

EU REGULATION AND CONSUMER DEMAND FOR ANIMAL WELFARE

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There is already considerable legislation on the statute books in Europe dealing with animal welfare. Such legislation results from strong public pressure and interest. The legislation is always science based, usually on reports from the European Union (EU) Scientific Committee on Animal Health and Animal Welfare (SCAHAW). This paper described the legislative framework in the EU, the methodology used for the assessment of animal welfare and comments on the economic implications of improving animal welfare.

Key words: animal welfare; European Union (EU); scientific advice.

The last 15 to 20 years has witnessed increasing scientific research, consumer activity, and political response towards animal welfare issues within Europe. This is particularly the case in European Union (EU). If anything, such activity has been increasing.

Undoubtedly, the greatest driving force for improved animal welfare is public opinion. There is major public demand for improvements in animal welfare in general. This demand is reflected in the activities of various lobbying organizations and through the media and ultimately at policy level, through improved legislation.

Though the driving force is public opinion, legislators have been careful to obtain scientific advice on animal welfare issues and to act within the scope of that advice. This paper provides an overview of recent developments in animal welfare policy in Europe. In particular, it describes the activities of the EU Scientific Committee on Animal Health and Welfare (SCAHAW) and the indicators used to determine advice on animal welfare. The paper also addresses how EU legislation with respect to animal welfare is evolving, and how consumer attitudes are shaping the food system and policy responses.

The Evolution Of Animal Welfare As A Public Concern

It is often forgotten that the European Union is a trading body. Though it has grown in breadth and depth, one of its primary roles remains to assure the single market and to ensure free trade in goods and in services. One of the first groups of commodities traded was agricultural goods—of which animals and animal products are an important part. For this reason, veterinary legislation

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developed earlier than other areas of EU legislation and is generally more comprehensive than legislation dealing with other commodities and substances. There has thus been a considerable degree of harmonization of legislation between Member States in order to ensure that no Member State obtained an unfair advantage. Such harmonization has also covered welfare standards and, in particular, the setting of minimum welfare standards which apply across the EU.

In addition to the EU, another body, the Council of Europe has played an important role in the formation of animal welfare policy. The Council of Europe was set up after the Second World War, and has a much broader membership than the EU. Membership extends from the Atlantic to the Urals and consists of all 15 Member States of the European Union, most of the countries of Eastern Europe, and also Norway and Switzerland that elected not to become EU members. The House of Europe is essentially an inter-parliamentary body that negotiates treaties on various issues. One topic that it has worked on extensively is animal welfare. Various Council of Europe treaties pertaining to animal welfare have been ratified by EU member states and by countries outside of Europe. These treaties have set standards for the treatment of animals that have, in turn, been incorporated into the law of the European countries who are members of the Council of Europe.

How Animal Welfare Is Regulated Within Europe

Harmonized legislation in the EU derives from Treaties that have been adopted by the Member States at various times. European Union law takes the form of Directives, Regulations and Decisions but all must derive ultimately from the treaty. A recent modification (Treaty of Amsterdam) introduced a protocol, which dealt specifically with animal welfare. It reads as follows,

...desiring to ensure improved protection and respect for welfare of animals as sentient beings; in formulating and implementing the Community's agriculture, transport, internal market, and research policies, the Community and Member States shall pay full regard to the welfare requirements of animals, while respecting religious rites, cultural tradition, and regional heritage.

In this sense, our "constitution" sets an ethical framework for how livestock systems should be developed.

Most people who work in the field of animal welfare hold the view that sound scientific analysis is a prerequisite to sound decision-making. In this respect, the Scientific Committee on Animal Health and Welfare (SCAHAW) plays a critical role. This is a scientific advisory committee of the EU, which is composed of 19 scientists, active in the field of animal health and animal welfare. The function of the Committee is to advise the Commission which is the body charged with proposing new legislation. The commission may pose specific questions to the Committee. Following a request the will produce a report, which it adopts by majority, which is then published on the Internet. In practice, reports are usually adopted unanimously but a member who opposes a report may write a minority opinion which is included with the report. A civil servant of the European Commission prepares drafts of new legislation. Such proposals are usually heavily influenced by the scientific advice given by the scientific Committee. The European Commission's proposal is then submitted to two European bodies; namely, the European Parliament and the European Council. The European Parliament is a directly elected body, while the European Council is made up of representatives from each of the 15 individual member states.

Decision-making can be complex and often involves a process of negotiation between and within both these two bodies. Eventually, however, a modified version of the original proposal (unless there is perfect initial agreement) is adopted and becomes law throughout Europe. The responsibility for ensuring that the legislation is implemented correctly lies with each Member state. However, the European Commission still plays an oversight and monitoring role ensuring sure that the legislation is properly transcribed into National Law if necessary and that it is implemented in practice.

Indicators Of Animal Welfare

In drawing up scientific advice, it is necessary to rely on scientific data and principles to determine the welfare of an animal in a particular farming system. There are four indicators of animal welfare that are commonly used. These indicators are as follows.

Animal Health

Animal health is an important component of animal welfare. The incidence and duration of a disease affects the health of the animal. However, in terms of animal welfare, the intensity of pain and discomfort suffered from that disease are important. Indeed, diseases can affect an equal number of animals but can have quite different effects on the welfare of the animal. For example, two diseases that have similar causes affect broiler chickens. Ascitis, where the main clinical sign is fluid in the abdomen, lasts several days and causes pulmonary insufficiency. The animals very often die. Sudden death syndrome (SDS) has the same general cause but is essentially a heart attack and the animal dies a sudden death. The welfare implications of both situations are quite different. In the case of Ascitis the chicken suffers; with SDS the suffering is minimal. Animals that appear quite healthy may still have their welfare impacted.

Absence of disease does not necessarily suggest optimal animal welfare. The presence of disease usually indicates possible poor welfare issues.

Production

The production or productivity of an animal is often used as an indicator of its overall welfare. However, production indicators need to be interpreted carefully. While the productivity of broiler chickens has increased dramatically over the last twenty or thirty years this does not necessarily mean that the overall welfare of chickens has also increased. In fact, broiler chicken welfare has decreased over this time period. Animal can produce relatively well in poor welfare situations. A very sudden drop in productivity does usually indicate, however, the possibility of deterioration in welfare.

Physiology

Again, the existence and level of stress hormones as an indicator of welfare need to be interpreted carefully and in context. There are different types of stress—short-term stress and long-term stress—which vary by farm practice and have different outcomes in terms of animal welfare. Possible indicators of stress include suppression of the immune system or failure to ovulate. An increase in stress levels does not necessarily mean poorer welfare. For example, excitement can increase stress hormones.

Ethology

Different animal behaviors can be a sign of overall welfare. Ethology involves a comparison of animal behavior in a farming situation with behavior in the wild. It can also be determined through experimental behavior. An animal can be given certain choices. For example, the extent to which an animal is prepared to work for a better environment can be measured. If hens are put in a cage, are the hens prepared to work hard to increase the size of that cage? There may also be the presence of stereotypic or abnormal behavior on the part of an animal that may indicate reduced welfare. Repetitive behaviors can indicate welfare problems.

None of the above indicators, taken separately, will be sufficient to assess the welfare of an animal in a farming system. They all have to be taken as whole to give a more complete picture.

Animal Welfare Issues In Europe

Many issues that involve animal welfare have been raised within the EU. In particular, the transportation of animals received constant attention. Animal welfare legislation has been advanced in other areas such as slaughter standards and various sectors of intensive animal production.

Animal Slaughter

European Union legislation ensures that an animal is killed or stunned without unnecessary suffering. Legislation provides for specific methods of slaughtering animals. New methods are examined to ensure that they are satisfactory from an animal welfare perspective. In the most recent case, in June 1998, the Scientific Committee on Animal Health and Animal Welfare examined the use of a mixture of gases, carbon dioxide, oxygen, and nitrogen for stunning poultry at slaughter (Scientific Committee on Animal Health and Animal Welfare [SCAHAW], 1998a). In their opinion this method was not satisfactory and its use was not permitted.

Animal Transportation

Animals are transported considerable distances within Europe, though possibly to a lesser extent than in the United States. Europe can have difficult climatic conditions depending on the time of year. Hence, animals transported by truck must be properly taken care of. They must have adequate space to travel well and be well protected. An incident in the summer of 1999, illustrates the public sensitivity to such issues. Two trucks transporting sheep were left exposed in the full sun for 24 hours in Italy. Forty percent of the sheep died as a result. This event received considerable media attention across Europe.

A recent report (SCAHAW, 1999a) on animal transportation sets standards for the temperature and humidity (or microclimate) of animal transport road vehicles. Legislation is now being drafted to implement these standards. In addition, another report is being drafted on the length of time an animal can be transported without a rest. Currently, the maximum distance an animal can be transported without a rest is about 30 hours. If this time is liable to be exceeded the animals must be unloaded and allowed to rest for at least 24 hours.

Europeans also distinguish between transportation for slaughter and transportation for further production. There is a strong resistance to animals being transported long distances for slaughter. The perception is that slaughter is more appropriate close to where animals are reared, with the meat rather than the live animal being transported for longer distances.

Intensive Production Techniques

Several reports have been adopted on the welfare of animals in intensive production systems.

- *Welfare of veal calves.* In the past, young calves, usually from a dairy herd, were fattened up for slaughter by housing them individually in small pens and feeding them a pure milk diet. This type of livestock system produces calves that yield veal meat products. Following a report (SVC, 1995) of the Scientific Committee on Animal Health and Animal Welfare, calf systems involving small individual cages and milk diets low in iron were prohibited in Europe.
- *Welfare of laying hens.* Most laying hens are housed in cage-based systems. A detailed scientific report on the Welfare of the Laying Hen was adopted in October 1996. As a result, legislation has recently been adopted on EU standards for the welfare of hens kept in cage based intensive farming systems. Cage-based systems are being phased out, with those that are being retained having to meet tough standards. Legislation in force sets a minimum space for caged hens of 450 square centimeters or 70 square inches per hen. This minimum requirement increases to 500 square centimeters for existing cages. By 2003 the minimum space allowance will increase to 550 square centimeters for such cages. However, any new cages that are added to a farm, or any farm that is being remodeled or redeveloped, will have to provide 750 square centimeter of cage per hen. By 2012 all existing cages must meet this 750 square centimeter cage requirement. Also, each cage must be enriched. An enriched cage will have facilities in the cage to allow the birds to express normal bird behavior. For example, the birds will have the ability to stretch their wings.
- *Production of Foie Gras.* In order to produce Foie Gras, geese and ducks are force-fed a diet composed mainly of grains. The resultant overfeeding causes fatty accumulation in the liver, which is the “foie gras” or fatty liver. Foie Gras is both highly sought after and expensive, and it is generally sold to restaurants. Because of this, consumer pressure to change current production practices has not been very effective. A report (SCAHAW, 1998b) of the Scientific Committee was adopted in December 1999, which recommended a number of changes to the production system and concluded that the system as currently practiced was detrimental to the welfare of the birds. Through the implementation of Council of Europe recommendations in national law, this system has become more regulated in the Member States.

Economic Costs Of Animal Welfare Legislation

Changes in farming systems to improve animal welfare often have an economic cost, which must ultimately be met by the consumer. For example, table 1 provides estimated cost increases for broilers and eggs in various improved welfare scenarios. These examples are taken from the reports of the EU Scientific Committees on the laying hen (Scientific Veterinary Committee [SVC], 1996) and on keeping chickens for meat production (SCAHAW, 2000).

In the case of broiler chickens, welfare problems are linked to breeding policies over the past decade, which has led to enormous increases in productivity but has been accompanied by welfare problems particularly skeletal and joint problems. It is technically feasible for breeders to modify their breeding policies to eliminate or substantially reduce these problems. As well as genetics another welfare issue arises from the farm management policies particularly the stocking density, which can often be excessive from a welfare perspective. In Europe, the typical density is around 38 kilos per square meter. This is a finishing weight of the birds. In some farms it is

higher—40-45 kilos per square meter. The Scientific Committee on Animal Health and Animal Welfare felt that once density on a farm exceeded around 30 kilos per square meter, welfare problems would rise. Optimal density depends very much on the skills, managerial ability of the farm operator, and on the weather. Some farms are able to manage high-density operations without compromising animal welfare, other farms are not. Reducing density from 38 kilos/square meter to 30 kilos increased costs by about 5%; from a 30 kilo density to a 25 kilo density increased costs by 10%; and from 25 kilo density to a 20 kilo density cost increased by 15%.

Table 1: Economic Effects of Animal Welfare.

Farm Cost Increases for Improved Welfare	
Reducing Broiler Stocking Density	+5%
Slowing Broiler Growth	+5%
Eggs - cage size 600cm_	+5%
Eggs - cage size 750cm_	+15%
Eggs - outdoor	+50%

The study also analyzed the possibility of growing the chickens at a slower pace, which would limit many weight related problems. If chickens are bred to reach their slaughter weight at 50 days instead of 40 days, predicted costs should increase by about 20% - 25% because the growing period increases by 25%. However, actual projected costs were only 5% greater as the fertility of the birds increased quite dramatically. As bird fertility increases, the chick cost decreased and the chick cost is about 20% of the final cost of the bird. In addition, the feed used for the slower growing birds was slightly lower energy-dense feed. This led only to a 5% additional feed cost involved.¹

Implications of Animal Welfare for Trade

While Europe has been very active in the area of animal welfare, only two issues have directly impinged on United States (US) or North America agricultural practices. The issue of recombinant bovine somatotropin (rBST) (SCAHAW, 1999b) has led to a direct difference of opinion between the US and Europe; and has been covered extensively elsewhere in this issue (see Collier, 2000; Brinkman, 2000). However, as already pointed out (*ibid.*) this has not impacted the direct importation of milk products derived from rBST treated cows. Another issue arose ten years ago concerning leg hold traps used to catch animals for fur. The EU took a position against furs caught using these traps, which were regarded as being cruel, effectively banning the importation of such furs.

Consumer Attitudes Toward Animal Welfare

European consumers are aware and very sensitive to animal welfare and are prepared to pay higher prices. For example, consumers are prepared to pay up to three times the cost of conventionally grown chicken for an open roost chicken. And while farm-gate costs might

increase by 5 - 10% for welfare-friendly chicken, retail prices can increase by as much as 40% to 50%, sometimes even more. Hence, consumers are willing to pay considerably more for welfare-friendly production practices. However, when chicken meat is packaged as convenience food (prepared meals and so on), consumer attitudes can differ. Convenience foods are too far removed from the live animal to be directly linked to welfare issues. This is the "commodity politics" of animal welfare. Even though the European Union is a net exporter of chicken meat, there are considerable imports of chicken breasts from Brazil and Thailand. These chicken breasts go into the convenience food market, not into the whole bird market. These birds are unlikely to be raised under the same welfare standards as in Europe.

Conclusions

It is often argued that animal welfare is simply a mechanism of trade protection. This paper has argued the opposite. Europe has been engaged in discussions on animal welfare and relevant legislation for a considerable period of time. Concern for animal welfare and a desire for improvement is a consumer driven issue and it will not go away. The legislation that has been enacted in Europe is science-based. The Member States of the European Union are very sensitive to the trade issues resulting from animal welfare considerations and have initiated reviews of existing legislation based on the outcome of recent World Trade Organization (WTO) negotiations. The policies that Europe has adopted have not been harmful to third countries; in fact, they may very well have given these countries a competitive advantage in convenience food markets. While long-term projections are difficult, it is safe to say that animal welfare will remain a priority issue well into the future.

Endnotes

¹The reports and spreadsheets that give rise to the calculations reported here can be found in SCAHAW (2000).

References

- Scientific Committee on Animal Health and Animal Welfare (SCAHAW). (2000). The welfare of chickens kept for meat production (broilers) (SCAHAW Report No. SANCO.B3/AH/R15/2000). Brussels: European Commission. Available on the World Wide Web: http://europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.
- Scientific Committee on Animal Health and Animal Welfare (SCAHAW). (1999a). Standards for the microclimate inside animal transport road vehicles (Report No. Sanco/B3/AW/R13/1999). Brussels: European Commission. Available on the World Wide Web: http://europa.eu.int/comm/food/fs/sc/scah/out35_en.html.
- Scientific Committee on Animal Health and Animal Welfare (SCAHAW). (1999b). Report on the animal welfare aspects of the use of bovine somatotrophin (adopted 10 March 1999). Available on the World Wide Web: http://europa.eu.int/comm/food/fs/sc/scah/out21_en.html.

Scientific Committee on Animal Health and Animal Welfare (SCAHAW). (1998a). The use of mixtures of the gases CO₂, O₂ and N₂ for stunning or killing poultry (adopted 23 June 1998). Brussels: European Commission. Available on the World Wide Web: http://europa.eu.int/comm/food/fs/sc/scah/out08_en.html.

Scientific Committee on Animal Health and Animal Welfare (SCAHAW). (1998b). Welfare aspects of the production of Foie Gras in ducks and geese (adopted 16 December 1998). Available on the World Wide Web: http://europa.eu.int/comm/food/fs/sc/scah/out17_en.html.

Scientific Veterinary Committee (SVC). (1995). Report on the welfare of calves. Brussels: European Commission.

Scientific Veterinary Committee (SVC). (1996). Report on the welfare of laying hens. Brussels: European Commission.