



## **The future key players in environment friendly farming and animal welfare based on new legislation in Croatia (A review)**

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### **ABSTRACT**

*There is a high demand of nowadays civilization for producing huge amounts of different kinds of food from agriculture. Pressure of competition between producers forces them to produce in the most economic and efficient way. They are trying to follow these trends by going into intensive farming, which opens many questions about environment friendly animal husbandry and animal welfare as well. On the other side, we can find increased care about consumers covered by EU (European Union) standards where many consumers are ready to pay more for the same product if it has clear history that starts from the field itself. Still, Croatia remains, for now, the part of the World where most consumers prefer cheaper price of food instead of clear history, which allows producers to think in their economic way. Recently, Croatia has brought new legislation concerning this topic in order to prepare itself for joining EU. Therefore, we can expect in next few years firm interaction between key players in farm animal welfare: consumers, farmers, food retailers, media, politicians, vegetarians, welfare campaigners and farm animals itself. Scientists are going to be involved in this power struggle as well with everyone's expectation to contribute objective investigations and researches. This paper analyses how much the Croatian standards are confirmed by those from EU, goals, strengths, possible weaknesses, opportunities and dangers faced of different key players, as well as scientists' role in this power struggle, which will continue until the players see the mutual benefit of balancing conflicting interests.*

(Keywords: key players, environment, animal welfare, legislation, Croatia)

### **INTRODUCTION**

From the time of establishing its independence as a country in 1990, the main strategic goal of the Republic of Croatia has become to get closer and step-by-step involve into the European integration processes. One of the most required preconditions being postulated by the countries that already are the members of the EU (European Union) is adjusting the complete legislation of countries candidates. This refers to the strict regulations concerning ecology, and, within it, animal welfare as well.

### **EUROPEAN UNION DIRECTIVES AND DEMANDS**

EU (European Union) started its job on legislations concerning animal welfare more than 25 years ago. Documents having being issued by EC (European Council) from that time

oblige legislators from national governments, primarily the EU members, but also the candidates for joining EU, to adjust their regulations and, what is more, to issue even higher standards. Responsibility for EU legislation is in hands of the *Directorate General for Health and Consumer Protection*, which is covering three huge aspects:

- Farm animals' protection (EEC, 1978, 1988a; EC, 1997d, 1999, 2000, 2002),
- Protection of animals during transport (EC, 1991a, 1995, 1997c, 1998b, 2001),
- Protection of animals while being slaughtered (EEC, 1988b; EC, 1993).

One of the first regulations about keeping farm animals was presented as a *Council Directive on the approximation of laws, regulations and administrative provisions of the Member States regarding the protection of animals used for experimental and other scientific purposes* (EEC, 1986). Subsequently, a more concrete directive named *Council Directive of laying down minimum standards for the protection of calves* (EC, 1991b, 1997a, 1997b) was issued. *Council Directive concerning the protection of animals kept for farming purposes* (EC, 1998a) still presents general regulation about protecting all species of animals being raised for producing food, wool, leather, fur or for other purposes, including fishes, reptiles and amphibians. These regulations are based on the conclusions of the *European Convention for the protection of animals kept for farming purposes* (EEC, 1978) and accepted by *Farm Animal Welfare Council*, which is competent for establishing standards about animal welfare on farms, during transport and in slaughtering units. This Directive points out the importance of "five freedoms":

- "Freedom from hunger and thirst" that is to ensure free admittance to fresh water and food required for full health and vitality;
- "Freedom from discomfort" that is to ensure adequate environment with shelter and adequate and comfortable stalls;
- "Freedom from pain, injuries and diseases" regulates prophylactic measures and quick therapy;
- "Freedom to express normal behavior" insures adequate space and facilities, and company of the animals own kind;
- "Freedom from fear and stress" is describing conditions and treatment required to avoid mental suffering.

Such an incorporated legislation that takes care about preconditions for animal welfare, especially concerning animals kept on farms, is giving minimal standards according to which national governments should accept most of the strict regulations defined by EC in five conventions covering international transport, animals for breeding (especially those on farms), animals for slaughtering and laboratory animals and pets.

### **ADJUSTMENT OF CROATIAN LEGISLATION**

Republic of Croatia has announced its serious willingness for joining the countries candidates for becoming EU members in aspects of ecology and animal welfare by signing and accepting *Council Directive on the protection of animals at the time of slaughter or killing* (EC, 1993) and *UNECE (United Nations Economic Commission for Europe) Convention about accessing to informations and participating of public opinion in forming decisions about environment* (UNECE, 1998). Currently, the *Convention about international transport of animals* is in preparation (Ministry of agriculture and forestry, in preparation). Croatia has even given its concrete contribution to the *International Conference on the Domestication of the Bluefin Tuna* by presenting *Regulation on protecting tunas* (Katavić et al., 2002a). This data gains in importance

taking in account the fact that Croatia is “by the sea” country with rich fish fond, especially tunas (*Thunnus thynnus* L.) that are being produced in still ecologically preserved Adriatic Sea (NN, 1999a; Katavić *et al.*, 2002b).

According to above-mentioned legislation, the Croatian Parliament has presented a list of new statutes that are controlling this problematic and in high degree respect and accept important regulations from EU conventions and directives.

One of the first and basic acts was the *Statute on protecting environment* (NN, 1994), which was in order to reduce life and health threatening risk to people and insure and improve life quality for the benefit of current and next generations. The basic aim and purpose of this Statute is long-lasting protection of biological variability of natural populations and protection of ecological stability as well. To emphasize, and in this way to stimulate protection of animals, subsequently the *Statute on animal welfare* (NN, 1999b) was presented. This Statute determines animal welfare concerning the ways of keeping animals, their housing, feeding, as well as their protection and attitude toward them. Concretely, the following aspects are discussed in the Statute: protection of animals during breeding, protection of animals during treatment and zootechnological measurements, protection of animals while being slaughtered; protection of animals during transport, protection of companion animals, wild animals in nature, animals in zoos, circuses and exhibitions, abandoned and starving animals and animals for experimental purposes and other scientific investigations.

Furthermore, some of the following “professional” statutes have incorporated regulations that are to pay attention on environment protection and animal welfare.

- *Statute on veterinary medicine* (NN, 1997b, 2001d) is discussing animal health protection and measures that have to be done in cases of occurring of specific diseases, but speaks also in undoubtfull and direct way about veterinary role concerning animal welfare. The accent is put on protection of animals from mistreating, suffering and pain during any kind of manipulation (breeding, transport, experiments, slaughtering etc.). The Statute determines subsequent statements:
  - Every animal owner must treat animals in human way and protect them from sufer and pain, as well as require veterinary help on time;
  - Proper veterinary help and care has to be provided to sick or injured animal as soon as possible, except if disease or injure is such that animal has to be anaesthetized immediately;
  - Stalls and buildings where the animals are kept in have to be suitable to belonged to species and categories of animals and equipped in the way to satisfy their biological needs;
  - Animals have to be provided with free access to hygienically proper food and drink;
  - Scientific researches and experiments on animals can be provided only in medical, veterinary, pharmacological and other health institutions and animals must not be exposed during experiments to torture and suffer.
- *Statute on animal husbandry* (NN, 1997a) is determining the way of breeding and producing of “in breeding way” valuable animals, artificial insemination of animals, market with “in breeding way” valuable animals, required hygienic conditions for keeping domestic animals, environment protection in breeding and exploitation of domestic animals, quality of fodder and animal products, organization of raising “in breeding way” valuable animals and other questions important for efficiency and improvement of animal husbandry.

- *Statute on ecological producing of agricultural and food products* (NN, 2001a) is determining ecological production of agricultural products and food, processing in ecological production, market with ecological products, unprocessed vegetable and animal products and products partially or completely composed of such pre-products, ways of marking in ecological production, providing professional and inspective supervision and other questions important for processing unique system of ecological production. The purpose of this Statute and ecological production is protection of people and animal health, protection of nature and environment and protection of consumers.

### **THE LATEST SUB-LEGISLATIVE REGULATIONS IN CROATIA – ONE STEP CLOSER TO EU DEMANDS**

As it could be seen if read in details, mentioned statutes are not enough worked out concerning some questions about ecology, particularly in the sense of protecting environment, animal welfare and ecological production and processing of provisions of vegetable and animal origin and the need for revising by introducing sub-legislative regulations is obvious. In this purpose, some ministerials (Ministry of agriculture and forestry, Ministry for protecting environment and area arrangement etc.) presented in last and this year, and on the base of mentioned statements and following world and especially European legislative trends in domain of ecology, package of sub-legislative regulations, trying in this way to make preconditions for implementation of signed obligations from European conventions and directives:

- *Regulation on conditions and ways of transporting animals* (NN, 2001b) – determines general and special conditions for transporting animals, ways of transporting, obligations of transporter, international transport and supervision above this Regulation in praxis. It covers transport of ungulates, cows, sheeps, goats, swine, poultry, domestic birds, rabbits, other mammals and birds, other vertebrates and cold-blooded animals;
- *Regulation on conditions that have to be fulfilled by shelters and hygienic services for animals* (NN, 2001c) – determines conditions that have to be fulfilled by shelters and hygienic services for animals concerning accommodation, way of building, technical arrangement, equipment, way of working, veterinary and sanitary requirements and hygiene;
- *Regulation on processing in ecological production* (NN, 2002e) – determines and describes additional matters and other products of non-agricultural origin, as well as products of agricultural origin that are not being produced in ecological way but involve components, additives and additional matters that are allowed for usage in processing of provisions for human and animal usage;
- *Regulation on processes and conditions to acquire the symbol of ecological product* (NN, 2002d) – determines processes and conditions to acquire the symbol of ecological product, way of its assignment, as well as shape and content of symbol, which is being given by the Ministry of agriculture and forestry for one producing year;
- *Regulation on declaration of eco-product* (NN, 2002a) – determines the shape and content of declaration used for marking ecological products;
- *Regulation on ecological production in processing fibers* (NN, 2002b) – determines rules, procedures and normatives concerning production from row cotton, wool, hoofs, silk, flax etc.

- *Regulation on conditions and way of registering in registration books about eco-production of agricultural and food products* (NN, 2002g);
- *Regulation on professional supervision in eco-production* (NN, 2002f) – determines way and methodology of supervision of ecological production through so-called supervision units;
- *Regulation on ecological production of animal products* (NN, 2002c) – for sure is the most important regulation from this package. It is separated in four basic parts: general rules, animal husbandry, apiculture, fishery and aquaculture. The Regulation determines minimal zootechnological requirements in animal husbandry, aquaculture and in ecological production of animal products, and involves rules, technics and certain normatives in breeding of domestic animals, plans of production unit, conditions of transitional period, species and breeds of animals, way of keeping animals, requirements in reproduction, feeding, care, treating, slaughtering and transporting animals. Ecological production of animal products is a part of total agriculture production, within which harmony of producing systems in agriculture has to be ensured. There should be an aspiration to breed and naturally exploit healthy, resistant and to people useful animals that are adapted to conditions of breeding area. Also, breeding and exploitation should be as much as possible based on the laws of nature with keeping each animal in as much as it can be natural environment with ensured ecological conditions. This regulation is a concrete sub-legislative act that respects the biggest part of things mentioned in EU legislation. However, one of the major shortages is considered to be omitting welfare of reptiles and amphibians.

The value of this new legislation is huge because it introduces in Croatian economy term “ecological product” that much differs in its technological and producing concepts from up to the present classic agricultural products. It is to be presumed that very few products will fulfill mentioned requirements, but it is also for sure that products that will gain declaration “ecological” will really be ecological.

By presenting the package of sub-legislative acts in domain of ecology, legislation of the Republic of Croatia has approached strict legislation presented by EU Council. Still, some questions have to be worked out in more details. Therefore, it is necessary to work further on bringing new, more concrete and detailed regulations, but also to make preconditions in praxis, so that extended legislative and sub-legislative regulations could be efficiently implemented on place.

### **THE FUTURE KEY PLAYERS IN CROATIA – WHAT CAN WE EXPECT TO HAPPEN?**

The period when new legislation is being introduced to some country causes increased interactions between sides that are directly involved in new events. By recognizing each side’s goals, strengths, possible weaknesses, opportunities and dangers faced, as well as characteristics of Croatian animal husbandry and its market, it is possible to predict the subsequent events.

When we think about the key players in the power struggle that will happen in Croatia in next years by putting demands of EU legislations to Croatian law and praxis, we have to start from *animals* themselves, apart from the fact they should serve to the peoples’ pleasure, not opposite. Their goals are very simple and could be reduced to three points: to live, to express natural behavior and instincts and to suffer not more than necessary. Their interesting and unique life forms get peoples’ attention and in peoples’

nature is to feel compassion for vulnerability and innocence that easily could be found in animals. However, they are often abused and exploited by those who are not taking responsibility for their inner emotions and issues and limited means of communication and mental differences put animals in subordinate position. Therefore, it is important to influence people to meet needs of animals as their own and to fight against lifestyle determined by ignorant and insensitive people.

*Farmers* are the second key players with the goals to enjoy an occupation of raising livestock and providing material security for their families. Family properties will very possibly become the important production source for some products in Croatia (e.g. milk). Because of their close contact to animals through previous practical experience of livestock needs and practical feeling of economic realities, they will accept more easily new legislative about animal welfare than big producers. To make their position easier, farmers should communicate their situation more effectively to consumers and discuss and work with welfarists rather than condemn them. The biggest dangers they will be faced to are increased costs of high welfare and ecological farming and competition from global trade.

*Food retailers* are the third link in chain with main goals to enjoy the occupation of food retailing, to increase revenue from food sales and to decrease customers' complaints. The position between farmers and consumers make this group more independent of farmers and welfarists' pressure groups. This group could easily become ignorant of farming methods and reluctant to be involved directly on farms. However, the pressure from consumers and new legislation will force them to ensure that quality assurance schemes are effectively policed and to mediate between farmers and consumers. In this position, food retailers could be caught in the middle of conflicting pressures, which is considered to be the biggest danger for them.

*Consumers* are the most influencing key players because they have voting, purchasing and complaining power. However, because of insensitivity to needs and problems of farmers, as well as inexperience of farm animals and farm economies, marketing, media, their emotional reactions and ideologies could easily mislead them. Consumers can express their willingness to pay more for high welfare product, but hypocrisy through supporting high welfare but buying cheap low welfare product is very possible. Because of the big power of these key players, they can easily make confusion and chaos from conflicting informations and views, as well as demand impossible from farmers and food industry.

The special kind of consumers are *vegetarians*, who can be placed as a separate group of key players. Some of them (militant) have a goal to discourage others from eating meat. Usually, members of this group have strong personal convictions and self-discipline, but because of relatively small percentage in society, their power is not strong enough. However, because of similar views on animal farming, their interests are very often overlapping with those from welfarists.

*Media* (press, radio, TV) will play very important role in the future because of its influence on the most powerful and numerous key players, consumers. Their goals are to provide informed comment and news on public issues and to maintain and increase number of readers, listeners or viewers. Because of the temptation to sensationalism and to inflame conflict and passions, as well as lack of experience and understanding of farming, media can produce scandals that could be productive or contra-productive. To make them productive, it is important that journalists present balanced and factual comments from all the players and to provide constructive rather than destructive forum.

The demands from *welfare campaigners* can be reduced to one main – to improve quality of life for farm animals. They feel sensitivity and compassion for suffering and are lead by moral “high ground”: “Do as you would be done by!” However, they can easily become insensitive to the economic difficulties of farmers and release subjective approach. The positive approach should be to awaken farmers’ and public awareness of animal suffering and to encourage action, as well as fight ignorance and insensitivity, but on the way to dialogue and work with farmers rather than condemn them. Otherwise, welfarists could easily become lead by anthropomorphism with not being able to recognize that animal needs may differ from human. In order to avoid suffering to animals, they could in this way cause suffering to farmers and their families.

*Politicians* are involved as key players because of their ability to institute or threaten legislation. However, their goals are also to represent public interests, to contribute to the nation’s economic and moral welfare and to maintain and increase support of voters. The last one could become dangerous if decisions are being made on the base of number of possible voters. To make their position productive, politicians should encourage dialogue, collaboration and mutual respect between opposing interests and bring players together to work out balanced and mutual solutions.

### **SCIENTISTS’ ROLE IN THIS POWER STRUGGLE**

Taking in account all mentioned goals, strengths and opportunities, it is obvious that we as *scientists* will be caught in this power struggle by many questions to be resolved, with everyone’s expectation to contribute objective investigation and research. There is also a question of how high can degree of objectivity be if research is founded by one side of this struggle. Furthermore, welfare questions cannot be resolved by science alone. However, we can foster objective understanding of livestock’ needs, analyze dynamics of welfare issues and devise economic and practical ways of meeting livestock needs taking in account emotional components of welfare issues.

Whichever course this power struggle between different key players will take in Croatia in the future, it is for sure that it will continue until they see the mutual benefit of balancing conflict interests and we as scientists are here to help them to get through this transitive period by providing them with objective informations.

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### **REFERENCES**

- EC (1991a). Council Directive 91/628/EEC of 19 November 1991 on the protection of animals during transport and amending Directives 90/425/EEC and 91/496/EEC Official Journal L 340. 17-27.
- EC (1991b). Council Directive 91/629/EEC of 19 November 1991 laying down minimum standards for the protection of calves Official Journal L 340. 28-32.
- EC (1993). Council Directive 93/119/EC of 22 December 1993 on the protection of animals at the time of slaughter or killing Official Journal L 340. 21-34.

- EC (1995). Council Directive 95/29/EC of 29 June 1995 amending Directive 91/628/EEC concerning the protection of animals during transport Official Journal L 148. 52-63.
- EC (1997a). Council Directive 97/2/EC of 20 January 1997 amending Directive 91/629/EEC laying down minimum standards for the protection of calves Official Journal L 025, 28/01/1997. 24-25.
- EC (1997b). 97/182/EC: Commission Decision of 24 February 1997 amending the Annex to Directive 91/629/EEC laying down minimum standards for the protection of calves Official Journal L 076. 30-31.
- EC (1997c). Council Regulation (EC) No 1255/97 of 25 June 1997 concerning Community criteria for staging points and amending the route plan referred to in the Annex to Directive 91/628/EEC Official Journal L 174. 1-6.
- EC (1997d). Protocol on protection and welfare of animals. Official Journal C 340.
- EC (1998a). Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes Official Journal L 221. 23 –27.
- EC (1998b). Council Regulation (EC) No 411/98 of 16 February 1998 on additional animal protection standards applicable to road vehicles used for the carriage of livestock on journeys exceeding eight hours Official Journal L 052. 8-11.
- EC (1999). Council Directive 1999/74/EC of 19 July 1999 laying down minimum standards for the protection of laying hens Official Journal L 203. 53-57.
- EC (2000). 2000/50/EC: Commission Decision of 17 December 1999 concerning minimum requirements for the inspection of holdings on which animals are kept for farming purposes Official Journal L 019. 51-53.
- EC (2001). 2001/298/EEC: Commission Decision of 30 March 2001 amending the Annexes to Council Directives 64/432/EEC, 90/426/EEC, 91/68/EEC and 92/65/EEC and to Commission Decision 94/273/EC as regards the protection of animals during transport (Text with EEA relevance) Official Journal L 102. 63-68.
- EC (2002). Commission Directive 2002/4/EC of 30 January 2002 on the registration of establishments keeping laying hens, covered by Council Directive 1999/74/EC Official Journal L 30. 44-46.
- EEC (1978). 78/923/EEC: Council Decision of 19 June 1978 concerning the conclusion of the European Convention for the protection of animals kept for farming purposes Official Journal L 323.
- EEC (1986). Council Directive 86/609/EEC of 24 November 1986 on the approximation of laws, regulations and administrative provisions of the Member States regarding the protection of animals used for experimental and other scientific purposes Official Journal L 358. 1-28.
- EEC (1988a). 88/306/EEC: Council Decision of 16 May 1988 on the conclusion of the European Convention for the Protection of Animal for Slaughter Official Journal L 137. 25-26.
- EEC (1988b). European Convention for the protection of animals for slaughter. Official Journal L 137. 27-38.
- Katavić, I., Ticina, Franičević, V. (2002a). Bluefin tuna (*Thunnus thynnus* L.) farming on the Croatian Coast of the Adriatic Sea-present stage and future plans. International Conference on the Domestication of the Bluefin Tuna, 3-8 February 2002, Murcia, Spain.
- Katavić, I., Ticina, Franičević, V. (2002b). Rearing of small Bluefin tuna (*Thunnus thynnus* L.) in the Adriatic Sea-preliminary study. International Conference on the Domestication of the Bluefin Tuna, 3-8 February 2002, Murcia, Spain.



- Narodne novine br. 82 (1994). Zakon o zaštiti okoliša. Zastupnički dom Sabora Republike Hrvatske, Zagreb.
- Narodne novine br. 70 (1997a). Zakon o stočarstvu. Zastupnički dom Sabora Republike Hrvatske, Zagreb.
- Narodne novine br. 70 (1997b). Zakon o veterinarstvu. Zastupnički dom Sabora Republike Hrvatske, Zagreb.
- Narodne novine br. 19 (1999a). Naredba o lovu tuna (*Thunnus thynnus*). Ministarstvo poljoprivrede i šumarstva, Zagreb.
- Narodne novine br. 19 (1999b). Zakon o dobrobiti životinja. Zastupnički dom Hrvatskog državnog sabora, Zagreb.
- Narodne novine br. 12 (2001a). Zakon o ekološkoj proizvodnji poljoprivrednih i prehrambenih proizvoda. Zastupnički dom Hrvatskog državnog sabora, Zagreb.
- Narodne novine br. 71 (2001b). Pravilnik o uvjetima i načinu prijevoza životinja. Ministarstvo poljoprivrede i šumarstva, Zagreb.
- Narodne novine br. 71 (2001c). Pravilnik o uvjetima kojima moraju udovoljavati skloništa za životinje i higijenski servisi. Ministarstvo poljoprivrede i šumarstva, Zagreb.
- Narodne novine br. 105 (2001d). Zakon o izmjenama i dopunama Zakona o veterinarstvu. Zastupnički dom Hrvatskog državnog sabora, Zagreb.
- Narodne novine br. 13 (2002a). Pravilnik o deklaraciji ekoloških proizvoda. Ministarstvo poljoprivrede i šumarstva, Zagreb.
- Narodne novine br. 13 (2002b). Pravilnik o ekološkoj proizvodnji u preradi vlakana. Ministarstvo poljoprivrede i šumarstva, Zagreb.
- Narodne novine br. 13 (2002c). Pravilnik o ekološkoj proizvodnji životinjskih proizvoda. Ministarstvo poljoprivrede i šumarstva, Zagreb.
- Narodne novine br. 13 (2002d). Pravilnik o postupku i uvjetima za stjecanje znaka ekološkog proizvoda. Ministarstvo poljoprivrede i šumarstva, Zagreb.
- Narodne novine br. 13 (2002e). Pravilnik o preradi u ekološkoj proizvodnji. Ministarstvo poljoprivrede i šumarstva, Zagreb.
- Narodne novine br. 13 (2002f). Pravilnik o stručnom nadzoru u ekološkoj proizvodnji. Ministarstvo poljoprivrede i šumarstva, Zagreb.
- Narodne novine br. 13 (2002g). Pravilnik o uvjetima i načinu upisa u upisnike ekološke proizvodnje poljoprivrednih i prehrambenih proizvoda. Ministarstvo poljoprivrede i šumarstva, Zagreb.
- United Nation Economic Commission for Europe (1998). Convention on Access to information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Aarhus, Denmark.

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