Animal agriculture in North America has undergone a revolution since World War II. Productivity has increased enormously through the use of animal confinement, genetic selection, scientific feed formulation, and productivity-enhancing pharmaceuticals. There has been a shift to larger production units taking advantage of economies of scale. Critics contend that these changes have reduced the welfare or well-being of farm animals. Proponents argue that the system reduces mortality due to predators, the weather, and the risk of disease.

Farm animal welfare is an increasingly prominent issue in many wealthy countries. Concerns are expressed about how farm animals are kept, some management practices, and transportation and slaughter. There is increased legislative activity and more buyer requirements for production and marketing practices.

This article draws on a much longer report, *The Future of Animal Agriculture in North America* (Farm Foundation, 2006).

**Current Rules and Regulations**

**Legislation**

Much of the legislation in North America deals with pets or companion animals, animals used for research, and those kept by zoos or circuses. Regulations for farm animals address humane slaughter and transport, but there is no comprehensive animal welfare law. A comprehensive bill was introduced in Mexico in 2004, but has not passed.

Canada has a federal law prohibiting cruelty to all animals and regulations dealing with the transportation and slaughter of animals for food. Each province has its own legislation dealing with animal welfare, which typically recognizes accepted humane production practices. Industry guidelines have been developed for each type of animal.

The United States has federal regulations dealing with the slaughter of livestock, but not poultry, and for the transportation of animals. Each state has an anti-cruelty statute, but most do not target farm animals or there is an exemption for accepted farming and ranching practices.

There has been a marked increase in the number of animal welfare bills introduced in the U.S. Congress in recent years. There is also much activity at the state level, although relatively few bills have been passed. Recent state initiatives include proposed prohibitions on the tail docking of cattle and on the use of stalls for sows and veal calves.

**Codes of Practice and Third-Party Auditing**

Codes of practice have been developed by the animal products industry, particularly in Canada and the United States. In Canada, codes have been defined for all major species of farm animals. The National Farm Animal Care Council was created in 2005. Several U.S. producer groups have introduced welfare programs, for example, the National Pork Board for swine and the United Egg Producers (UEP) for laying hens. Both of these are voluntary and rely on independent auditing by third parties. The costs are borne by the audited firms.

A major U.S. initiative has been spearheaded by the Food Marketing Institute and the National Council of Chain Restaurants. An expert advisory group developed a series of standards for production and processing. The focus is on the application of objective, measurable characteristics that can be audited. Suppliers to the food retailing and restaurant industry can voluntarily request an audit. The results can then be made available to retailers or restaurant chains who can determine whether their own requirements are being met.

Several animal welfare advocacy groups have developed welfare schemes. The Animal Welfare Institute promotes...
voluntary standards for a range of farm animals. Certification programs have been developed by the American Humane Association and by a consortium of animal welfare organizations through Humane Farm Animal Care.

Drivers of Change

Consumer and Public Attitudes
U.S. surveys of public attitudes generally show that there is substantial confidence in farmers and ranchers in the treatment of animals. However, there appears to be increasing concern about some practices, such as housing systems for veal calves, and intensive confinement for pigs and poultry.

Animal welfare issues are championed by a range of interest groups. Some of their views may not be widely shared, but the groups have been effective in raising the profile of animal welfare issues. Protection of the reputation and value of branded products is a key concern in the food industry, and firms respond to public pressures that threaten their interests.

International Developments
The European Union (EU) has been very active in the development of animal welfare standards, primarily through legislation. New rules will eventually result in the elimination of traditional cage systems for laying hens, and individual pens or stalls for calves and pigs, and may reduce the stocking density for broilers.

Key Issues for Change

Practices Being Questioned
Many of the practices being questioned are associated with animal confinement. Confinement can benefit animals by allowing better environmental control, but raises issues, particularly in terms of the ability to express “natural behaviors.” The size of cages and whether these allow for nests or perches is central to the debate on the welfare of laying hens. The issue for swine centers on stalls that restrict the movement of sows during gestation or farrowing, and the provision of bedding material, such as straw.

Some management practices, such as restricting feed for laying hens to induce molting and a subsequent egg-laying cycle, and diets deficient in iron to produce white veal have been questioned. Other practices such as beak trimming and toe clipping for poultry, and tail docking, dehorning, branding, castration and early weaning for livestock are criticized.

The length of time animals are transported, the duration of rest periods, loading densities and the handling of non-ambulatory animals are issues. Concerns are also expressed about animal slaughter, particularly methods for stunning and handling, and culling to control disease outbreaks.

Finally, a range of issues relate to livestock breeding, particularly the impact of genetic selection on the reproductive efficiency, health and viability of farm animals.

The Development of Standards
A central question is what constitutes humane treatment for farm animals. The answer depends partly on beliefs and values that differ across individuals. Nevertheless, there is increasing acceptance of the Five Freedoms – freedom from hunger and thirst; discomfort; pain, injury, and disease; fear and distress; and any constraints on the ability to express normal behavior – as a basis for developing objective methods for evaluating animal well-being.

Public opinion will exert a major influence on the future development of standards in North America. A central issue is whether this will result in more legislation or if the industry will respond by developing and applying higher standards.

Legislation versus Collective Action
The use of mandatory standards, supported by legislation, has been the primary approach adopted in Europe. Public attitudes and perceptions about animal welfare are changing, and the science of animal welfare continues to evolve. Consequently, it is difficult to develop and apply detailed legal codes for production practices for farm animals.

The alternative is to develop voluntary codes which evolve as more is learned. The model that has been adopted so far in North America—the involvement of animal welfare experts in the development of standards and the use of independent audits—can address public concerns if those in the industry fully accept the process. Producers are the key to animal welfare practices and must be actively involved in developing standards.

Economic Impacts
Low animal welfare standards do not impose an economic cost on society unless they result in lower productivity and efficiency or pose a threat to human health. In fact, there may be gains if the prices of animal products are lower. Some argue that animal welfare is a public good, or that there are external costs not reflected in current prices of animal products. But there is little evidence of market failure. The decision to impose higher welfare standards in farming cannot be based solely on economic criteria.
**Production Costs and Consumer Response**

Some changes in practices can be relatively inexpensive to implement, but others are likely to increase production costs. Changes in confinement operations, particularly increased space requirements, may require the modification or construction of facilities. Extensive production systems require more land. Operating costs may increase due to higher labor requirements, increased energy consumption in larger facilities, and reduced feeding efficiency. Higher standards may also increase the costs of transporting and processing animals.

There may also be cost savings. Morbidity and mortality may decline and expenditures on disease control and treatment may fall. Greater reproductive efficiency may lead to cost savings. Product quality may improve through reduced stress.

It is difficult to generalize about the net effect, but available economic studies indicate a net increase in costs. A recent study of EU egg production suggests that unit costs under new systems are roughly 12% to 20% higher than conventional systems. Over the long term, producers might be able to adapt by adopting new technology or production techniques. However, this is unlikely to negate the adverse effects on costs and competitiveness, particularly if producers in other countries use lower standards.

Increased production costs will be reflected in higher product prices. Some consumers may be willing to pay a price premium for products that meet higher standards, others may respond by switching to products whose prices are not affected. European experience shows that estimates of willingness to pay for higher standards typically overstate actual willingness to pay in the marketplace. For welfare-friendly products to command a price premium, they must be clearly distinguishable. Labels need to be uniform and clearly understood. Research indicates that European consumers are confused by wide variations in labeling of animal-friendly products. Consumer welfare may decline if a proliferation of information makes informed choice difficult.

**Welfare Standards and Competition**

If all producers are required to adhere to a particular standard, they will all be on an equal basis in terms of competitive position. Product prices will tend to rise as higher costs are passed through to the market. Consumer response could affect the market share of individual products and their prices. Exporters will face a deterioration of their competitive position if other countries supply non-conforming products.

Producers who have difficulty differentiating their product face particular risks from non-conforming products. Domestic or foreign producers operating at lower costs may increase their market share. Domestically, this problem can be solved by requiring that all producers meet the standard. When non-conforming supplies originate from other countries, the situation is more complicated.

The General Agreement on Tariffs and Trade (GATT) and its associated agreements contain no specific provisions for animal welfare. The Agreement on Technical Barriers to Trade requires that imported products should be treated as “like” products of national origin. The Sanitary and Phytosanitary Standards agreement is limited to the protection of animal health and recognizes standards developed by the World Organization for Animal Health (OIE). In 2005, OIE agreed on four international standards for animal welfare and is currently working on others. This could go some way to addressing concerns over unfair competition from non-conforming products.

**Options for the Future**

The North American livestock industry is taking steps to address some of the concerns about the impact of current practices on animal well-being. Much of the effort centers on the voluntary development of standards and codes of practice. This is in contrast to Europe, where legislation and mandatory standards are playing a major role. Pressures for legislation are likely to intensify in North America if the general public perceives that self-regulation is not effective. A number of options could be used to strengthen the process.

1. **Improve the flow of information to the general public.**

   Industry policies on animal welfare are not always visible. All stakeholders could develop a statement of principles and make this publicly available. Industry groups could support the development of educational materials.

2. **Develop codes of practice.**

   The industry could ensure that standards and codes are developed for all types of livestock. Information dissemination and support for training could be made a high-priority activity. The industry could lend support to the development and application of appropriate science-based standards internationally.
3. Increase research and education.
Higher priority could be given to animal welfare issues in publicly funded research. Particular emphasis could be placed on developments that are both practical and economically viable. A further step would be to ensure that all educational programs in animal science, veterinary medicine, and related fields incorporate material on animal welfare—biological issues as well as ethical and socio-economic aspects. Animal welfare could be made a priority in public extension programs, particularly for the training of farmers and ranchers, and employees in the animal products industry.

The extent to which the industry voluntarily addresses animal welfare issues successfully will determine whether legislation will eventually require certain practices in animal husbandry. The above options in some combination may go a long way to quieting concerns about animal welfare.

For More Information

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