

## **ANIMAL WELFARE, PRODUCTION, HYGIENE AND THE LAW**

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Animal production, worldwide, occurs under two principal systems:

- 1.- Intensive, highly technified, depending on pressures of the market and on the demand of food of animal origin.
- 2.- Lacking technology, in those parts of the world where people live under marginated conditions and practice subsistence agriculture , producing barely enough food for their families.

In the first case , we are dealing with mass production, where the animal, as an individual does not count and where conditions imposed on them are far from their natural behaviour; in the second, the poverty under which the small landowners live does nor allow them to worry about animal welfare .

Between these two extremes, semi-technified systems are practiced by peasants in traditional ways, often government subsidized and “in danger of extinction” in developed countries.

Where do we find, in these systems, principles of animal welfare?

To think about concepts of animal welfare in systems of intensive production, seems illusory, if we analyze the methods under which pigs and cattle are raised and fattened, chicken have to produce eggs and cows milk.

In no way can these practices agree with any of the definitions of animal welfare.

In the case of subsistence agriculture, it would be unrealistic to expect owners to worry about welfare for their animals, as they cannot even offer any wellbeing to their families.

In the semi technified systems, it may still be possible to find conditions of welfare for the animals, as peasants in this group have some education and traditional knowledge, live close to their animals, know their needs and satisfy them wherever possible.

The majority of developed countries have legislation for the protection or welfare of animals, and efforts are made to control abuses that occur during the different stages of production. These can however never be more than palliatives. It is doubtful whether the wellbeing of a laying hen improves considerably by enlarging its cage a little bit. The hen remains caged, without the possibility to perform its natural functions, like scratching and bathing in soil etc. The same holds true for pigs, raised on cement or metallic floors with no possibility of exploring, rooting and nest building.

One could continue enumerating more welfare problems that arise as a consequence of “modern” systems of animal production and efforts to provide animals with acceptable conditions of wellbeing. In the developed countries, legislations meets with the sympathy of the public, however it has encountered opposition from those sectors that have transformed intensive animal production into a multimillion dollar business. In those developing countries where laws exist, their enforcement has encountered other problems, which will be briefly described, with emphasis in Mexican conditions.

The Mexican Ministry of Agriculture (*Secretaría de Agricultura, Ganadería y Recursos Hidraulicos*”, SAGAR) has dedicated much time and effort to elaborate federal rules in order to control the humane

slaughter of animals (23), their transport (24) and their stay at animal markets and fairs(25), which were all published in the official government organ. However, the next and most important step, divulging and enforcing them, has not occurred with the result that few know about them and nobody respects them. Laws that pretend to control primitive and cruel methods as well as production systems which are opposed to all common sense are without effect in a country like Mexico for two main reasons:

1. - The government has not taken into account that in order to enforce the law, a budget is needed to pay specialized officials and to provide for the necessary infrastructure.
2. - Lack of educational campaigns, to explain to the producers that the methods they use are actually reducing their profits, in view of the fact that they cause losses in quantity and in quality of their product (2,25). Once producers have understood that improving their management systems, their earnings will increase, they themselves will be interested in implementing the methods dictated by the law.

I shall illustrate some of the practices that are observed during transport, in animal markets and at slaughterhouses, in spite of their being penalized by the law:

Beef cattle, that have lived most of their life on pastures without much contact with human beings, are exposed to difficult situations when being embarked for slaughter. By means of shouts, gestures, electric prods etc they are made to enter badly constructed races and ramps which are much too steep, their walls not solid (10), producing shadows which frighten them even more. Once they have reached the vehicle where they must enter, there are no separations, so that young and old, males and females, familiar and strange animals have to stand together in a much too crowded space. No speed limits are respected and some animals fall, being trampled on by the others. All this produces distress, anxiety and lesions, with the result that losses have occurred in the quantity and quality of their meat (5, 8, 22) and the hygienic conditions are unacceptable.

When sheep are handled, the confusion is even worse, their flight distance is not respected (10) with the same results as described above.

Pigs, reared in intensive conditions, never having had a chance to exercise, are forced, during loading, to tackle situations they have never found before, like improvised ramps, presence of unknown animals, long hours of exposure to heat and sunlight, overloading, lack of water and food.

At the municipal slaughterhouses conditions are beyond description, with a total lack of correct installations, like ramps, shoots etc. Slaughter methods are unacceptable and hygiene is nonexistent (28).

The examples given are sanctioned by law, with more or less severe fines, they decrease the earnings of producers and constitute a danger for human health due to the lack of hygiene, but nobody seems to care.

With these few examples it will be understood that the sole approval of welfare laws does not meet the objectives of procuring the animals with a minimum state of wellbeing. Unless governments are determined to enforce the laws, nothing will change. It is also necessary to explain the benefits of better management to the producers, which are:

- less weight loss during transport (22)
- fewer losses due to condemned meat because of bruises etc.
- better quality of the product, therefore better earnings (5).

Sooner or later “globalization” and in the case of México, the Free Trade Agreement with the USA will force the governments to make the laws work, as export of animal products requires certain standards.

To introduce animal welfare legislation is much more complicated in a developing country than in a developed one. Experts, who have worked with the European Community to edit laws on animal protection, stress that public opinion is a decisive factor in promoting these laws. As an example they explain that the informed public prefers to buy eggs from hens raised on the ground or meat of animals that have not been produced in intensive farms. Unfortunately, these products are somewhat more expensive, than the ones from mass production, a fact that for most Europeans will not be a matter of great importance, but in countries, where people are poor and hungry, they can barely afford the cheapest food available.

Among other reasons that make it difficult to convince people of the need to have animal welfare laws is the argument that animals don't feel and have no soul.

In this paper, the problems of production and management of food animals that are directly related to economics, hygiene and public health have been described. No mention has been made to ethical aspects that arise during the production of animals for food (1). The wealth of knowledge on animal minds (3,4,6,7,13,14,15,18,19,20,27,30) does in no way justify the way they are exploited both during the different steps of production and during the last phases of their lives. It is necessary to analyze whether these systems are ethically defensible and the XI International Congress on Animal Hygiene should call to the attention of Veterinarians and Agronomists that our obligation does not end with producing animals for human food in healthy and hygienic conditions.

We know enough about the behaviour of animals (9,11,12,16,21,26,29) to accept that today's methods of exploitation are not compatible with the ethical principals (2) which we have adopted as guidelines for our professions.

## REFERENCES

1. **Aluja A.S.** de: El trato humanitario con los animales. Memorias, 1ª Reunión Anual del Consejo Nacional de Sanidad Animal, Secretaría de Agricultura y Recursos Hidráulicos (SARH). 17-19 de noviembre de 1992.
2. **Antonites A.:** Animals- more than sentience: Ethical and welfare implications. *Animal Welfare* 10:S235, 2001.
3. **AVMA:** Animal Welfare Forum: The Veterinarian's Role in Farm Animal Welfare. *JAVMA* Vol. 204, 3:363-395, 1994.
4. **Baars B.J.:** There are no known differences in brain mechanisms of consciousness between humans and other mammals. *Animal Welfare* 10:S31-40, 2001.
5. **Barocio León L.D.; Pérez Salmerón L.A. y Sánchez Pares M.E.:** Influencia del manejo de los bovinos de abasto sobre niveles de glucógeno y pH de la carne en dos rastros del D. F. *Vet. Méx.*, 13:175-182, 1982.
6. **Bermond B.:** A neuropsychological and evolutionary approach to animal consciousness and animal suffering. *Animal Welfare* 10:S47-62, 2001.
7. **Bradshaw R.H.:** Consciousness in non-human animals: adopting the precautionary principle. *Journal of Consciousness Studies* 5:108-114, 1998.
8. **Broom D.M. and Johnson K.G.:** *Stress and Animal Welfare*. Chapman & Hall, London, 1993.
9. **Coerse N.C.A., Haskell M.J. and Forkman B.:** Incentive value learning in domestic hens. *Animal Welfare* 10:S237, 2001.
10. **Food and Agricultural Organization of the United Nations 2001,** Guidelines for humane handling, transport and slaughter of livestock. RAP Publication 2001/4.
11. **Fraser A.F. and Broom D.M.:** *Farm Animal Behaviour and Welfare*. Bailliere Tindall, London, 1990.
12. **Grier J.W. and Burk T.:** *Biology of Animal Behaviour*. 2<sup>nd</sup> ed Mosby Year Book, St. Louis, U.S.A., 1992.
13. **Griffin, D.R.:** *Animal Minds*. University of Chicago Press, Chicago, 1992.
14. **Hagen K. and Broom D.M.:** Emotion and successful learning in cattle. *Animal Welfare* 10:S239, 2001.

15. **Held S., Mendl M., Devereux C. and Byrne W.R.:** Social tactics of pigs in a competitive foraging task: the 'informed forager' paradigm. *Animal Behaviour*, 59:569-576, 2000.
16. **Houpt K.A.:** *Domestic Animal Behavior* 2<sup>nd</sup> ed. Iowa State University Press, Ames, 1991.
17. **Kilgour R.:** Animal welfare considerations – pastoral animals. *New Zealand Veterinary Journal* 33:54-56, 1984.
18. **Kirkwood J.K. and Hubrecht R.:** Animal consciousness, cognition and welfare. *Animal Welfare* 10:S5-17, 2001.
19. **Mendl M., Bourman O., Laughlin K. and Paul E.:** Animal memory and animal welfare. *Animal Welfare* 10:S141-159, 2001.
20. **Nicol C.J.:** Farm animal cognition. *Animal Science* 62:375-391, 1996.
21. **Phillips C.J.C.:** *Cattle Behaviour*. Farming Press Books, Ipswich, U.K., 1993.
22. **Ruiz Romero A., Aluja A. S. de y Reyes Gómez Llata A.:** Efecto de la distancia recorrida durante el transporte del ganado bovino sobre su peso y el pH de la carne. *Vet. Méx.* 21:241-245, 1990.
23. **Secretaría de Agricultura, Ganadería y Desarrollo Rural:** Norma Oficial Mexicana NOM-033-ZOO-1995, Sacrificio humanitario de los animales domésticos y silvestres. *Diario Oficial de la Federación*, el martes 16 de julio, 1995. México D.F.
24. **Secretaría de Agricultura, Ganadería y Desarrollo Rural:** Norma Oficial Mexicana NOM-051-ZOO-1995, Trato humanitario en la movilización de animales. *Diario Oficial de la Federación*, el lunes 23 de marzo, 1998. México D. F.
25. **Secretaría de Agricultura, Ganadería y Desarrollo Rural:** Norma Oficial Mexicana, NOM-045-ZOO-1996, Características zoonosológicas para la operación de establecimientos donde se concentren animales para ferias, exposiciones, subastas, tianguis y eventos similares. *Diario Oficial de la Federación* el lunes 5 de agosto de 1996.
26. **Syme G.J., Syme L.A.:** *The Social Structure of Farm Animals*. Elsevier Scientific Publishing Co., Amsterdam, 1979.
27. **Underwood W.J.:** Pain and distress in agricultural animals. *JAVMA* 22(2):208-211, 2002.
28. **Villanueva M.V. y Aluja A.S. de:** Estado actual de algunas plantas de sacrificio de animales para consumo humano en México. *Rev. Vet. Méx.*, 29(3):273-278, 1998.
29. **Webster J.:** *Animal Welfare*, Blackwell Science Ltd, Oxford, U.K., 1994.
30. **Wemelsfelder F.:** The inside and outside aspects of consciousness: complementary approaches to the study of animal emotion. *Animal Welfare* 10:S129-139, 2001.