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Animal welfare and international trade

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1. World attitudes and socioeconomic trends

A significant change has been occurring in world economics, probably because of increasing availability to the public of good quality information. Consumers now want to know more about the origins of what they buy, especially about the ethics of the methods of production. For example, in the food production industries, whereas at one time producers decided on most aspects of methods of production, now consumers have increasing impact on what methods will or will not be used. There is a move from a push economy driven by producers to a pull economy driven by consumers (Broom 2014, 2016).

In most countries of the world, including China and European countries, sustainability issues are now being viewed as of increasing importance by the public. Where resources are exploited, the fact that something is profitable and there is a demand for the product is not now sufficient reason for the continuation of production. A system or procedure is sustainable if it is acceptable now and if its expected future effects are acceptable, in particular in relation to resource availability, consequences of functioning and morality of action (Broom 2001a, 2014). Acceptability refers to the general public, for example, those who might buy a product. A system might be unsustainable for several possible reasons. For animal usage systems, including those with an animal production aim, examples of such reasons are: (i) because it involves so much depletion of a resource that this will become unavailable to the system, (ii) because a product of the system accumulates to a degree that prevents the functioning of the system, or (iii) because members of the public find that an action that is part of the system, or a consequence of the system, is 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. Other reasons for unacceptability are harms to the perpetrator, harms to other people, harms to the environment, or harms to other animals. Poor welfare of animals has become more important as a reason for system unacceptability in recent years (Broom 2017).

For very many people, in Europe and around the world, animal welfare is considered to be a public good (McInerney 2004) and an important part of sustainability. According to a Eurobarometer survey in 2016, awareness of animal welfare continues to increase with 94% of Europeans agreeing on the importance of protecting farm animal welfare. The vast majority of respondents believed that farm animal and companion animal welfare in Europe should be

better than it is now. Surveys in other countries also indicate the extent of discontent about animal welfare with current practices during animal usage. The pressure to avoid poor welfare of animals exerted by consumers in most countries is directed especially at food retail companies. As a result of consumers threatening to boycott supermarkets or restaurant chains if they sell products whose production causes poor welfare of animals, many of these companies now have welfare standards (Bennett et al 2002, Broom 2010). These standards are imposed on animal producers, policed by the retail company and information about them is available to consumers.

2. Concepts referring to humans and other animals

Health and welfare are terms that apply to humans and all other animals, indeed the human disciplines in these areas are extremely similar to the non-human disciplines. The One Health concept is generally defined as a worldwide strategy for expanding interdisciplinary collaborations and communications in all aspects of health care for humans, non-human animals and the environment. A resolution promoting the similarity of human and non-human animal health and the need for collaboration between the human medical and veterinary researchers and practitioners was adopted in 2007 by the American Medical Association and the American Veterinary Medical Association. The concept is further explained by Monath et al (2010) and Karesh (2014).

The welfare of an individual is its state as regards its attempts to cope with its environment. Feelings are a part of coping mechanisms and health refers to coping with pathology so both feelings and health are important parts of welfare. The term welfare refers to animals, including humans, but not to plants or inanimate objects. Hence welfare is a wider term than health, it can be measured scientifically and it varies over a range from very good to very poor (Broom 1986, Broom and Fraser 2015). Welfare means the same as well-being, although the word welfare is often thought of as more precise, and welfare is used more often in scientific writing and in laws. Quality of life also means welfare, so it can be measured, but the concept of quality of life is not normally used for short periods of life (Broom 2007).

The similarities, in humans and a range of other species, of studies of stress and welfare referring to physiological, immunological and clinical research were emphasised at a Dahlem Conference “Coping with Challenge: Welfare in Animals including Humans” (Broom 2001b). It was clear that human psychiatry and medicine could learn from farm animal and other welfare research and vice versa. More recently, the one welfare approach has been presented (Colonus and Early 2013, Garcia Pinillos et al 2015, 2016, 2018, Broom 2017). When the welfare of individual humans or non-human animals is poor, there is increased susceptibility to disease. As a consequence, improving welfare generally reduces disease. Preventing anti-microbial resistance is good for animal welfare and improved welfare can reduce the need for the use of anti-microbial products. Those with a medical background and those with a veterinary or other biological background benefit from exchanging information, in particular because of the similarities in disease and in other causes of poor welfare in humans and other species. Care for people and care for animals used

by people is generally better if all are considered as individuals.

3. Regulation and sentience

The European Union has high regulatory standards concerning animal welfare and the Lisbon treaty (European Union 2007) recognises that the animals that we use: farm animals, pets, working animals, laboratory animals, animals used for human entertainment, are sentient beings. Hence, these animals should not be considered to be merely property and all legislation should cause them to be treated accordingly. An example of a more recent statement to this effect in EU legislation is in Article 12 of Directive 2010/63 “On the protection of animals used for scientific purposes”. This states: “Animals have an intrinsic value which must be respected. There are also the ethical concerns of the general public as regards the use of animals in procedures. Therefore, animals should always be treated as sentient creatures and their use in procedures should be restricted to areas which may ultimately benefit human or animal health, or the environment. The use of animals for scientific or educational purposes should therefore only be considered where a non-animal alternative is unavailable. Use of animals for scientific procedures in other areas under the competence of the Union should be prohibited.”

The term sentience has for some time been used to mean that the individual has the capacity to have feelings (DeGrazia 1996, Kirkwood 2006, Broom 2006). This capacity involves awareness and cognitive ability so is principally a brain capacity. Sentience implies a range of abilities that are required in order to have feelings but does not mean actually having the feelings. A definition of a sentient being in terms of such abilities is: one that has some ability to evaluate the actions of others in relation to itself and third parties, to remember some of its own actions and their consequences, to assess risks and benefits, to have some degree of awareness and hence to have some feelings (Broom 2006, 2014). There is much evidence for substantial cognitive ability, sophisticated awareness and a range of emotions in the mammals, birds and fish that are used by humans. Indeed all vertebrate animals, cephalopod molluscs and decapod crustaceans are considered to be sentient (Broom 2014). As a consequence, these animals should be protected, or at least their sentience considered, by EU legislation. At present, some farm and laboratory animals are protected but others are not (Broom 2017). Most individual EU member states have more comprehensive legislation protecting animals but not all EU legislation has been modified to take account of the wording of the Lisbon Treaty. Examples of legislation in which reference to sentient animals is not taken into account include Regulation (EU) 576/2013 on the non commercial movement of pet animals and Regulation (EU) 1143/2014 on the prevention and management of the introduction and spread of invasive alien species.

4. EU legislation and other policies affecting animal welfare

Within the European Commission, the main section that deals with legislation and other activity in relation to animal welfare is D.G. Santé (Health and Food Safety). However, other sections also take account of animal welfare in the course of their tasks. For example, D.G. Environment has a small team that does this and there are individuals in D.G. Agriculture and Rural Development, D.G. Growth, D.G. Trade and other sections who ensure that the subject area is considered when they are preparing policy or legislation.

Some legislation and codes of practice are deliberately designed to have an impact on animal welfare but other legislation may have an indirect effect on welfare. Any measure which reduces disease will improve welfare and some conservation measures lead to fewer attempts to kill animals and hence reduce the poor welfare that often occurs during such attempts. In some cases there may be multiple reasons for introducing a legislative measure. Some measures whose aim is to promote sustainable systems may increase biodiversity, reduce pollution and improve animal welfare.

The first EU legislation whose direct aim was to minimise poor welfare in non-human animals was to require stunning before slaughter (Directive 74/577/EEC). Soon after this, legislation which specifies what must be included in veterinary training was introduced (Directive 78/1027/EEC). This prevented the occurrence of poor welfare associated with inadequate training and benefitted animals because it required that veterinarians have knowledge about animal welfare. Some poor welfare is also prevented by legislation prohibiting the killing of certain birds and other wild animals. The wide range of EU animal welfare legislation is listed by Broom (2017). The EU has also had influence by funding research on animal welfare, for example the valuable Welfare Quality project and the innovative Animal Welfare Indicators (AWIN) project. In addition to scientific papers, the AWIN project also produced the Animal Welfare Science Hub (<http://animalwelfarehub.com/>). This provides information on teaching and research in animal welfare.

In order to help to formulate policy in the EU, the Animal Welfare Strategy covering the period 2012-2015 was prepared. The impact of this strategy has been evaluated for the European Commission. In 2017 the European Union produced a number of publications that focused on sharing best practice and advancing animal welfare. Those included the "Preparation of best practices on the protection of animals at the time of killing" and the "Welfare of farmed fish: Common practices during transport and slaughter". Moreover, during 2016, the "Animal Welfare Platform" was launched and animal transport guides were proposed. The European Commission released reports in 2018: "on the impact of animal welfare international activities" and "on the cross-compliance mechanism of the Common Agricultural Policy (CAP)". The first EU Reference Centre for animal welfare commenced function in 2018. All of these actions help trade within the EU and clarify what is needed for trade to occur with other countries.

5. Scientific information used in formulation of laws

In the EU, the sequence of events that leads to a Directive or Regulation about animals has always included the production of a scientific report by unbiased scientists. As an example of events leading to an EU Directive, the welfare of calves may be considered (Broom, 2009). In the 1970s and 1980s there were research results giving evidence for serious welfare problems in closely confined calves. In 1988 the Council of Europe Standing Committee on the Protection of Animals Kept for Farming Purposes (TAP) recommendation concerning the welfare of cattle stated that cattle should be able to make all normal movements for grooming, exercise and other behaviours. This is clearly not possible in a small crate. A 1990 European Commission report by a group of scientists reviewed the evidence about calf welfare in relation to confinement and both iron and roughage in the diet. This was followed in 1991 by Directive 91/629/EEC laying down minimum standards for the protection of calves. This allowed the use of crates of a minimum size but required a report on calf welfare from the EU Scientific Veterinary Committee. There was further research on the effects on calf welfare of diet, confinement, individual rearing and space in groups and, in 1994-1995, much public pressure for action. The "Report on the welfare of calves" was produced by the EU Scientific Veterinary Committee, Animal Welfare Section (1995) and in 1997 Directive 97/2/EC phasing out the use of veal crates and inadequate diets was passed. There are now many other examples of legislation based on information from scientific reports in the EU and elsewhere. In recent years, the reports are often misleadingly called opinions. A valuable development in many of the outputs of the European Food Safety Authority (EFSA) concerning animal welfare is the inclusion of systematic risk assessments and benefit assessments (Smulders and Algers 2009, Broom 2009, Berthe et al 2012).

Laws should provide guidance, not just a mechanism to punish (Radford, 2001). EU legislation has some guidance incorporated in it but since it is based on scientific reports that are publicly available, the reports and opinions can provide guidance to anyone in the world who may need it. Some of these reports and opinions provide advice on what welfare outcome indicators can be valid and useful for inspectors or farmers to assess welfare in order to comply with laws. Scientific reports are one of the ways in which the EU has helped or had influence on other countries in the world. As explained by Broom (2016, 2017) EU legislation and policies have also had effects on practices and trade internationally.

6. The World Trade Organisation dispute about trade in seal products

The rules setting up the World Trade Organization (WTO) do not specify that animal welfare is an accepted ground for restricting trade. This situation has resulted in difficulties for countries with strict animal welfare laws as they cannot prevent imports of animal products from countries that can produce them more cheaply because they do not have strict animal welfare laws. However, the WTO rules do specify public morality as an acceptable reason for restricting trade.

The European Union passed legislation banning trade in seal products on animal welfare grounds. This was the result of public pressure over many years because many of the young seals killed for their fur, principally in Canada, were not killed in a humane way (Broom 2014). The EU produced hardly any sealskin products so this action was not because of trade competition with Canada. The EU ban was challenged at the World Trade Organisation by Canada and this challenge was supported by Norway. A WTO Panel was constituted (DISPUTE DS400 European Communities — Measures Prohibiting the Importation and Marketing of Seal Products) and hearings occurred in Geneva during 2013. At these hearings, two other countries with some sealskin production, Namibia and Iceland, spoke in support of Canada. Other countries including Russia which has a ban similar to that of the E.U. on animal welfare grounds, and the United States which has a ban on conservation grounds, spoke in favour of the EU position.

Scientific evidence presented at the WTO hearings by the author, included the following points. Seals are sentient beings which can learn complex tasks and have feelings such as pain and fear. Their pain and fear systems are very much like those of humans and other mammals. Seals are either killed by a sealer walking to the seal and clubbing it or by a person on a moving boat shooting a seal on an ice floe, that is often moving, or shooting a seal in the water. Clubbing and shooting can wound the seal or make the animal temporarily unconscious. Injured seals often enter the water and may escape the sealers. These injured seals may recover or die of their wounds some hours, days or weeks later. Herding or chasing seals will cause fear and other forms of poor welfare. The major problem is whether or not there is there a humane, acceptable and reliable method of killing seals. During a commercial seal hunt, some seals will be killed humanely. However, even if all rules are obeyed, the welfare of a substantial proportion of seals will be very poor. It is not possible to stun and kill seals in commercial conditions without the welfare of many seals being poor.

The WTO panel found on 25 November 2013 that the EU Seal Regime does not violate Article 2.2 of the Technical Barriers to Trade (TBT) Agreement because it fulfils the objective of addressing E.U. public moral concerns on seal welfare to a certain extent, and no alternative measure was demonstrated to make an equivalent or greater contribution to the fulfilment of the objective. The EU ban on seal products was found not to violate the general Agreement on Tariffs and Trade (GATT). However, the EU's exception to the seal product ban for indigenous peoples and marine resource management was found to be unacceptable by the WTO. This means that seal products resulting from inhumane killing methods may not be traded in the EU in any circumstances.

This is a very important result as it is the first time that a product ban on animal welfare grounds, as part of public morality, has been accepted by the WTO. The possibility is raised that other product bans on the same grounds might be accepted. At present, certain farming practices are banned in some countries because their effects on animal welfare are unacceptable to the public in those countries. Examples include the EU bans on keeping calves in small crates, keeping pregnant sows tethered or confined in stalls that do not allow the sow to

turn around, and keeping laying hens in battery cages with a space allowance of less than 550 cm² per bird. However, these systems are allowed in many other countries and it has been perceived that the import of veal, pig meat and eggs from such countries could not be blocked by the EU because of WTO rules. Following the WTO ruling in the seal products case, it may be that this situation will change because the public in the EU consider that the very poor welfare of closely confined calves, sows and hens is unacceptable and a matter of public morality.

7. Actions on animal welfare by other world organisations

The World Trade Organization has accepted that animal welfare can be considered to be a part of public morality and hence to fall within the remit of the WTO. Other world organisations with policies about animal welfare include OIE, FAO, OECD and the World Bank. All of these have been influenced by EU policies and some were initiated because of EU policies. EU legislation on the welfare of calves, poultry, pigs, animals during transport, animals during slaughter, laboratory animals, animals treated with growth-promoting drugs, cloned animals and genetically-modified animals has influenced policy and laws in other countries and has been copied by some of them. Pressure from the general public, which has had much effect on EU animal welfare laws and policies, is having the same effects in most countries of the world but at various rates.

On a worldwide scale the Office Internationale des Epizooties (World Organisation for Animal Health, OIE) is now producing sets of recommendations about animal welfare and these have been agreed by over 180 countries. Hence, these are likely to be treated as if they were laws by most nations in the world, just as OIE recommendations on animal disease are respected. For example, China has developed training programmes so that the OIE standards will be upheld within the country. Such action facilitates international trade as well as helping to meet the requirements of consumers within the country. However, many countries have higher animal welfare standards than those at present in the OIE recommendations so exporting countries need to be aware of what standards are demanded by consumers in each country to which they export. The importance of considering animal welfare in the course of international trade has also been emphasised in the information provided by FAO and in statements by OECD and the World Bank.

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