and management have been set by a widely respected animal protection society and farms are inspected by Freedom Foods staff. Retailers who subscribe to the scheme are allowed to use the Freedom Foods logo which is accepted as honest by the purchasing public. Acceptance, by the public, of products which are produced in such a way that the welfare of the animals is good, depends upon trust in the organisation which is carrying out the labelling and inspection. Some large supermarket chains and other food retailers are trusted because it is thought that they could not afford to be found out if they were not labelling and policing adequately. Animal protection groups are trusted in this respect and their label is a valuable asset for some retail companies. A recent development in this area is the announcement by MacDonaldis fast-food chain in the U.S.A. of standards for the welfare of hens which produce their eggs, including increased space allowance and the banning of forced moulting.

The enforcement of standards by food retailers has led to substantial changes in the welfare of animals on farms because every producer has to conform to the standards in order to sell their products. The rapid development of such schemes in several countries has, in general, been based on scientific evidence about animal welfare. The retail food chains started to seek the advice of independent scientists in order to be able to reply to customers' questions. They subsequently sought such advice, or employed scientists or veterinary surgeons with extra qualifications in animal welfare, when setting up their animal welfare standards. Since the standards themselves are open to public scrutiny and those scrutinising can have expert scientific advice, most of the standards are soundly based.

2.5. Effects of builders and designers of animal facilities and equipment

It is the people who design and build farm animal facilities and the people who own, manage and work on farms, transport operations and slaughterhouses who have the principal effects on animal welfare. The actions of these people may depend to some extent on expert advice, for example that of veterinary surgeons.

The architects, builders and equipment companies who provide accommodation and other facilities for those in the food animal production industry, depend upon their customers in the sense that their products would not be bought if they were not economically viable but they also have freedom to be innovative and they are perceived by the public and the farmers to have moral obligations to animals similar to those of the farmers themselves. Some of these moral pressures are not as immediate, however, so these companies are not always ready to acknowledge their responsibilities.

2.6. Attitudes of farmers, transporters, slaughterhouse staff etc.

Public concern about animal welfare has increased in many countries during the last thirty years and especially in the last ten years. Evidence of this is summarised in Table 3.

Table 3 - Evidence for increased concern about animal welfare.

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| 1. | Letters from the public, media coverage. |
| 2. | References in parliamentary discussions and government statements. |
| 3. | Requests for scientific evidence concerning animal welfare. |
| 4. | Activity of scientific and other advisory committees. |
| 5. | Funding of scientific research on animal welfare. |
| 6. | Increased teaching and conferences. |
| 7. | More legislation. |
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(from Broom 1999)

People who run or work on farms are influenced by a variety of factors when they are deciding on their housing and management policies and when they are executing these policies. They are involved in a commercial enterprise and will be endeavouring to make a profit so the monetary costs which they incur and the potential financial returns which they are likely to get for their product will be factors of major importance to them. Some other costs to the industry exist, for example, consumers who do not like some aspect of production may refuse to buy the product (Broom 1994). These costs are often ignored by individual farmers.

Attitudes of animal users depend upon early training, traditional practices, acquisition of knowledge from others subsequent to any training, personal experience and general beliefs and philosophy. Training did not, until recently, include much information about animal welfare except where it impinged on profitability. Even diseases were often mentioned in agriculture training only in relation to effects on growth, offspring production or product quantity and quality. Recent training courses are more likely to have included information about the welfare of the animals and most agricultural trade journals nowadays do cover animal welfare issues. Traditional practices are often deemed by farmers to be right for the sole reason that "this is the way that we have always done it". Some of these methods are the best ones for good welfare but in a time of changing attitudes to animals, such arguments are untenable.

Farmers and other animal users have to live with their families, friends and neighbours. If these people are critical of the effects on the welfare of animals of the methods used, the farmer may change these methods. In some cases, the animals are very obvious to all who pass by the farm. If a sheep or cattle farmer has many animals which are noticeably lame, there will be a considerable likelihood that someone will comment on this to the farmer. Farmers do not like to be thought incompetent or uncaring, so they may respond to such comments by giving the animals veterinary treatment or changing the management system so as to avoid lameness. If the animals are inside a building or otherwise hidden from public view, the number of people who might comment on poor welfare will be smaller and there is a greater chance that the farmer can persuade himself or herself that there are no significant welfare problems.

Meetings with others in the same business and trade magazines will tend to help farmers and others to arrive at common views about their various problems. A farmer who has to reconcile himself or herself to poor welfare in some animals will find it easier to do so with the support of others. Such influences will tend to slow down change towards better welfare in the animals if economic factors mitigate against such change.

The views of the general public are largely made known to farmers and others involved in animal production via the media. There is frequent coverage of animal welfare issues in newspapers, on radio and on the television and this, by bringing scientific knowledge about animal complexity to the attention of most people, affects the attitudes of people and then comes to represent it. Farmers see themselves portrayed as uncaring in some respects. They are unfairly portrayed on some occasions but other portrayals are correct and the farmer cannot hide from them by retreating physically into buildings and socially into a farming only society. When public demonstrations about animal welfare issues occur, farmers cannot ignore these. The demonstrations by great numbers of largely

orderly and apparently normal people against the shipping of calves to conditions which were illegal within the United Kingdom, had a big influence on farmers and politicians alike. It is not the most vociferous people, who are sometimes rather extreme in their views, who have the greatest influence on animal users or politicians but the moderate people who represent a groundswell of public opinion. In many recent surveys in Europe, animal welfare has been shown to be an important issue for the general public. For example about three quarters of people questioned in France regarded animal welfare as a problem affecting their purchasing of veal or eggs (Ouedraogo 1998) and 34% of 420 schoolgirls questioned in Dublin stated that they avoided eating meat, principally (53%) for animal welfare rather than nutrition (29%) reasons (Ryan 1997)

2.7. Consequences of efforts to make animal production economically efficient

The improved nutrition of animals and the genetic selection of animals in order to increase rates of growth and to improve feed conversion efficiency have resulted in cheaper and more readily available animal products for consumers. This has been a great success story but continuing efforts in these directions have often not involved sufficient consideration of the adverse consequences for the animals. As has been pointed out (Broom 1994, Phillips 1997) continuing efforts to achieve earlier and faster growth, greater production per individual, efficient feed conversion and partitioning, and increased prolificacy are the causes of some of the worst animal welfare problems. To prevent these, in addition to housing systems and management methods, feeding systems and genetic selection need to be changed. The breeding companies have a very great effect on animal welfare. Especially in relation to broiler chickens, turkeys, pigs and dairy cattle, there are major problems such as lameness, ascites, inability to mate, other cardio-vascular disorders, mastitis and reproductive problems which are a direct consequence of breeding for high production. The direction of selection needs to be reversed, or at least causes of poor welfare need to be taken into account during selection, if animal welfare is not to get poorer and poorer.

Legislation against genetic selection of farm animals which frequently results in poor welfare exists in a few countries but should be passed in all countries. To some extent the standards set by retail companies can deal with the problem. These companies can insist on slower growth, less bodily distortion and eradication of undesirable, if profitable, traits. Farmers can also insist on more appropriate strains of animals when they buy from breeding companies.

2.8 International trade agreements

The European Union started as a trade agreement but now encompasses legislation which is in force in all member states. Some of this legislation has a moral basis, for example it prevents unreasonable exploitation of people, such as child labour, or it prevents poor welfare in farm animals. Although there is a general effort, within E.U. legislation, to prevent trade barriers within the E.U., for example in the for sale of animal products, this legislation has effects which are regarded as morally right by most citizens of E.U. member states.

Future improvements in farm animal welfare depend to some extent on world trade agreements. Poor welfare in animals must be regarded, in any such agreement, as a moral issue in relation to imports. It is intolerable to most civilised people that all countries must drop their standards to that of the lowest when a moral issue is at stake so all European countries should endeavour to insure that the next World Trade Organisation agreement, or the interpretation of the present one, is changed to include poor welfare in animals as a criterion for legislation which allows refusal of imports.

3. Conclusions

Animal welfare is one of the criteria which is used by the public when deciding whether an animal production system is acceptable, so it is a necessary consideration for sustainability. Animal welfare, of which animal health is an important part, can be scientifically assessed and is the subject of much public concern. The actions of farmers and other people involved in animal production in relation to animal welfare must be considered when asking how animal production is regulated. These actions are most affected by regulations imposed by those who purchase their products. The standards set by food retailers are having a considerable effect on the welfare of animals on farms. Secondly, animal welfare during animal production is affected by legislation but the extent of this effect depends upon the efficacy of enforcement and the general attitude to legislation. Thirdly, the knowledge of the individuals concerned in animal production and their philosophy in relation to animals will affect animal welfare. The actions of the farmers, transporters or slaughterhouse staff will also be affected by the attitudes of their family, friends, visitors, and colleagues and of the farming press and general media or other sources of information about public views. The breeding of animals, which causes significant and serious welfare problems, should be prevented by means of legislation although pressure from the purchasers of products may bring about some changes. There is an urgent need to change the present World Trade Organisation agreement so that animal welfare standards are allowed criteria for refusing imports.

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