The globalisation of farm animal welfare

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Summary
Animal welfare has achieved significant global prominence for perhaps three reasons. First, several centuries of scientific research, especially in anatomy, evolutionary biology and animal behaviour, have led to a gradual narrowing of the gap that people perceive between humans and other species; this altered perception has prompted grass-roots attention to animals and their welfare, initially in Western countries but now more globally as the influence of science has expanded. Second, scientific research on animal welfare has provided insights and methods for improving the handling, housing and management of animals; this ‘animal welfare science’ is increasingly seen as relevant to improving animal husbandry worldwide. Third, the development and use of explicit animal welfare standards has helped to integrate animal welfare as a component of national and international public policy, commerce and trade. To date, social debate about animal welfare has been dominated by the industrialised nations. However, as the issue becomes increasingly global, it will be important for the non-industrialised countries to develop locally appropriate approaches to improving animal welfare, for example, by facilitating the provision of shelter, food, water and health care, and by improving basic handling, transportation and slaughter.

Keywords

Introduction

Animal welfare, especially since the turn of the 21st Century, has increasingly become a global issue. To cite just a few examples of this trend:

– at a governmental level, since 2005 the Member Nations of the World Organisation for Animal Health (OIE) have adopted more than 100 pages of animal welfare standards as new text in the Terrestrial Animal Health Code (Terrestrial Code) (1)

– in the corporate world, companies the size of McDonald’s and Burger King have set requirements for the welfare of animals in their supply chains (2)

– in the financial world, the International Finance Corporation (the investment arm of the World Bank) has called for animal welfare to be part of the business plan of livestock companies in which it invests (3)

– in the United Nations system, the Food and Agriculture Organization (FAO) has begun providing a weekly news service called ‘Gateway to Farm Animal Welfare’, which brings new developments to the attention of agricultural and veterinary authorities around the world

– at a national level, countries including Croatia, Malaysia, Peru, Puerto Rico, the Philippines, Chinese Taipei and many others have announced recent laws and programmes for the protection of animals (4).

What accounts for this increase in global attention to the welfare of animals?

Evolving views of animals

One important factor is the evolving view of animals that has resulted from several centuries of scientific research.

The earliest developments came from anatomy. Beginning in the 14th Century, comparative anatomy became one of the frontiers of Western science. The research, and its popularisation through the ‘dissecting theatres’ that sprang
up in the main centres of learning in Europe, gradually gave rise to the recognition that humans are built on the same anatomical template as the other vertebrate animals. According to historian Dix Harwood, this was not well known in 1600, but by 1700 it had become common knowledge (5).

With the anatomical similarity established, the 1700s and 1800s saw both scientists and non-scientists struggling to grasp the implications of this new understanding. Poets such as Alexander Pope proposed a metaphysical connection of all beings, from God down to the tiny creatures that the new microscopes were beginning to reveal (6). Others, such as Johann Wolfgang von Goethe, anticipated the theory of evolution by noting how anatomical variations equip different animals to live in distinctive ways (7). By the end of the 1700s, the discussion had shifted to the more concrete idea that humans and other species actually share a common ancestry – an idea that reached its most famous expression in Charles Darwin’s theory of natural selection (7, 8).

During the 1900s, research on animal behaviour led to a further revision in the scientific view of animals. A classic example is the work of primatologist Jane Goodall, who studied animals – in her case, chimpanzees – in such detail that she could describe their personalities, unique life histories and complex social relations (9). Drawing together this and other scientific evidence, primatologist Roger Fouts described the chimpanzee as a ‘highly intelligent, cooperative, and violent primate who nurtures family bonds, adopts orphans, mourns the death of mothers, practises self-medication, struggles for power, and wages war’ (10). The result of such work was the view that certain animal species possess a complex social and emotional life not unlike that of human beings.

Through these developments, modern science has, in effect, narrowed the gap that people perceive between humans and other species. As this happened, the new ideas also stimulated a major rethinking of traditional ethical beliefs about the proper treatment of animals. Although this change began in Western culture, with the increasingly global influence of science, societal concern about animals and their welfare is becoming increasingly widespread.

**Animal welfare science and animal husbandry**

Beginning around 1970, the growing concern about animals also gave rise to a body of scientific research designed to improve animal welfare. The work focused, for example, on:

- managing groups of animals to minimise aggression and social stress
- fostering positive relations between animals and their handlers
- detecting and reducing stress-producing states such as fear and pain
- incorporating natural elements into animal production, such as feeding systems that allow animals to maintain a natural meal size and frequency
- improving physical environments, including flooring surfaces and air quality, so as to prevent lameness, respiratory disease and other problems.

Although much of this research began as an attempt to address welfare concerns in confinement production systems, the research also helped to fill a more basic void in animal and veterinary science. Early in the 20th Century, certain aspects of animal husbandry had become topics of scientific research. Specifically, the feeding of animals was supported by the science of animal nutrition; the breeding of animals was supported by genetics and reproductive physiology; and health care was informed by microbiology, epidemiology and other veterinary sciences. When that happened, however, there were no obvious scientific disciplines to address some of the most basic aspects of animal handling, management and housing.

By the mid-20th Century, two new fields of basic science had emerged. These were ‘ethology’, or the study of animal behaviour (11), and ‘stress physiology’, which focused on how the sympathetic nervous system and the glucocorticoid system respond to many types of bodily challenge (12). These fields were beginning to be applied to farm animal production well before animal welfare became a topic of debate. For example, in the classic textbook on domestic animal behaviour, the term ‘animal welfare’ was not mentioned until the third edition, published in 1975 (13).

When calls arose for research on the welfare of animals, the fields of animal behaviour and stress physiology were immediately identified as particularly relevant (14), although they were quickly augmented by many other approaches (15, 16, 17). The result was the multi-disciplinary field of ‘animal welfare science’, which is now providing a scientific basis for many elements of animal husbandry that had previously received little scientific investigation. Although the research began largely in confinement systems, the methods and insights are often applicable to a wide range of production systems and have the capacity to generate major improvements in animal husbandry. This practical side of animal welfare undoubtedly accounts for some of the global expansion of interest in the topic.
Animal welfare standards

The emergence of explicit welfare standards has provided a further impetus for global attention to farm animal welfare. The OIE standards, although not mandatory for Member Countries, provide many countries with their first explicit and officially supported standards for animal welfare. At the very least, having such widely acknowledged standards should give veterinary and agricultural authorities a basis for promoting improvements in animal welfare in their respective jurisdictions.

Standards created by corporations are also influential, partly because the companies generally require compliance as a condition of purchase. For example, some global chain restaurant companies require local suppliers in non-industrialised countries to pass animal welfare audits at slaughter plants. As a result, adherence to animal welfare standards is increasingly seen as part of normal business practice.

Animal welfare standards also open the door to forms of international pressure. If, for example, OIE animal welfare standards are being violated in a Member Country, the standards provide a basis for other countries and agencies to apply pressure for corrective action.

Trade also plays a role. Although recognition of animal welfare by the World Trade Organization appears limited (18), many trade opportunities are created by bilateral or multilateral agreements negotiated by contracting countries. In such agreements, countries may well consent to meet each other’s animal welfare standards in order to secure markets. In fact, the European Union has indicated a willingness to develop trade opportunities for developing countries to market high-welfare products to Europe (19), and several such initiatives are under way (20).

The debate about farm animal welfare

In the case of food animal production, the growing concern about animal welfare roughly coincided with the shift towards more ‘intensive’ production systems – a shift which, in the industrialised countries, triggered a reaction that needs to be understood in its historical context.

During the Industrial Revolution of the 1700s and 1800s, the industrialised countries underwent a major social upheaval. Factories became the predominant way of producing textiles and other goods throughout much of Europe, and they proved so efficient that traditional, home-based production almost disappeared. Increasingly, the population moved out of villages and rural areas to live in crowded and often unhealthy cities, and to work in oppressive and often dangerous factories.

The change triggered a deeply divisive debate. On the one side were critics of industrialisation who valued a simple life lived close to nature; they saw nature as an ideal state that we should preserve and emulate, and they valued emotions ahead of the rationality of science and technology. In contrast, supporters of industrialisation saw the factories as allowing people to become more productive and hence contribute more to society; they saw nature as an imperfect state that could be improved through science and technology, and they focused on rationality and efficiency ahead of emotion. The debate profoundly influenced the art, literature and philosophy of the time, and the different ideas remain deeply embedded in the culture of the industrialised world (15).

The Industrial Revolution also led to an influential reform movement that tried to curb the harmful effects of industrial society, especially on working women and children, by a programme of legislative controls. In the United Kingdom, for example, a series of laws required proper ventilation of textile factories (1802), limited the work day to 12 hours for children aged 9 to 16 years (1819), imposed a nine-hour day for children under 13 (1833), and eventually forbade all labour for children under ten years old in 1878 (21).

When the intensification of animal production began in the mid-1900s, it was perceived by many of its critics as a further example of industrialisation, and it sparked debates and reforms that followed a remarkably similar pattern. Critics of intensification saw the new methods as depriving animals of a natural life; they proposed that such unnatural systems must be unhealthy for the animals, and they looked to the emotional states of animals (suffering, frustration) as evidence of impaired animal welfare. In contrast, promoters of intensification saw it as using science and technology to overcome natural hardships such as disease and harsh weather, and they looked to the physical health and productivity of the animals as evidence of satisfactory animal welfare (15). Moreover, as in the Industrial Revolution, the reform movement pressed for legislative controls. In the United Kingdom, for example, an Act in 1968 commissioned the writing of Codes of Practice for the care of farm animals, another in 1988 set minimum requirements for certain types of animal housing, and laws passed in the 1990s required some of the most restrictive practices to be abolished entirely (22).

The debate between the promoters and critics of intensification remains a divisive issue in the industrialised countries, with significant miscommunication and
mistrust between the opposing sides (23). It has also created misunderstanding at a global level. In developed countries, many of those in favour of animal protection see intensification as fundamentally bad for animal welfare and they urge developing economies to avoid intensification. This view sometimes conflicts with the efforts of development agencies to encourage intensification in order to increase local food production and reduce rural poverty. Moreover, in non-industrialised countries where providing the human population with adequate nutrition, health care and shelter remains an unrealised ambition, it is difficult for citizens to see why productive, indoor systems which allow controlled feeding and disease prevention should be regarded as detrimental to welfare. As animal welfare increasingly becomes a global issue, the non-industrialised countries need to be allowed to develop an understanding of animal welfare in their own terms (24). This will often mean better provision of shelter, food and water, addressing problems of infectious disease, and improving basic handling, transportation and slaughter.

La mondialisation du bien-être des animaux d’élevage

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Résumé

Les principales raisons expliquant l’importance que revêt désormais le bien-être animal au niveau mondial sont peut-être au nombre de trois. Premièrement, des siècles de recherche scientifique dans des domaines comme l’anatomie, la biologie de l’évolution et le comportement animal ont progressivement réduit l’écart qui séparait l’espèce humaine des autres espèces dans notre perception; cette évolution a poussé les simples citoyens à se préoccuper des animaux et de leur bien-être, d’abord dans les pays occidentaux puis un peu partout sur la planète à mesure que l’influence de la science gagnait du terrain. Deuxièmement, la recherche scientifique sur le bien-être animal a fourni l’éclairage et les méthodes permettant d’améliorer les conditions de manipulation, de logement et de gestion des animaux; cette « science du bien-être animal » est perçue désormais dans le monde entier comme un facteur important d’amélioration des techniques d’élevage. Troisièmement, la création et l’application de normes explicites sur le bien-être animal ont contribué à intégrer ce bien-être comme une composante des politiques publiques, du commerce et des échanges au plan national et international. À ce jour, le débat sociétal sur le bien-être animal a été dominé par les pays industrialisés. Néanmoins, cette question prenant une dimension d’envergure planétaire, il sera important pour les pays non industrialisés d’élaborer leurs propres méthodes d’amélioration du bien-être animal, adaptées à leur situation locale, par exemple en facilitant la disponibilité d’abris, d’aliments, d’eau et de soins vétérinaires et en améliorant les conditions élémentaires de manipulation, de transport et d’abattage des animaux.

Mots-clés
La mundialización del bienestar de los animales de producción

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Resumen
Hay tres razones que quizá expliquen la notable relevancia mundial que de un tiempo a esta parte ha cobrado el bienestar animal. En primer lugar, varios siglos de investigación científica, sobre todo en anatomía, biología evolutiva y comportamiento animal, se han traducido en una gradual reducción de la distancia que psicológicamente, desde el punto de vista humano, separa al hombre de otras especies, cambio de percepción que a su vez ha llevado al ciudadano de a pie a preocuparse en mayor medida por los animales y su bienestar, en un principio en los países de Occidente y ahora en todo el planeta, a medida que se ha ido extendiendo el influjo de la ciencia. En segundo lugar, la investigación científica sobre temas de bienestar animal ha deparado ideas y métodos para manejar, alojar y tratar mejor a los animales, y cada vez más se considera que esta ‘ciencia del bienestar animal’ tiene mucho que decir a la hora de mejorar los métodos zootécnicos en todo el mundo. En tercer lugar, la formulación y utilización de normas explícitas de bienestar animal han ayudado a integrar el bienestar animal como componente de las políticas públicas y el comercio nacionales e internacionales. Hasta la fecha eran las naciones industrializadas las que dominaban el debate social sobre bienestar animal. Sin embargo, ahora que el tema empieza a cobrar una dimensidad cada vez más planetaria, será importante que los países no industrializados definan soluciones adaptadas a la realidad local para mejorar el bienestar de los animales, que sirvan por ejemplo para proporcionarles más fácilmente cobijo, alimentos, agua y atención sanitaria y para mejorar las técnicas básicas de producción, transporte y sacrificio.

Palabras clave

References


