



## **AWARE**

# Organic Inspector Trainings for Animal Welfare

101 - WP 2

Report on existing inspection concepts for animal welfare in organic production for different animal species

December 2016 by Roberto Maresca







### In Cooperation with











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### **List of Abbreviations**

AHAW Scientific Panel on Animal Health and Welfare

AWIN Animal Welfare Indicators

AT National code for Austria

BPZ Buone Pratiche Zootecniche (Good livestock practices)

CB Control/Certification body

CH National code for Switzerland

DE National code for Germany

DEFRA Department for Environment Food & Rural Affairs

DK National code for Denmark

EAWP European Animal Welfare Platform

EC European Community

EEC European Economic Community

EFSA European Food Safety Agency

EOCC European Organic Certifiers Council

EU European Union

**EUWELNET** Coordinated European Animal Welfare Network

FR National code for France

GfRS Gesellschaft für Ressourcenschutz mbH

IBA Indice Benessere Animale

IFOAM International Federation of Organic Agriculture Movements

IOIA Independent Organic Inspectors Association

IT National code for Italy

LT National code for Lithuania

MAFF Ministry of Agriculture, Fisheries and Food (UK)

NAHWOA Network for Animal Health and Welfare in Organic Agriculture

NL National code for Netherlands

RDP Rural Development Programme





OIE World Organisation for Animal Health

RDP Rural Development Programme

RSPCA Royal Society for the Prevention of Cruelty to Animals

SANCO Directorate General for Health and Consumer Affairs

SE National code for Sweden

TGI Tiergerechtheitsindex (Animal Welfare Index)

UK National code for United Kingdom

WP Working Package

WQ Welfare Quality®





### 0 Introduction

Work Package 2 (WP2) of the AWARE project aimed to evaluate **existing inspection concepts** with regard to animal welfare for different animal species in organic animal production. These inspection concepts were assessed in order to identify the strengths and weaknesses of already existing standards and control activities for animal welfare.

The WP consisted of:

- 1) A review of literature;
- A description and analysis of existing concepts (content, methodology) for animal welfare in organic farming
  - a) ...implemented by the project partners;
  - b) ...implemented by the members of the Quavera network;
  - c) ...implemented by other control bodies (CB) in the European Union (EU) member states (European Organic Certifiers Council (EOCC) members).
- 3) Identification, description and analysis of best-practice examples.

### 1 Background

During recent years' consumers of animal food products are increasingly considering aspects related to sustainability of animal production and respect for animal welfare. Society is deeply concerned about ethical aspects of animal husbandry in conventional and organic agriculture. For increasing numbers of consumers it is important to know under which conditions farm animals are kept as they prefer food produced by animals living under suitable and good conditions.

In many EU member states, at least initially, the organic sector focused mainly on crops, while the animals were a second-level priority in both research and consultancy to organic farmers. To date, the awareness that animal welfare must be examined in depth gradually increases. Animal welfare has grown in importance, especially in the eyes of the consumer. Over time, farmers have started to pay attention on this issue. The reason for this is, on the one hand, to take account of the wishes of consumers and / or ethical considerations. On the other hand, more and more farmers are aware that the state of health of the animals is proportional to the quality of the delivered animal products.





A recent survey funded by the European Commission confirmed that the vast majority of EU citizens care about animal welfare and would like to significantly improve the husbandry standards: The 2016 Eurobarometer on animal welfare aimed to evaluate consumer expectations towards the welfare of farmed animals. Considering the results, intensive farming model should be rethought (Figure 1).

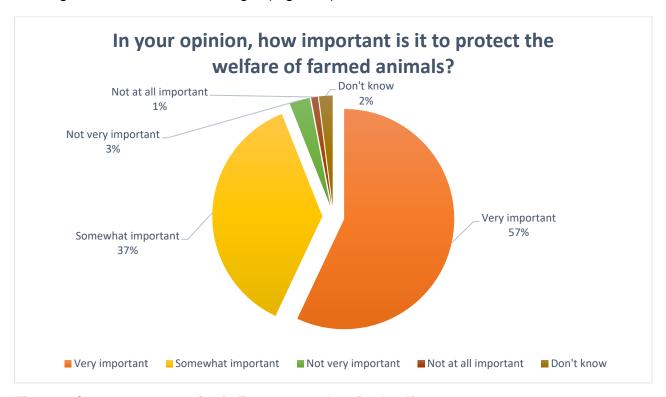


Figure 1: Consumer expectation in Europe towards animal welfare.

A large majority of Europeans (94 %) consider protecting the welfare of farmed animals to be important. Only a small minority (4 %) found the welfare of farmed animals not to be relevant.

One of the basic principles of organic agriculture is to achieve a high level of animal welfare through the proper management of species-specific needs. To date, the European Community (EC) regulation No. 834/07 on organic production contains an exhaustive number of resource-related criteria to improve animal welfare. However, it lacks precise criteria to inspect the status of animal-related criteria in organic farms.

There have been critical cases and irregularities with regard to animal welfare conditions on organic farms in the past, linked with a deficient inspection of animal-related criteria. In order to fill this gap, the AWARE project was launched: It shall analyse and consolidate different control approaches for animal-related criteria on the EU-level and develop a corresponding





training approach for organic inspectors.

### 2 Review of literature

What people understand by "animal welfare" depends in part on values that differ between cultures and individuals. These differences lead people to emphasize different elements of animal welfare that can be summarised under 3 broad headings: the physical health and biological functioning of animals, the "affective states" of animals (pain, distress and hunger) and the ability to live in a reasonably "natural" manner (FRASER, 2008).

The development of private standards for organic agriculture aimed also to improve the living conditions of farm animals. These standards were developed by private associations starting in 1924 (Demeter) in order to find alternatives to conventional production methods (SCHAUMANN, 1995).

Since the 1960s, farm animal welfare in conventional agriculture has been the topic of many moral and political debates.

Due to increasing empirical information on farm animal welfare, the prospects for sound decision-making concerning welfare have improved (BRACKE et al., 2001). One of the first scientific researches on animal protection in organic livestock breeding facilities was carried out in 1999 by Reading University, United Kingdom (RODERICK & HOVI, 1999).

Its Veterinary Epidemiology and Economics Research Unit of the Department of Agriculture of Reading University submitted the corresponding report to the Ministry of Agriculture, Fisheries and Food (MAFF) of the United Kingdom (UK) in 1999. It described the results of a survey, which had the overall objective to assess animal health and welfare issues associated with organic livestock systems. Animal welfare issues were an important concern of many producers, but it was apparent that, monitoring of the welfare of farm animals suffered from a lack of sound, practical quantitative methods that could be applied universally. Whereas the animal health status of livestock can be relatively easily quantified, assessment of broader welfare issues is more complex.

In order to be able to assess effectively whether a high level of animal welfare is met, appropriate measures and/or indicators for animal welfare were identified to be required. They must meet the following requirements: 1) based on sound scientific evidence; 2) simple





and repeatable; 3) have full involvement of the farmer; 4) focused on the 5 freedoms.

The 5 freedoms were developed in 1965 and formalized in 1979 by a press statement of the UK Farm Animal Welfare Council. They describe 5 aspects of animal welfare under human control, namely:

- 1) freedom from hunger and thirst
- 2) freedom from discomfort
- 3) freedom from pain, injury and disease
- 4) freedom to express normal behaviour and
- 5) freedom from fear and distress

(RODERICK & HOVI, 1999).

In the 2000s, research in the field of animal welfare experienced a significant acceleration. Johnsen et al. (2001) described and compared 9 methods of assessing the welfare of farm animals at herd level for different species and different countries which are listed in Table 1. These methods were divided in:

- Environmental parameters (resource-related criteria), describing features of the environment and management, such as size of stalls, feeding and drinking facilities, space allowance, quality of litter and access to pasture;
- Animal-based parameters (animal-related criteria), regarding animals' reactions to specific environments. Thus, animal-based parameters fall within the categories of behaviour, health, and physiology; level of stress hormones, aggression, fear and abnormal behaviour, symptoms of acute disease and mortality are examples of such parameters.





Table 1: Different assessment methods for animal welfare of different livestock species at herd level (by JOHNSEN et al., 2001).

Title of method/ project	Group of animals	Characteristics of the method	Aim of the assessment	Result of assessment	Country
TGI 35 L	Cattle, pigs, laying hens	Index system for on farm welfare assessment	Certification of animal welfare in organic farming	Welfare score	AT
TGI 200	Cattle, pigs, laying hens	Index system for on farm welfare assessment	Certification of animal welfare in organic farming	Welfare score	DE
Welfare assessment in Ethical Accounting	Cattle, pigs	Multidisciplinary expert based assessment	Advisory tool for the farmer	Welfare report	DK
The impact of housing systems on welfare in dairy cattle	Cattle	Monitoring system (Epidemiologic approach)	Scientific investigation of the impact of housing systems on animal welfare	Welfare status report	СН
On-farm assessment of dairy cows	Cattle	Multidimensional approach to welfare	Evaluation and certification of animal welfare	Multiple welfare scores	FR
Decision support system to assess the welfare status in farm animals	Pigs	Computer model combined with scientific knowledge base	Certification of animal welfare Scientific evaluation of housing systems	Welfare score	NL
Evaluation and certification of housing systems for horses	Horses	Test concept based on test tradition from psychology and social science	Certification of animal welfare Scientific evaluation of housing systems	Multiple welfare scores	СН
Dispensation program for battery cages	Laying hens	Dispensation program for phasing out battery cages	Evaluation of individual farms	Welfare score	SE
Testing alternative housing systems for laying hens	Laying hens	Testing program for new housing systems	Evaluation of housing systems	Final report includes welfare	SE





The majority of the methods reviewed in Table 1 have been developed to investigate or certify the impact of the housing system on animal welfare.

The possibility of quantifying a parameter in a limited period of consultation or inspection is obviously an important factor in the practicability of a method. Consequently, practicability has a huge impact on the selection of welfare parameters. This favours environmental parameters / resource-related criteria.

SUNDRUM et al. (2001) noted that organic standards provide a solid basis for good living conditions for livestock in terms of animal-related criteria compared to conventional production systems. The annual inspections of organic farms could also contribute to this. However, they are not necessarily a guarantee for good animal welfares. This depends very much on the knowledge level of the organic farmer. The inspection approach of organic inspectors must also be targeted.

In order to examine the organic inspectors, organic advisors and farm animal veterinarians' perceptions of the capability of organic standards a survey was arranged by Hovi et al. (2002) to give positive impacts on welfare of organic livestock. The results indicated a very positive perception of the role of organic standards in improving animal welfare.

With the study related to human-animal "affair", BOIVIN et al. (2003) emphasized the ethical importance of the human-animal relationship in the context of farm animal welfare; improved stock watching can help prevent disease and optimize animal welfare. BRITT et al. (2004) pointed out that organic agriculture wishes to emphasize animal welfare, and aims to be at the forefront with regard to promoting the welfare of farm animals.

For this reason, they consider it important to increase the expertise in the field of animal welfare in organic farming among farmers, veterinarians and consultants. The article presented a consultative instrument for optimizing animal welfare at farm level in order to improve knowledge of animal welfare in the agricultural sector and to influence the attitude of the farming community. It included an on-farm assessment of animal welfare. The aim was to contribute to the protection of a high level of animal welfare in organic farming. The proposed tool included the following aspects: General impression of the herd, animal behaviour, interaction between animals and humans, and farm management and operating systems.

VAARST & ALROE (2011) pointed out that a large number of factors could influence the





creation of healthy and fair livestock food systems with a meaningful consideration of ecology and care aspects (Figure 2).

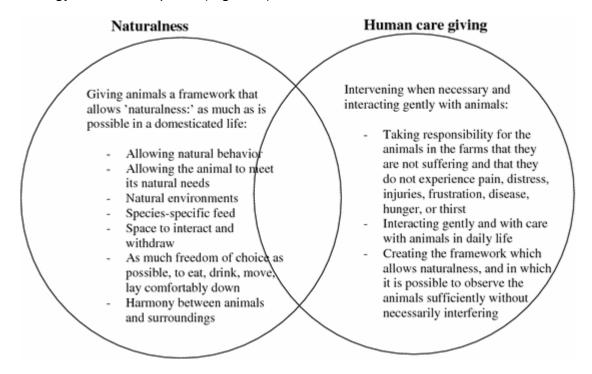


Figure 2: Interfaces between naturalness and human care (by VAARST & ALROE, 2011).

This means that a lot of knowledge and the ability to think and innovate are necessary for the creation of production systems that meet the needs of the animals. If this is the case for livestock farms, this also applies to the inspectors involved in the inspection of organic livestock operators.

The open-access review named Animal Health and Welfare Issues Facing Organic Production Systems (SUTHERLAND et al., 2013) highlighted that there is still a lack of scientific information regarding animal welfare including the ability to perform natural behaviours in organic systems, as they have not been well studied. Animal welfare is a potentially important area, especially for organic livestock systems; the benefits of improved animal protection ultimately outweigh the efforts to enforce it.

In order to promote animal welfare in organic farming, it is imperative that all parties have the knowledge to carry out a solid assessment of parameters that indicate the level of animal welfare in organic farms. This applies to both livestock operators and inspectors.





### 3 The European legal framework

The European convention for the protection of animals kept for farming purposes signed under the commit of Europe in 1978 defined recommendations for most farming animal species like cattle, pigs, sheep, and different kinds of poultry and so on. The first recommendation was defined in the 1980's. Although they are only recommendations, they supported the development of corresponding legislation.

One of the first legal documents related to animal welfare was the council directive 93/119/EC of 22 December 1993 on the protection of animals at the time of slaughter or killing. This directive provided that animals must be spared any avoidable excitement, pain or suffering during the above stages, and described requirements applicable to slaughterhouses. It is also specified that instruments, restraint systems and other devices used for stunning or killing must be designed to achieve rapid anaesthesia or killing. In addition, the staff shall have the necessary knowledge and skills regarding the rules to be followed when animals are slaughtered and killed out with slaughterhouses. Derogations apply in respect of poultry, rabbits, pigs, sheep and goats slaughtered by their owner for personal consumption.

The breakthrough in the field of animal welfare was in 1998, when the council directive 98/58/EC provided general rules for the protection of farm animals kept for the production of food, wool, skin respectively fur or other farming purposes. These rules were based upon the European convention for the protection of animals kept for farming purposes and reflect the so-called '5 Freedoms' (see also chapter 2): (1) freedom from hunger and thirst, (2) freedom from discomfort, (3) freedom from pain, injury and disease, (4) freedom to express normal behaviour and (5) freedom from fear or distress.

This directive applied to all animals, conventional and organic. It still had to be converted into national legislation by the member states of the European Union.

For animals kept on organic farms, European Economic Community (EEC) regulation No. 1804/1999 came into force in August 2000, completing regulation (EEC) No. 2092/91 for organic farming. For the first time, it provided resource-related parameters related to organic animal welfare. In particular, it developed guidelines regarding housing conditions, animal nutrition and breeding, animal care, disease prevention and veterinary treatment in organic farming. It also introduced other elements with relation to animal welfare, such as the maximum number of livestock density, locomotion area, floor characteristics and husbandry





### practices.

In 2007, the Treaty of Lisbon, which was signed by the EU countries, officially recognized animals as living creatures. Article 13 of the Treaty on the functioning of the European Union recognizes animals as sentient beings and requires full regard be given to the welfare requirements of animals while formulating and enforcing some EU policies. EU-member states are committed to adopt measures which, as far as possible, respect animal welfare.

Actually, the European Union has the highest animal welfare standards in the world. The general framework for animal welfare is defined in the EU Strategy for the protection and welfare of animals 2012-2015. The strategy lays the foundation for improving welfare standards from 2012 to 2015, as well as making sure that these standards are applied and enforced in all European Union countries. It focuses on enhancing knowledge among many key agencies, organizations and individuals who are involved in the process. The strategy also aims to improve the competitiveness of European agricultural products by ensuring that markets and consumers recognize animal welfare as a quality feature.

Harmonized rules at European level are currently in place for many species of animals and for various issues related to animal welfare. The council directive 98/58/EC lays down minimum standards for the protection of all animals on farms, while other EU rules define breeding standards, animal welfare during transport and stunning and slaughter. Specific directives concern the protection of individual animal categories such as calves, pigs and laying hens. In addition to farm animals, also animals used in laboratory experiments as well as wild animals housed in zoos are protected by standards harmonized at European level.

Nevertheless, it needs to be mentioned that also other international organizations have issued recommendations and guidelines on animal welfare, such as the World Organization for Animal Health (OIE).

The European Commission instructed the European Food Safety Authority (EFSA; European agency funded by the European Union that operates independently of the European legislative and executive institutions and EU member states) to provide scientific advice on a number of categories of farm animals including pigs, fish and dairy cows. The scientific panel on Animal Health and Animal Welfare (AHAW experts) examines a wide range of factors that affect the well-being of each category of animals such as housing and husbandry systems, nutrition and feed, transport and the stunning and killing methods. In January 2012, the EFSA has published guidelines for the evaluation of risks related to





animal welfare; before that date, there were no specific indication at international level.

The parameters laid down by European standards for animal protection are not sufficiently linked to the measurement of objective, animal-related parameters. For this reason, different stakeholders (associations, certification bodies, research projects) have implemented their own protocols; to address this shortcoming, or at least define parameters that facilitate a clearer indication of the state of animal welfare at the livestock operators.

### 4 Outcomes from EU projects on animal welfare

The first European projects related to the issue of animal welfare were implemented at the dawn of 2000.

One was named "Network for Animal Health and Welfare in Organic Agriculture (NAHWOA) - A European Commission funded Concerted Action Project". It started in 1999 and ended in 2001. The main aim of the project was to provide a joint platform for research organizations and institutions involved in organic livestock production. This platform facilitates the exchange of information and ideas to enable the development of new research priorities and to analyse conventional research methods and their suitability for organic livestock research. Another objective of the project was to create a forum for an on-going discussion on animal health and welfare and their interrelationship within the framework of organic livestock production, in order to contribute to the development of organic regulations. The network had 17 member organizations from 13 European countries. During the project, 4 workshops were been arranged, related to different topics: "The diversity of livestock systems and definition of animal welfare", "Human-animal relationships: management, housing and ethics", "Feeding and breeding for animal health and welfare", "Positive health: preventive measures and alternatives strategies".

With the purpose of detailing the 5 freedoms, the EC-funded **Welfare Quality®** (http://www.welfarequality.net, 2004 - 2009) research project delivered "Principles and criteria for good animal welfare".

After evaluating the views of consumers, industry representatives, biologists, social scientists and legislators, the Welfare Quality® project established 4 principles considered essential to safeguard and improve farm animal welfare: good feeding, good housing, good health and appropriate behaviour. Within these 4 main principles, 12 criteria were set.





Regarding health, the following criteria were identified: absence of injuries (animals should be free of physical injuries); absence of disease (animals should be free of disease, high standards of hygiene and care); absence of pain induced by management procedures (animals should not suffer pain induced by inappropriate management, handling, slaughter, or surgical procedures). With regard to the behaviour the criteria were the expression of social behaviours (animals should be able to express normal, non-harmful social behaviour); expression of other welfare-related behaviours; good human-animal relationship (animals should be handled well in all situations); positive emotional state (positive emotions such as security or contentment). Regarding the good feeding aspects, the animals should not suffer from prolonged hunger (a proper and complete diet is needed), should be free to foraging for food, as a species-specific natural behaviours, and should have at any moment access to fresh and clean water. With regard to good housing criteria, the animals should have enough space to be able to move around freely, they should have comfort around resting; in addition, the farmers should maintain high standards of hygiene and care.

This scheme emphasizes the animal's point of view by placing increased importance on animal-related criteria (e.g. bodily condition, injuries, fear) in its assessment of the degree of fulfilment of the twelve welfare criteria outlined above. By doing so, the assessment system is rather independent of the rearing system. However, relevant resource-based (e.g. space, temperature) and management based (e.g. handling, record keeping) measures are also included.

Together, these measures are helpful in assessing the animal welfare status of the animals reliably, identifying the causes of poor welfare and advising farmers on possible improvements.

In order to verify compliance with the twelve criteria, the project researchers identified around thirty to fifty animal-based measurements to achieve the best assessments by observing the animals. The number of measurements applied in a specific case may vary, as this depends on the specific objective of the assessment. The choice of the animal-related measurements is done accordingly. In fact, it is unnecessary to use all animal-based measurements on every occasion. The complete list of measurements is comparable to a "toolbox" from which the appropriate range can be selected. In order to evaluate and monitor the quality of animal welfare on farms or at slaughter a specific assessment system was established for each livestock species. The systems were intended to help producers or





slaughterhouse managers to understand the level of animal welfare in their unit and to streamline the alignment of their practices with certification programs that guarantee high standards of animal welfare for consumers.

Based on the 12 criteria and the different animal based measures, the project also gave a stepwise procedure to score the level of animal welfare at a farm in a 3-step process.

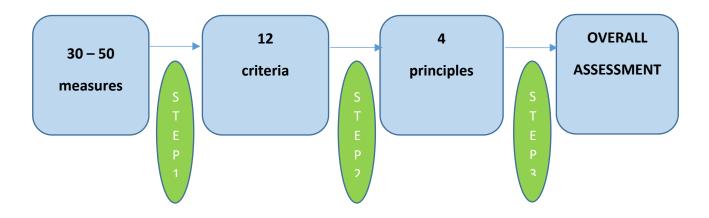


Figure 3: The "3 steps" process according to the Welfare Quality® project.

The measures were tested to make sure they accurately reflected the actual welfare of the animal. In addition, each measure had to be so clearly defined that everyone could quickly and precisely carry out the assessment after a short training period.

With the information provided by the Welfare Quality<sup>®</sup> project, producers shall be better enabled to monitor and control the well-being of their animals. The results shall also support consultants and inspectors and consumers can be sure that the level of animal welfare is respected. This could be a useful tool for the operators, but due to time constraints during inspections the system cannot be easily integrated to organic inspections.

Based on the results of the Welfare Quality<sup>®</sup> project, the Emilia Romagna Region (Italy) has provided an Information Technology tool to support verification procedures and the assessment of compliance with the good animal husbandry practices. This tool, available at <a href="https://agri.regione.emilia-romagna.it/IBA/home.do">https://agri.regione.emilia-romagna.it/IBA/home.do</a>, addresses to all farms that want to access the measure "Payments for animal welfare" in the framework of the "Rural Development Programme (RDP)". In particular, the assessment of the compliance system Buone Pratiche Zootecniche (ital. BPZ; engl. Good livestock practices) uses a default





classification scheme for the cattle according to the methodology animal welfare index (*ital. Indice di Benessere Animale;* IBA). This index identifies merit classes within which the farms are located in relation to the different level of animal welfare. Compliance with BPZ means reaching the level of classification "Class 3: company with a sufficient level of welfare." The measurement is performed using a specific checklist (evaluation/questionnaire IBA) that allows to identify a "class of merit" relating to animal welfare scores, starting from a relatively small number of objective and measurable parameters. Unfortunately, the animal welfare assessment system according to the methodology IBA is not available for other livestock species (sheep, pigs, chicken meat, laying hens) yet.

The European funded project "European Animal Welfare Platform" (EAWP, 2008 - 2011) provided important web tool: an on-line platform available http://www.animalwelfareplatform.eu. They deliver strategic documents for every welfare issue, providing some background to the welfare problem, describing its impact and frequency of occurrence, and identify existing best practice for dealing with the problem as well as the need for improvement. The partners involved in the project were relevant companies in the animal production sector (producers, processors, retailers, and food service), animal welfare organizations and universities. All participants shared their knowledge gained through the project on a common platform. All outcomes are available on the website mentioned above. It is possible to download "Strategic Approach Documents" for different animal production systems: pork production, broiler chicken production, egg production, beef and dairy production and salmon production. Each document analyses the best practices in the field of livestock farming in detail. The project provided farm animal welfare indicators which can be defined and measured. Welfare parameters and practical measures were developed. Protocols were written for implementing farm animal welfare standards on-farm and during slaughter.

The project **EUWELNET** (http://www.euwelnet.eu) has lasted 2 years (2013-2014). It responded to the call SANCO 2012/10293 (a document provided by SANCO, the Directorate General for Health and Consumer Affairs) and was a pilot project on the feasibility of a coordinated European animal welfare network.

The aim of the project was to coordinate a pilot study to identify bottlenecks/difficulties in the implementation of EU legislation on animal welfare, to develop and test knowledge strategies, to carry out an overarching analysis and to make recommendations for feasibility





and conditions for a European network. The EUWELNET project partners were 16 universities as well as 10 research and technical institutes from 16 EU member states. The project pointed out the necessity of the establishment of a coordinated network of experts in animal welfare, in order to support the competent authorities and other stakeholder in the implementation of the EU regulation regarding the animal welfare.

The recently EU funded program **Animal Welfare Indicators - AWIN** (http://www.animal-welfare-indicators.net/site/, 2010 - 2015) focused specifically on indicators of animal welfare for turkeys, sheep, goats, horses, and donkeys (it does not refer specifically to organic animals). The AWIN project has provided a list of relevant animal-based indicators for each species. The inclusion of each indicator in the list was based on its validity, feasibility and reliability. As a result of the project, several "Animal welfare assessment protocols" have been established. These documents were developed to give practical, science-based information to those usually deal with animals, in particular livestock farmers. The attention of the AWIN project was addressed to species that, although commercially relevant worldwide, have been overlooked in animal welfare assessments so far. The AWIN project involved several international partners, gathered together in the so-called "AWIN Consortium".

The project Animal Welfare Research in the enlarged Europe (http://www.aware-welfare.eu/aware) involved 14 partners from Denmark, Turkey, Austria, UK, Estonia, Slovakia, Poland, France, Sweden, Macedonia, Greece, Croatia and the Netherlands. The project started in 2011 and terminated in 2014. It aimed to develop sustainable and actively expanding Europe-wide networks of farm animal welfare scientists, farm animal welfare university lecturers and students. It has also been established stakeholder platforms for animal welfare knowledge transfer and implementation. The project has shown that it is necessary and desirable to have a common platform so that institutions, universities, experts and livestock producers share knowledge about animal welfare in different European countries in order to pursue a common and harmonized approach.

The analysis of existing projects on the subject of animal welfare has highlighted a continuous research in the field of animal welfare. The results of the projects mentioned above are a valuable contribution to the development of tools that can be used in inspections of organic livestock operators.

Many projects have been implemented related to the issue of animal welfare; however, up





to now it has not been possible to obtain a single shared and agreed, simple assessment model applicable in the reality of animal-welfare inspections with a limited time budget on site. No project was addressed to the inspectors involved in monitoring aspects of animal welfare. With the project, AWARE, we will try to fill this gap for organic production and to provide the information required for the assessment of animal welfare to all parties involved in organic controls.

# 5 Inspection concepts for animal welfare implemented by the project partners

Organic controls today already examine in depth numerous resource-related criteria for organic animals, which are set in regulation (EC) No. 834/2007.

With regard to husbandry practices, farmers keeping organic animals must possess the necessary knowledge and skills as regards the health and the welfare needs of the animals.

Regarding the origin of the animals, organic livestock must be born and raised on organic farms. For breeding purposes, non-organically raised animals may be brought onto a holding under specific conditions. Such animals and their products may be deemed organic after compliance with the conversion period provided by the regulation.

In addition, the ability to adapt to local conditions should be taken into account when choosing breeds.

The European organic regulation limits the number of livestock per hectare with a view to minimising overgrazing, poaching of soil, erosion, or pollution of ground water by the spreading of animal manure. Farmers can also develop suitable multiannual rotation systems, so that animals do not graze on the same field every year.

As organic stock farming is a land-related activity animals should have, whenever possible, access to open air or grazing areas.

Tethering or isolating livestock is prohibited, unless for individual animals for a limited period of time, and in so far as this is justified for safety, welfare or veterinary reasons. Suffering, including mutilation, must be kept to a minimum during the entire life of the animal, including at the time of slaughter.

The duration of transport of livestock must be minimised to ensure the welfare of the animals.





There are also requirements regarding breeding; with regard to reproduction, natural methods must be used. However, artificial insemination is allowed. Hormones or similar substances are not permitted, unless as a form of veterinary therapeutic treatment in case of an individual animal. Cloning animals and/or transferring embryos is also strictly forbidden. Farmers should choose appropriate breeds; this would prevent the animals from suffering. It would also avoid the need to mutilate the animals.

Regarding disease prevention and veterinary treatment, farmers must prevent diseases by selecting the appropriate breed and strain. Choosing the appropriate stocking density and adequate housing maintained in hygienic conditions will also avoid illnesses. Livestock that receives high quality feed and exercise are also inclined to live healthier lives. When the animals are ill, chemically synthesised allopathic veterinary medicinal products, including antibiotics, where necessary and under strict conditions; this is only allowed when the use of phytotherapeutic, homeopathic and other products is inappropriate.

All these aspects are checked during the inspections by control authorities and CB's recognized to certify organic farmers in accordance to the regulation (EC) No. 834/2007 in the different EU member states. These inspections at least need to be conducted annually. Additional, primarily unannounced inspections are carried out based on the risk-categorization of the operator.

With regard to animal-related criteria, regulation (EC) No. 834/2007 remains rather vague and refers to "a high level of animal welfare" which must be ensured by the organic farmers.

Some of the project partners, namely Soil Association, *Gesellschaft für Ressourcenschutz* (GfRS) and *Naturland*, have already designed and implemented inspection concepts in order to verify animal-related criteria on organic farms. The project partners AGRO BIO TEST and CCPB still do not have inspection approaches towards animal-related criteria.

In one case (*Naturland*) the animal welfare inspections are linked to a private organic certification standard. The other project partners evaluate animal welfare by including specific inspection requirements in their inspection program according to the EU regulation No. 834/2007 on organic production.





### 5.1 Soil Association (UK)

The Soil Association is a charity based in the UK. The activities include campaign work; Soil Association developed the so-called Soil Associations Standard for farming and processing, which also includes rules related to the welfare of organic animals. Soil Association Certification, a separate organization, inspects for compliance of Soil Associations Standard.

The requirements in Soil Association standards, as is the case for the EU regulation are often quite general in that they often use qualitative terms in relation to welfare. This works fine for cases where welfare is excellent and where it is very bad, but of course in the real world there is often a wide range of performance on any individual measure and it can be hard to be objective about assessment and to define a clear line between when welfare is acceptable and when it becomes unacceptable. In order to support Soil Association inspectors in their work of assessing compliance with the standards, a range of welfare outcome measure for use at inspection were developed. This is a part of a collaborative project with the University of Bristol and the Royal Society for the Prevention of Cruelty to Animals (RSPCA; http://www.assurewel.org). Soil Association already implemented the use of welfare outcomes assessment for laying hens, dairy cattle and pigs, and they are currently developing and piloting measures for broilers (meat birds), beef cattle and sheep. All of the current protocols are available on the AssureWel website and are available to download from the website. For laying hens there is also a benchmarking tool for feather cover.

All of the protocols that Soil Association uses are designed so that they are intelligible to livestock keepers and could be used by farmers and their advisors or vets – they are a tool to support inspection, but can easily be used to support management of animals based on self-assessment. For those measures where benchmarking has been adopted it is not provided as a decertification threshold; however, if an assessment indicates that the result is low, the inspector is required to consider issuing a non-compliance and if they do not do so to provide a written justification. For some of the measures there is an element of joint assessment – the inspector and the producer look at a small (not statistically significant) sample together and agree how to assess and score them against the protocol. This is important for allowing a conversation about welfare and for promoting self-assessment. The inspectors are also encouraged to have a conversation about animal welfare and to signpost producers to appropriate information (such as on the AssureWel and FeatherWel





http://www.featherwel.org/websites) and there are 2 specialist advisors in the Soil Association Charity.

The aspects to be checked depend on the animals, and below are listed the main aspects.

### For laying hens the following 7 points are checked by the Soil Association inspectors:

1) Feather loss. Feather loss can be a result of various issues. However, the location of the feather loss on the bird can help to provide an indication of potential cause. Loss of feathers to the back and vent areas usually indicate feather pecking. The causes of feather pecking are multifactorial but can include breed, nutritional imbalance, housing issues, poor range use and rearing conditions. Feather pecking can be very painful and can result in severe injury, sometimes even cannibalism and death. The resulting poor feather cover can lead to thermal discomfort (cold/sunburn) and reduced productivity. It is understood that the birds carrying out feather pecking are in a stressed state leading them to start this behaviour. Damage to feathers on the head and neck on the other hand can indicate the occurrence of aggressive pecking, often aimed at the head and with the potential to lead to further injury, or mechanical damage, caused by failings of the equipment or housing set-up.

The visual assessment of the head/neck area and back/vent area of the bird (without handling them), 5 animals for 1 of the 10 identified areas should be conducted by the inspector. The following image (Figure 4) helps the inspectors to find the body part to be checked:

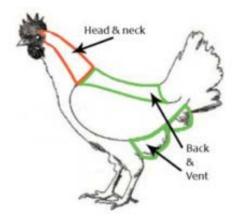


Figure 4: Approach to check feather loss in poultry (by AssureWell, 2013).



- 2) Bird dirtiness. Under normal circumstances healthy birds keep themselves clean, they will avoid dirty areas and carry out regular preening. Dirt around the vent can indicate diarrhoea. Dirt on feathers might indicate inadequate litter quality, a wet and muddy outside run and/or poor design of the perching/nesting area. It is a potential source for spreading disease and of relevance for general hygiene and bird wellbeing.
- 3) Beak trimming. All producers are urged to work towards keeping laying hens without beak trimming by 2016 (the Department for Environment Food & Rural Affairs (DEFRA) proposed date for a legal ban) at the latest or sooner where possible. Assessing if birds have been beak trimmed or not allows for the collection and analysis of useful data as we work together with the industry towards being able to ban beak trimming without compromising overall hen welfare.
- 4) Antagonistic behaviours. Antagonistic behaviour includes both aggressive behaviour and injurious feather pecking. High levels of these behaviours within the flock can result in extensive feather loss and painful injury, with the added risk of cannibalism, but can also increase the general level of stress and fear among the birds. This kind of behaviour may prevent all the birds being able to access all facilities, e.g. nest boxes and popholes.
- 5) Flightiness. A simple observation to help indicate the general behaviour of the flock and how accustomed the birds are to humans (indicating how regularly and thoroughly the birds are walked).
- 6) Birds needing further care. Sick birds require additional attention to ensure any suffering is alleviated as soon as possible. Early recognition, treatment or culling of sick birds is the key to reducing any potential welfare compromise.
- 7) Mortality. Recording levels of mortality can help establish relationships between potential welfare issues (e.g. injurious feather pecking) and resulting levels of mortality.

For dairy cows the following measures have been identified by AssureWel as being important indicators of dairy cow welfare. The criteria to select these 'core' measures included consideration as to how practical they are to assess on-farm. The full set of measures is now being implemented on Soil Association and Freedom Food farms.

1) Mobility. Lameness is known to be a huge welfare issue across the UK dairy industry with over 30 % of the national herd being lame at any one time. However, the prevalence of lameness has been shown to range from 0 % to 70 % at farm level.





Lame cows are not only in considerable discomfort and pain but are predisposed to further disease challenges (e.g. mastitis, swollen hocks) reduced fertility, lowered milk yield and decreased appetite. Primarily all these factors significantly affect the welfare of the cow but in addition they have hefty financial implications both in the short and long term. Early recognition, investigation and treatment of any lame animal are essential to limit pain, aid recovery and minimise any additional complications. Therefore, regular on farm mobility assessment is an important step in resolving lameness issues. Lameness caused by foot lesions can be both infectious (digital dermatitis, foul) and non-infectious (sole haemorrhages, sole ulcers and white line disease) and it is important for farmers to identify the types of lesions present in order that likely causes can be addressed. The mobility of the animals is checked by inspectors involved, the following pictures (Figure 5.1) help them to the right assessment:

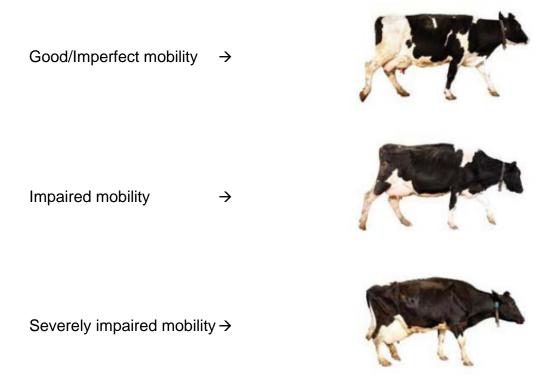


Figure 5.1: Examples of cow mobility (by AssureWel, 2013).

2) Body condition. Body condition scoring is a technique for assessing the condition of livestock at regular intervals. The purpose of condition scoring is to achieve a balance between economic feeding, good production and welfare. Body condition will vary





during a healthy cow's lactation. She will most likely be at her thinnest around peak milk yield and at her fattest around drying off. However, despite this variation her condition should not fall below score 2 or rise above score 3.5. A cow with a body condition score of less than 2 is excessively thin and is not meeting the nutritional demands of her body. This may be as a result of feed quality/quantity, access to feed or disease. Thin animals may suffer from chronic hunger, discomfort (especially in cubicles), are predisposed to health issues (metabolic, infectious and physical) and are more likely to have reduced fertility. Cows with a body condition score of 4 or 5 are overweight. Fat cows are at risk of dystocia (difficult calvings), more likely to develop metabolic diseases such as ketosis, fatty liver disease and milk fever and are prone to mastitis, lameness and infertility.

The inspector is supported in the visual assessment with proper pictures that show if the animal can be scored as:

 Thin, with ail head, deep cavity with no fatty tissue under skin. Skin fairly supple but coat condition often rough. Loin – spine prominent and horizontal processes sharp. The condition is effectively represented in Figure 5.2.





Figure 5.2: Thin cows (by ASSUREWEL, 2013).

 Fat, when the animals have the tail head completely filled or buried and folds and patches of fat evident. Regarding the loin, horizontal processes cannot be seen and the appearance is completely rounded, with a slight loin depression. This condition is showed in Figure 5.3.









Figure 5.3: Fat cows (by ASSUREWEL, 2013).

 Medium, the preferable condition, between those listed above, and visually explained in Figure 5.4.





Figure 5.4: Preferable body condition of cows (by AssureWell, 2013).





3) Cleanliness (Figure 5.5). Areas of dirt (faeces/mud) within different regions of the cow's body are as a result of different causes and can affect welfare in different ways. In general, if given the choice, cows will choose to lie in clean dry areas. Dirtiness on the coat can irritate the skin, provide optimal conditions for ectoparasites, increase cold stress, indicate dirty lying areas or lack of grooming facilities (brushes, trees etc.), increase the risk of disease and cause issues at or prior to slaughter. The lower legs: A high level of dirtiness in this region is associated with increased risk of lameness, digital dermatitis, interdigital dermatitis, slurry heal and mastitis. It can also obscure skin damage and foot lesions preventing early detection, treatment and increasing recovery times. It can be caused by poor slurry systems, lack of bedding, overstocking, or poached paddocks. The hind quarters: Dirtiness in this region may be as a result of incorrect feeding, change in feeding, lush grass, endoparasites, infectious disease or





Figure 5.5: Part of the cow to assess cleanliness (by ASSUREWEL, 2013).

dirty environments (lack of bedding, poor cubicle maintenance, overstocking etc.). The udder & teats: Dirtiness in this region can be caused by anything listed above. Dirt on the udder is strongly associated with the development of mastitis, increases the premilking cleaning (which adds time to the milking routine) and increases the risk of poor milk quality.

4) Hair loss, lesions (Figure 5.6). In this case the inspector should visually assess the following regions of 1 (randomly selected) side of the animal from a distance not exceeding 2 meters: head and neck, body (including flank, back & hindquarter), front leg, rear legs.





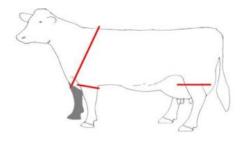


Figure 5.6: Section of the cow to assess hair loss and lesions (by ASSUREWEL, 2013).

The pictures in Figure 5.7 are at the disposal of the inspector:



Figure 5.7: Examples of hair loss and lesions in cow legs (by ASSUREWEL, 2013).

5) Swellings. Visually assess the following regions of 1 (randomly selected) side of the animal, from a distance not exceeding 2 meters: head and neck, body (including flank,





back & hindquarter), front leg, rear legs. Than the inspector should assess if there is one of the following condition:

 No swelling or smaller than grape-sized (≥ 2 cm diameter), as showed in Figure 5.8.





Figure 5.8: Healthy rear cow legs (by ASSUREWEL, 2013).

Mild swelling. The normal anatomy of the area is enlarged, poorly defined or obscured. Around the hock and the knee this will be apparent as a lack of definition of the tendons and other structures around the joint, and the hock will appear to have lost the 'waist' to the joint. On other parts of the body the swelling will be 2 - 5 cm in diameter e.g. golf ball (Figure 5.9).





Figure 5.9: Mild swelling of rear cow legs (by AssureWel, 2013).

 Substantial swelling, an abnormal enlargement which is a prominent/pronounced extension away from the body. Around the hock and the knee (carpus) this will be





apparent as an obviously rounded swelling > 5 cm in diameter, e.g. the size of a clementine. On other parts of the body the swelling may be long, rather than round. The pictures in Figure 5.10 help those who are checking the specific point.





Figure 5.10: Examples of substantial swelling of rear cow legs (by AssureWell, 2013).

- 6) Broken tails. Whilst assessing the herd, the inspector records the number of animals that show evidence of a broken tail, including tails that are bent, short or injured. Then the inspector investigates and records possible causes of any broken tails observed.
- 7) Response to stockperson. Then the inspector checks whether the person present for the assessment is the regular stockperson. Throughout the visit, the inspector observes the response of the cattle to the stockperson as they approach and interact with the cattle. As far as possible he/she assess response to the stockperson alone, rather than the assessor.
- 8) Cows needing further care. This point should not include cows already receiving suitable care. The inspector assesses the whole herd including the milking herd, dry cows, in-calf heifers, calves, hospital pens and animals that are due to leave the farm; the inspector records and comments on the number of any sick or injured cows that would benefit from further intervention (including mobility score 3 cows). Further interventions could include further treatment, hospitalization (i.e. removal from the main herd) or culling.
- 9) Mastitis. The inspector records the number of recorded cases of mastitis per 100 cows for the previous 12 months.





- 10) Calf/Heifer survivability. The inspector records the number of losses per 100 cows calved (for the previous 12 months) for the categories: 0 24 hrs all calves (including stillborn), 24 hrs 42 days all calves, 42 days 1st calving dairy heifers, 1st calving 2nd calving dairy heifers.
- 11) Cull and casualty cows. The inspector checks farm records and record the number of animals in the last 12 months per 100 cows for the following categories: No. planned culls No unplanned culls or casualty cows (died or killed on farm) in the last 12 months No. of enforced culls.

For pigs the following measures have been identified as being important indicators of pig welfare. The criteria to select these 'core' measures included consideration as to how practical they are to assess on farm. The control is made on 4 - 5 pens randomly checked, which include animals from 50 kg upwards. There are assessments for both dry sows and finishing pigs, which vary slightly in measures and assessment approach.

### For finishing pigs:

- Enrichment use. The inspector observes and records the oral behaviour of standing and sitting pigs in the pen ignoring lying pigs and assesses quickly to avoid double counting pigs already assessed.
- 2) Lameness. All the animal in the pen are observed by the inspector, while they get up and walk; the number of lame pigs shall be recorded.
- 3) Tail docking. Looking at the animals from the side or behind, the inspector notes if there are mixed tail lengths within the pen (undocked, short docked, long docked).
- 4) Ear and flank biting. All the animals in the pen shall be assessed regarding this point.

  The inspector records if ear-biting and flank biting lesions are present.
- Pigs needing further care. The inspector observes all the pigs in the observation pens (excluded those sick or injured already receiving suitable care) and any others seen, including those in hospital pens, to assess and record the number of sick or injured pigs that would benefit from further intervention (further treatment, hospitalization or culling). The assessment could include pigs who are sick, injured or lame and are unable to compete for resources, being bullied/tail bitten or would benefit from access to more comfortable bedding and space (to rest) than is available in that pen. This assesses legislative compliance that 'where necessary, any sick or injured pigs shall be temporarily isolated in suitable accommodation with dry, comfortable bedding'. The





- nature of the condition and the pen environment will affect this measure. The inspector records the number of pigs seen that would benefit from further treatment, hospitalization or culling.
- 6) Hospital pen. The inspector shall look at all finisher in the hospital pens, and records the number of finishers according to reason for hospitalization (tail-biting; lameness; body wounds; skin conditions; other).
- 7) Body marks. Standing near the animal, the inspector visually assesses one side only, and records the number and hardness of lesions. The lesions are to be identified for each body region, identified as: Shoulder (S); Hindquarters (H); Legs (L); Flank (F); Ears and Head (E); General, if there is no obvious pattern (G). There is a specific image that helps the inspector to distinguish the parts (Figure 6.1).

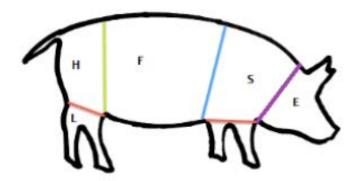


Figure 6.1: Body regions in finishing pigs to assess lesions (by AssureWel, 2013).

- 8) Tail lesions. Looking at the animals from behind, the inspector checks if the tail is swollen or shorter than normal and if scabs and lesions are present.
- 9) Manure on the body. Standing near the animal (also from outside the pen if visibility is adequate) the inspector visually assesses one side of the animals about the percentage of body soiled with fresh/old slurry/urine/faeces.
- 10) Leg swellings. The inspector visually assesses the front and hind limbs, on one side only, for leg swellings, reporting if and how the leg swelling is evident.
- 11) Skin conditions. The inspector assesses the total amount of the body affected (considering one side of it) in relation to the rest of the body.
- 12) Mortality. The inspector records the percentage mortality (died but not actively culled) on farm in the last 12 months or for the last batch; the relative predominant cause of mortality has to be reported as well.





For dry sows, the inspector selects randomly 4 - 5 pens, avoiding choosing hospital pens or pens in which pigs have been mixed from 1 week or treated as group. The points to be checked are the following:

- Enrichment use. The inspector observes and records the oral behaviour of standing and sitting pigs in the pen ignoring lying pigs and assesses quickly to avoid double counting pigs already assessed.
- 2) Nose ringing. The inspector records if the animals are nose ringed or not.
- 3) Tail docking. Looking at the animals from the side or behind, the inspector notes if there are mixed tail lengths within the pen (undocked, short docked, long docked)
- 4) Ear and flank biting. All the animals in the pen shall be assessed regarding this point.

  The inspector records if the ear-biting and flank biting lesions are present.
- Pigs needing further care. The inspector observes all the pigs in the observation pens (excluded those sick or injured already receiving suitable care) and any others seen, including those in hospital pens, to assess and record the number of sick or injured pigs that would benefit from further intervention (further treatment, hospitalization or culling). The assessment could include pigs who are sick, injured or lame and are unable to compete for resources, being bullied/tail bitten or would benefit from access to more comfortable bedding and space (to rest) than is available in that pen. This assesses legislative compliance that 'where necessary, any sick or injured pigs shall be temporarily isolated in suitable accommodation with dry, comfortable bedding'. The nature of the condition and the pen environment will affect this measure. The inspector records the number of pigs seen that would benefit from further treatment, hospitalization or culling.
- 6) Hospital pen. The inspector shall look at all finisher in the hospital pens, and records the number of finishers according to reason for hospitalization (tail-biting; lameness; body wounds; skin conditions; other).
- 7) Body marks. Standing near the animal, the inspector visually assesses one side only, and records the number and hardness of lesions. The lesions are to be identified for each body region, identified as: Shoulder (S); Hindquarters (H); Legs (L); Flank (F); Ears and Head (E); General, if there is no obvious pattern (G). There is a specific image as shown in Figure 6.2 that helps the inspector to distinguish the parts.





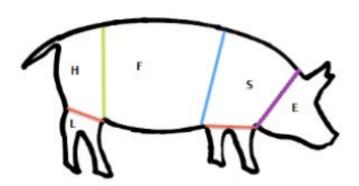
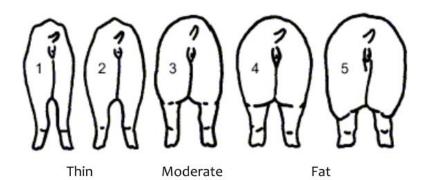


Figure 6.2: Body regions in dry sows to assess lesions (by ASSUREWEL, 2013).

- 8) Shoulder lesion. Stand near the animal, the inspector visually assesses one side only for shoulder lesions.
- 9) Vulva lesion. The inspector visually assesses the vulva region, checking if and how damage is present.
- 10) Manure on the body. Standing near the animal (also from outside the pen if visibility is adequate) the inspector visually assesses one side of the animals about the percentage of body soiled with fresh/old slurry/urine/faeces.
- 11) Leg swellings. The inspector visually assesses the front and hind limbs, on one side only, for leg swellings, reporting if and how the leg swelling is evident.
- 12) Skin conditions. The inspector assesses the total amount of the body affected (considering one side of it) in relation to the rest of the body.
- 13) Lameness. All the animal in the pen are observed by the inspector, while they up and walk; the number of lame pigs shall be recorded.
- 14) Body condition. The first assessment can be done visually, from the side and behind, but in case of doubt, also a manual assessment can help and give the right assessment. The inspector records if the body condition is in the "Thin", "Moderate", "Fat" category. The inspectors are helped with an image which is shown in Figure 6.3.







R. Coffey, thepigsite.com

Figure 6.3: Body conditions of pigs (by ASSUREWEL, 2013).

15) Mortality. The inspector records the percentage mortality (died but not actively culled) on farm in the last 12 months as well as the percentage of culls in the last 12 months. The relative predominant cause of mortality has to be reported as well.

# 5.2 Naturland (DE)

The project partner *Naturland* is a farmers' association promoting organic agriculture. The world over *Naturland* farmers and processors have been organic pioneers for over 30 years.

In cooperation with *Bioland*, Demeter and *Biokreis Naturland* developed a toolbox for organic advisors to support good animal husbandry conditions and animal welfare in organic farm. The guidebook for advisors included animal-related criteria. Since 2014, corresponding inspections were put in place and an inspection handbook was developed. The on-site inspection is made annually by inspectors trained in animal welfare issues. There are 3 checklists, 1 for ruminants (dairy cows, beef cattle, goats, sheep and horses), 1 for pigs (sows and fattening pigs) and 1 for poultry (laying hens, broiler chickens, turkeys, geese and ducks).

Most of the aspects to be checked during the inspection are strictly related to physical, visible indicators. During the annual training arranged by *Naturland* in co-operation with CB's for the inspectors involved, the trainer shows presentations with pictures, in order to demonstrate examples for good and bad conditions of the animals. Since 2016, there is also trainings on farms.

The inspectors are taught how to work with the checklist and the animal welfare indicators. They discuss with the experts which situation is acceptable and when to write down an unacceptable outcome.





During the inspections 6 criteria must be checked:

- 1) State of nutrition
- 2) The body condition (dirtiness, feathers)
- 3) Health
- 4) Stable, food, outdoor area
- 5) Mortality
- 6) Slaughterhouse findings (for pigs and poultry)

The criteria are applied for different species as explained below.

**For poultry**, the inspector has to inspect every stable to get an impression of the situation.

The inspector has to estimate how many chickens are affected by loss of feathers. He/she also has to look at the health, lameness, footpads and the sternum.

#### 1) Feather loss

- For laying hens younger than 30 weeks: show less than 10 % of chickens with loss of feathers?
- For laying hens older than 30 weeks: show less than 20 % of the chickens with loss of feathers

#### 2) Fattening poultry

The inspector has to check fattening poultry for feather loss and cleanness of the feathers.

- Show less than 20 % of the poultry with feather loss at the end of the fattening period?
- Show less than 20 % of the flock with dirty feathers at the end of the fattening period?

#### 3) Health

 Is less than 10 % of the flock too thin, apathetic or show symptoms of diseases like for example pale comb, dull eyes or diarrhoea?





- Is less than 10 % of the flock with obvious injuries? Is less than 20 % of the herd with inflammations of the footpads?
- Are there dead animals in the shed?
- Are there less than 5 % of chicken showing problems with the locomotion system,
   for example to fly down from the perch or to walk properly?

## 4) Stable and food have to be checked

- Is there enough dry and clean litter in the shed and the veranda?
- Is the stable equipment in good and operational maintenance?
- Is the food of good quality, does it smell well and are the troughs in a good maintenance?
- Are there sufficient drinking cups, are they clean and operating?
- Is the air acceptable?
- Is there sufficient daylight in the shed?

## 5) The outdoor area

 Has it enough structure where the poultry can hide against predators and can scratch about?

#### 6) Mortality

- Is the mortality for laying hens less than 10 % per year?
- Is the mortality for broiler chicken less than 5 % and for turkey less than 15 % (less than 10 % in the first 7 weeks and 5 % after that)?

# 7) Negative slaughter findings

• Is the number of negative slaughter findings, indicating illness of slaughtered animals, less than 20 %?

#### For cows, sheep, goats and horses:

#### 1) State of nutrition

Are less than 10% of the animals too thin or too fat?



#### 2) Good maintenance

- Are sheep shorn once a year?
- Are less than 20 % of the animals very dirty?
- Are there less than 10 % of the animals with overgrown hooves?

## 3) Health

- Have less than 10 % of the animal's injuries, technopathia swollen joints, show lameness, have ectoparasites or have obvious signs of other diseases? The inspector has to see the animals moving to see if there are some with lameness.
   It is important that the inspector checks if sick animals are treated or not.
- Is the food of good quality, does is smell well?
- Are there sufficient drinking troughs, are they clean and operational?
- Is the barn equipment well maintained and operational?
- Is the air acceptable and is there enough daylight available in the shed?

## 4) Mortality

The inspectors check these data on the records from the slaughterhouse. The mortality shall be checked taking into account the following limits:

- Are the still birth rate and the mortality in the first 48 h together less than 10 %?
- Is the mortality after the third day of life until the age of 3 month less than 8 % in case of calves' und less than 10 % in case of lambs?
- Is the mortality after the 3-month breeding period and with adult animals in total less than 5 %?

#### 5) Stable, food and outdoor areas

 The inspector has to check all the stables and the outdoor areas whether they are maintained well.

#### For pigs:

Around 20 % of the total number of pigs shall be inspected in depth.

#### 1) Nutrition





 Are less than 10 % of the pigs too thin? To assess this criterion, the pigs have to stand; the inspectors can touch the ribs or the back.

#### 2) Health

• If there are ill animals, it is important to understand if these animals are isolated cases or if it is a general problem. It is important that the inspector checks whether sick animals are treated or not and if they are separated. The inspector shall check if less than 10 % of animals show health problems such as ectoparasites, injuries, wounds, swollen joints, and diarrhoea, cough. In addition, the inspector shall check if the pigs are in a homogenous group or not.

# 3) Stable, food and outdoor area

- Have the pigs a clean and dry place to stay outdoors?
- Is the food of good quality, are there enough clean and functional drinking troughs,
   and is the air acceptable?

#### 4) Mortalities

- Is the mortality of piglets up to the first 2 day less than 15 %?
- Is the mortality from the 3<sup>rd</sup> day from the 3rd day until the weaning less than 10%?
- Is the mortality after this period less than 3 %?

#### 5) Slaughter findings

 Do less than 20 % of the pigs have a problem? The farmers get these findings from the slaughterhouses.

*Naturland* provides the guideline mentioned above to all inspectors. The guideline contains pictures with negative and positive examples as well as explanations of how to check the indicators of animal welfare.

In addition, inspection timing is important, for example, cattle should be checked in winter when animals are in the stables. The inspector has to go to every stable housing animals, in order to have an overview about the situation of the whole farm or company.

Specific conditions are applied for small farms with maximum 10 cows or 10 horses, 20 sheep or goats, 5 pigs, 100 laying hens, 500 broiler chickens.





After the inspection, the checklist is sent to the *Naturland* office within 2 weeks, in order to react quickly if necessary.

If there are serious animal welfare problems the inspector has to inform the office immediately.

# 5.3 Gesellschaft für Ressourcenschutz - GfRS (DE)

As an approved German CB, GfRS checks resource-related animal welfare conditions during the inspections of organic livestock since the EU organic legislation concerning organic animal production went into force in 2000. Currently, around 600 organic farms with animal husbandry are annually inspected; farms with a strong focus on organic animal husbandry also receive additional inspections during the housing period of the animals in wintertime. The resource-related requirements for organic animals of the regulation (EC) No. 834/2007 are checked by organic inspectors by on-site visits, document checks as well as by sampling and analysis of feed.

Since 2005 GfRS covers animal welfare aspects during the inspection of private standards (e.g. private scheme NEULAND). During this inspection there is a strong focus on animal welfare conditions and specific observation of animals and their health and behavior status. With the private label *Tierschutzlabel* of the *Deutscher Tierschutzbund e.V.*, GfRS was included in the development of a scheme that has the observation of animal related observations and criteria in the focus of attention. In cooperation with the University of Kassel GfRS is providing training on the inspection of animal welfare aspects in the husbandry of laying hens.

Since 2014 GfRS is also doing animal welfare inspections on bases of private farmer association standards in Germany. This standards also partly included animal related indicators.

With regards to animal-related welfare aspects, GfRS led a German project aiming to develop an inspection concept to include animal related criteria to organic inspections. The project was implemented together with *Beratung Artgerechte Tierhaltung e.V.* and University of Kassel also project results of the *Johann Heinrich von Thünen-Institut* have been taken into account.





Such animal-related criteria were identified on the grounds of a GAP analysis, identifying the most relevant deficiencies in animal welfare for different species under organic management. This GAP analysis has done under inclusion of all interested parties and under integration of several scientific experts, besides of the project partners. The indicators have also been harmonized, as far as possible, with the approach of german farmers associations. Among the indicators a set of criteria has been chosen that combines relevance to the welfare of the animals on the first hand and practical feasibility of the investigation of the criteria. Indicators have been chosen for laying hens, slaughter chicken, turkey hens, pigs, sheep and goats. Criteria for milk cows have been adopted from another project.

#### For poultry:

- Mobility
- The body condition
- Feathering status
- The degree of cleanliness of the animals
- Health (infections, deformations of the breastbone, transformation of the crest and toe
- Mortality

#### For cows:

- Body condition
- The degree of cleanliness of the animals
- Lameness and conditions of the claws
- Occurrence of diarrhea
- Occurrence of respiratory infections
- Cell count and fat-protein ratio of the milk
- Mortality

#### For sheep and goats:

Body condition





- Degree of cleanliness of the animals
- Manipulation (e.g. dehorning)
- Health status (watery eyes and nose, cough, diarrhea, swelling of legs, lesions)
- Conditions of claves
- Conditions of coat and wool
- Mortality

## For pigs, the criteria include:

- Body condition
- The degree of cleanliness of the animals
- Lameness
- Lesions
- Tail docking
- Slaughter report indicators
- Mortality

GfRS supports the inspectors for animal welfare with picture cards; the pictures demonstrate animals of the species concerned in good as well as in bad conditions. Compared to *Naturland*, no thresholds for animal-related criteria were defined. The inspectors shall gain and report a holistic view of the animal welfare condition on an organic farm.

For the inspector 2 different sets of observations are defined (observation of a group/herd or observation of single animals, Figure 7.1, 7.2, 8.1 and 8.2). Depending on the animal, the situation and status one or both levels of observation are implemented.





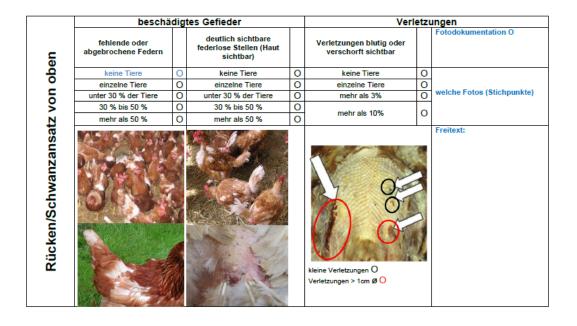


Figure 7.1: Example of a picture-card for laying hens (observation of a group).

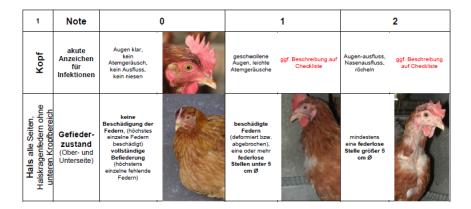


Figure 7.2: Example of a picture-card for laying hens (single animal observation).





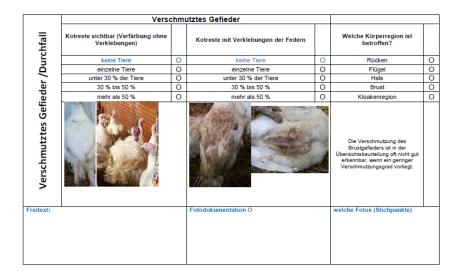


Figure 8.1: Example of a picture-card for turkey hens (observation of a group).

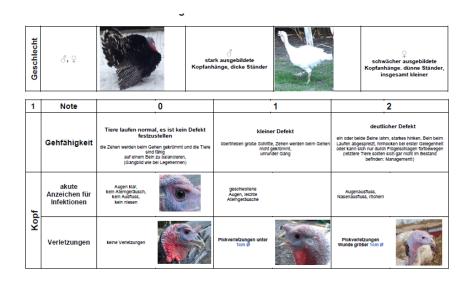


Figure 8.2: Example of a picture-card for turkey hens (single animal observation).

Furthermore in addition to the picture cards the inspectors are equipped with pictured detail instructions of observation instructions and detailed descriptions (Figure 9.1-9.3).





2-a¤	Struppiges·Fell· /Ektoparasiten¤	Glanzloses, teils lückiges Fell bei Ziegen oder Schafe mit lückigem Wollvlies können auf Ektoparasiten oder Ernährungsmängel hindeuten. Ziegen mit Weidegang /- Außenhaltung haben im Winter dickeres, meist weniger glänzendes Fell als Stallziegen. ¶ Vorsicht! Wollfreie und gerötete Partien beim Schaf deuten auf Räude oder wollfressende Schafe (oft Mineralstoffmangel). Anteil betroffener Tiere schätzen. Vorsicht! Beim Lacauneschaf ist der wollfreie Bauch (bis über die Rippenregion) normal! n	Ħ
2·b¤	Verwurmungsanzeichen¤	Ebenfalls-glanzloses-Fell-/-Vlies, zum Teil-kombiniert-mit-einem- <u>Kehlgangsödem</u> -unterm-Kinn, deutet-auf-blutsaugende- Innenparasiten. Stark-befallene-Tiere-wirken-apathisch-und- "blass"¤	n
2-сн	Schwache·/·kranke· Lämmer·/·Kitze¤	Teilnahmslose, matte Kitze mit "aufgestelltem"-Fell, oft mit hochgezogenem runden Rücken. Hier auch Aufstallung prüfen (Trockene Einstreu, frei von Zugluft, saubere Tränkeeinrichtung)¤	¤
2·d¤	Klauenpflege¤	Wenn-möglich-soll-das-Gesamtbild-der-Herde-eingeschätzt- werden. Bei-Einzeltierbeurteilung-alle-Klauen-betrachten. Bei- Milchtieren-gut-im-Melkstand-möglich.¤	Ħ

Figure 9.1: Detailed description for sheep and goats.



Figure 9.2: Detailed description for pigs.





4·d⊭	Verletzungen·und·Kratzer· ohne·Kopf·als· Herdenbeurteilung·und·in·der- Einzeltierbeurteilung¤	Leichte-Verletzungen (bis-zwei-kleine-Pickverletzungen) und mehrere-kleine-bzweine-größere-Wunde (>-1cm-Ø)-oder- Kratzer-länger-als-1-cmBei-der-Herdenbeurteilung-sind-in-der- Regel-nur-große-Wunden-zu-erkennen.¤	Ħ
4-ен	Zustand-der-Brusthaut-in-der- Einzeltierbeurteilung¤	Brustblase (wässrig/-gallertartig-gefüllt), ··mit·und-ohne- Geschwürbildung, ·zusätzlich ·Hämatome ·vermerken ·¤	и
4-f¤	Zustand·der·Fersenhöcker·in· der·Einzeltierbeurteilung¤	sehr-kleine-und-oberflächliche-Läsionen, schwache- Verfärbungen-des-Sprunggelenks, leichte-Hyperkeratosen, oberflächliche-Haut-entzündungen-und-mäßig-schwere-bis- schwere-Läsionen-sowie-Geschwüre, Wundkrusten-und-tiefe- Haut-entzündungen¤	п

Figure 9.3: Detailed description for chicken.

The approach used by GfRS to inspect animal welfare mainly focusses on 3 aspects:

- 1) The fundament of animal welfare inspections is the active involvement of the organic farmer during inspections.
- The competence level of animal welfare inspectors must be high. Specific trainings must be implemented. The trainings include an extensive theory part to explain the basic concept, the theory for the single indicators, how they work, how they are linked with other aspects (e.g. with environment and resource parameters). Furthermore in the theoretical session the instruction of how to approach, how to behave, how to ensure hygiene aspects when entering the farms and stables and how to approach the animals without interfering too much is explained. After the theoretical sessions the inspectors are undergoing practical training sessions. During these practical sessions they are introduced by experienced inspectors to identify and evaluate the different indicators. The aim of these sessions is to enable the inspectors to do a grading of indicators into 3 categories. Furthermore during training small groups of inspectors it is intended to harmonize the evaluation between the inspectors. Only by this more or





less comparable results can be achieved. An inspector needs a couple of these practical trainings for the different animals and different production systems. During the development of this training system a number of test trainings have been realized and evaluated to gain best possible results from the trainings.

3) To describe the animal welfare conditions on site, collecting evidence with proper documents (e.g. statement of the slaughtery regarding to pneumonia or transformation of the liver), including photos, is essential. This even becomes more important if animal welfare problems occur.

All organic farms with animal husbandry are monitored on animal welfare. If potential problems are identified during routine inspections, specialized animal welfare inspectors are commissioned to conduct additional inspections. The system is based on 2 steps; starting from a lower random sample of animals, only if deviations are founded, the checks go on and deeper with a larger sample of animals. All evidences found shall be accompanied with a short but meaningful as possible documentation; at this purpose, it is required to collect photos during each inspection.

The inspector in charge documents his findings on the inspection checklist on organic animal production. For animal-related criteria, there are – besides the picture cards - 4 additional checklists for poultry, for cattle, for sheep/goats and for pigs.

All the inspectors involved in the organic livestock inspection shall absolve an on farm training, in order to have clear and without doubts the aspects to be focused. This animal welfare inspection approach has been developed actually for laying hens, broiler, turkey hen, pigs, sheep, goats and milk cows.

This approach of inclusion of animal welfare aspects into organic inspections with a stepwise concept will be further evaluated.

# 5.4 CCPB srl (IT)

As approved Italian CB, CCPB srl verifies compliance with the requirements of regulation (EC) No. 834/2007. It does not have specific inspection concepts to include animal-related welfare criteria.

CCPB currently inspects and certifies around 600 Italian farmers with organic livestock.





Each inspection includes documentary controls (notification, production plan, livestock management plan, etc.), as well as an on-site tour of the premises including the stables and the outdoor areas.

The inspections focus on animal housing and husbandry practices as defined in regulation (EC) No. 834/2007 and it's implementing rules. In particular, maximum animal densities, the conditions of animal housing, husbandry practices, outdoor access, feeding, veterinary treatments and mutilations are taken into account.

In case of nonconformities sanctions are applied, according the official catalogue of Sanction issued by the Italian Ministry of Agriculture.

# 5.5 AGRO BIO TEST (PL)

AGRO BIO TEST Sp. z o.o. is the second biggest among 10 authorized CBs in Poland. As an approved CB in Poland, it is obliged to strict adhere to the organic rules laid down in regulation (EC) No. 834/2007 and its implementing rules.

Though producers running organic husbandry constitute approximately 1/3 of AGRO BIO TEST organic farming operations, the "animal" part of check list is 2.5 times longer than the "plant" part. An example extract of the "animal" part of such a checklist is presented in Figure 10.

Wnioskujący: AGRO BIO TEST. Po wypełnieniu						niu –	- dokument poufny				
н	podstawa prawna				OWAROWY CHÓW / HODO		e objašnienia	tak	n.dot.	nie	częś-
889/2007: art. 7, 15, zał. III		Gatunki (poza pszczołami i akwakulturą) utrzymywane w gospodarstw									
□ bydło: [1] □ trzoda: [2]		- kı	kury nioski: [3]		wpisywać cyfry jako symbole gatunków						
			tyfikacja zwierząt	jest prawidłowa (duże – inc	dywidualnie, małe – gr	rupowo)					
2				- comiesięczne	stany ilościowe / obrót sta	da / obsada					
3	889/2008: art. 3, 15, 17, 23,5,	zawiera:	- dane zwierząt przybytych: data, skąd, oznakowanie, wiek, leczenie						T.		
4		zav	- dane zwierząt wychodzących: waga, ilość, oznakowanie, przeznaczenie								
5	art. 35.3, art. 38, art. 76		Ewidencja	- dane zwierząt padłych, z podaniem przyczyn							-
6			ide	- pasze: rodzaj	, dodatki, proporcje składni	ków, okresy wypasu, j	przepędzanie				-
7			Ē	- leczenie: daty	, diagnozy, leki, dawki, me	tody, zalecenia, karen	cja				
8	834/20	007: art. 14.1 b) (i)		Personel posiada niezbędną podstawową wiedzę na temat zdrowia i dobrostanu zwierząt oraz umiejętności w tych dziedzinach							
9	889	9/2008: art. 8.1	Utrz	Utrzymuje się rasy / linie dostosowane do warunków chowu							
10	834/2	2007: art. 14.1 c)	Meto	Metody reprodukcji i rozrodu są zgodne z wymogami rolnictwa ekologicznego							

Figure 10: Extract of a Polish inspection checklist on organic animal production.





Among 21 titles, 9 tables cover animal issues. However, none refers directly to animal welfare.

In addition, to a general section on organic animal production, there are also specific sections regarding cattle, pigs and poultry in the inspection form.

The following aspects are checked at the inspection:

- Nutrition: kind and quality of fodders, percentage of farm own fodders (for this purpose there is an additional sheet form to fill in), kind and quantities of brought-in feeds, GMOfree declarations;
- 2) Health condition: veterinary accounts, records, veterinary therapeutic treatments, withdrawal periods, mortality;
- 3) Animal housing: stables, hygiene, available area, moving freedom, ventilation;
- 4) Access to outdoor area, grazing period records;
- 5) Livestock density; not only in terms of nitrogen amount production but also with regard to animal's social behaviour.

As the EU organic regulation No. 834/2007 does not itemise specific control points with regard to the status of animal welfare, there are no animal-related welfare criteria checked yet. The inspector reviews the farm accounts and checks the requirements of 834/2007 on site. Samples are taken. In the assessment report, the inspector is free to comment on points relevant to animal-related criteria as a subjective qualitative evaluation, influenced by personal knowledge and experience.

In livestock production, additional inspections are usually performed at the end of winter (February - April) to check stock and quality of feed and indoor conditions. Checks are focused on place for movement, light and air in the stables, intensity of veterinary treatments and last but not least - access to outdoor areas.

Farm animal welfare is still a relatively new concept in Poland which is not commonly understood. This can sometimes causes communication difficulties between inspectors and organic farmers. In general farmers believe that following traditional practices will deliver appropriate conditions to the animals. Also, consumer awareness in this respect is not high enough to incentivise farmers to change their minds. In general legal rules governing animal management have been the main driver of any significant progress in animal welfare. In the case of organic husbandry this has been through financial grants to support new investment





required to meet technical resource based requirements detailed in the organic law. Experience suggests that this has resulted in some improvement in animal health and welfare. The next step will be to utilise animal welfare indicators to support better animal welfare.

# 6 Inspection concepts on animal welfare implemented by the members of the Quavera alliance

Quavera is an international cooperation between European CB's. In order to gain a better insight on the state of the controls relating to animal welfare, the inspection concepts of some alliance members in other member states of the European Union are included to this study.

# **BIKO Tirol (AT)**

The Austrian CB *Kontrollservice* BIKO Tirol certifies roughly 2000 organic operators with livestock, 80% of them keep organic cattle; the rest manage sheep, goats, chickens or horses. The inspection period for the livestock operators is mainly from spring to autumn. They are carried out by organic inspectors, farmers themselves with an educational "agricultural" background (most of them studied at an agricultural school for 3 years).

As an approved Austrian CB, BIKO inspects all requirements for organic animal production laid down in Reg. (EC) No. 834/2007 and it's implementing rules, mainly resource-related criteria.

As 80% of the farmers keep organic cattle, BIKO Tirol uses an additional inspection tool only for tethered cattle. The *Tiergerechtheitsindex* (TGI) (see Table 1) takes into account animal-related criteria. It supports the inspectors and reviewers to assess the respective system of tied cattle.

Following parameters are evaluated:

- 1) Possibility of movement (place where cows are tethered and duration of days' cows spend in the run-out and pasture).
- 2) Social contact (with other cattle place where cows are tethered and duration of days cows spend in the run-out and pasture).





- 3) Texture of the ground (surface where cows are tethered/lying and type of ground and duration of days cows spend in the run-out and pasture).
- 4) Light and air (place where cows are tethered and duration of days cows spend in the run-out and pasture).
- 5) Intensity of care (cleanliness of the cowshed and the cattle, technopathies, animal health).

The farmer needs to gain 24 points at minimum. They, for example, can easily collect points with a bright, rather new cowshed, with clean and healthy cattle and especially with as many days as possible when the cows are in the run out and on the pasture.

If the farmer is not able to gain 24 points, they are subjected to an additional inspection. Only in rare cases, the livestock operator might be decertified. In Austria there is currently no sanction catalogue for organic livestock keeping. In 2017 the Austrian working group formed by competent authorities, CB's and ministry will work out a specific sanction catalogue.

# **Ekoagros (LT)**

Ekoagros inspects all type of livestock (e.g. cattle, sheep, pigs, goats, rabbits, cervids, chickens, ducks, geese, horses) according to the provisions of regulation (EC) No. 834/2007.

The annual inspections of farms, including livestock, are mainly carried out between May and October. Additional inspections of livestock holdings are carried out during the indoor period, usually from November to April.

Inspections at livestock operators are carried out by inspectors of Ekoagros, who have long-term experience in organic inspections and higher agricultural education. During the inspections of livestock, the inspectors focus on the requirements of regulation (EC) No. 834/2007, mainly animal keeping conditions, diet, treatment, animal acquisition, product storage, product sales, etc. There are no specific animal-related criteria checked during organic inspections in Lithuania yet.





# 7 Inspection concepts on animal welfare in the views of EOCC members

The European Organic Certifier Council (EOCC) represents 50 CBs and control authorities operating in Europe and beyond. Its aim is to increase the reliability of control and certification activities and decisions in relation to European legislation with regard to organic production and labelling of organic products. EOCC fosters the harmonisation of interpretation of the European organic legislation and supports the exchange of information amongst all inspection bodies.

A survey was implemented to obtain an overview of the approach of different control authorities and CB's towards the inspection of animal welfare in organic production.

15 EOCC CB's responded to the survey, which corresponds to 30% of all EOCC members. The respondents came from the countries shown in Figure 11.

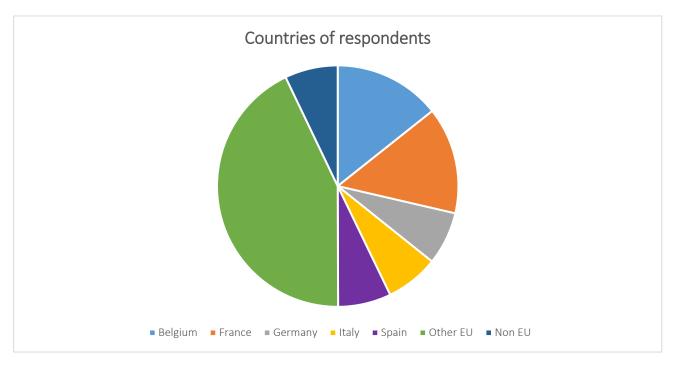


Figure 11: Countries of the respondent control bodies

As shown in Figure 12, the vast majority of respondents (77 %) deem the conditions laid down in the EU-organic regulation regarding animal welfare as basic.





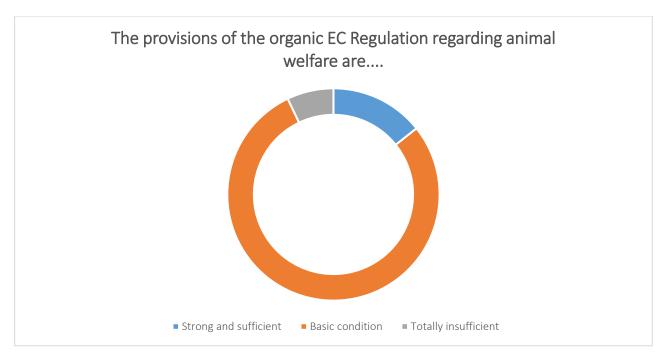


Figure 12: Assessment of the provisions of the EU organic regulation with regard to animal welfare by EOCC members.

Another question was related to the use of additional standards designed specifically for checking animal welfare issues. The responses were very variable (Figure 13):

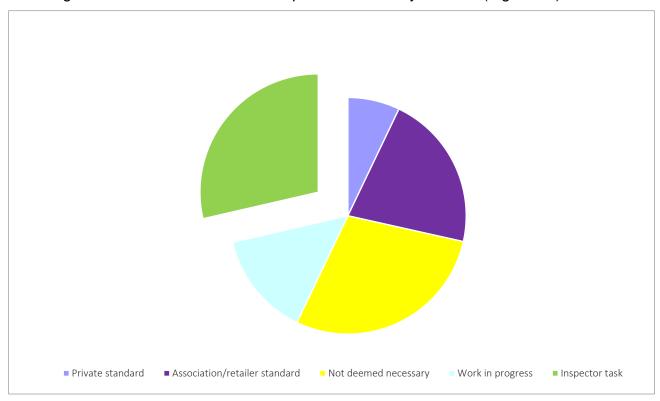


Figure 13: Standards used by EOCC members to assess animal welfare.





29 % of the respondents replied that they do not see the necessity to have additional own standards related to animal welfare; exactly the same percentage also declared that the controls were done by their inspectors during organic inspections.

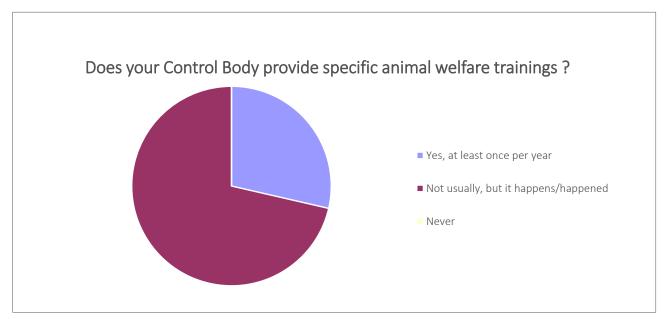


Figure 14: Inspectors training implemented by EOCC members regarding animal welfare topics.

All the CB's responding to the survey are organising trainings for their inspectors regarding animal welfare issues (Fig. 14). Only one third of the CB's (29 %) are doing this annually, the remaining 71 % from time to time. This result demonstrates that the focus on animal welfare during organic inspections is still not strong.

More than 2/3 of respondent CB's do not use a checklist that includes "indicators" of animal welfare.





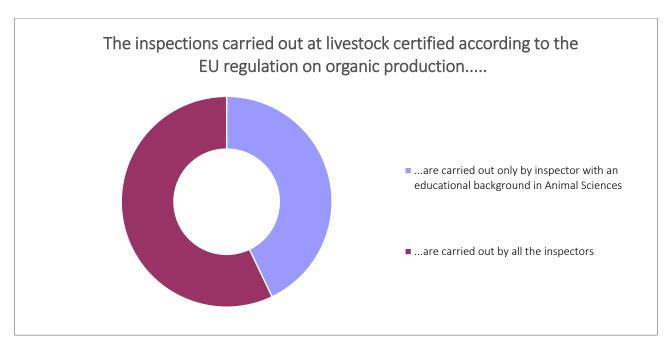


Figure 15: Qualification of organic inspectors of EOCC members dealing with livestock.

As shown in Figure 15, 43 % of the participating CBs answered that the inspections of organic livestock operators are carried out only by inspectors with an educational background in animal sciences.

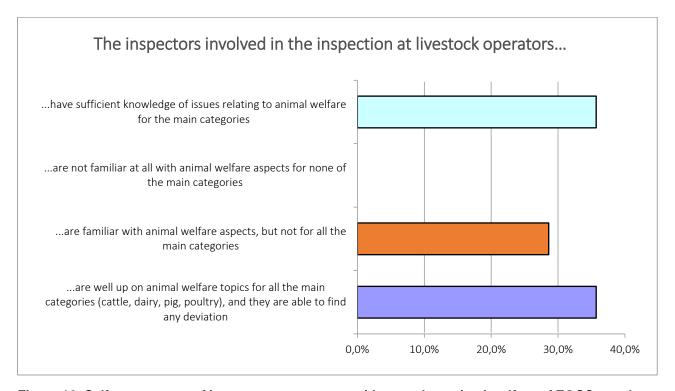


Figure 16: Self-assessment of inspector competence with regard to animal welfare of EOCC members.





35 % of the CB's involved stated that organic livestock inspectors have sufficient knowledge of issues relating to animal welfare for the main categories (cattle, diary, pig, poultry) (Figure 16); a further 35 % of the CB's deem the inspectors involved in livestock inspections well prepared and able to find any deviation for the main categories.

This result indicates that awareness of the relevance of animal-related criteria could be still low and that a large proportion of CB's might consider the resource-related criteria of regulation (EC) No. 834/2007 to be sufficient.

# 8 Summary and Conclusions

Farm animal welfare has received much attention by researchers and governments. Knowing that animals have been raised in systems which can and do deliver good welfare is also of increasing importance to consumers. Regulation (EC) No. 834/2007 and its implementing rules provide a very detailed framework for resource-based criteria regarding organic animal welfare. Organic control authorities and CB's across Europe are obliged by law to inspect these resource-based criteria for animal husbandry during their annual inspections and additional, risk-oriented unannounced inspections. However, it is now increasingly acknowledged that resource based criteria alone are insufficient to ensure that good welfare is actually delivered and recent thinking and research has focussed on developing the concept of 'welfare outcomes assessment'. This concept places emphasis on parameters related to the actual condition of the animal and is, therefore, a more direct assessment of the level of welfare that is achieved.

Several welfare outcome assessment protocols have been developed by researchers, but these are generally too elaborate and time consuming to practically form part of the inspection of organic farm. This is because many farms have multiple species and the inspection process must also consider many other control elements in addition to animal welfare outcomes. This preclude the use of time consuming protocols.

Some control and CB's have already designed and implemented inspection concepts for animal-related criteria, however, a survey amongst EOCC members confirms that the use of animal-related indicators during organic inspections is not common and that training of inspectors is perhaps insufficient to support any sophisticated evaluation of the level of welfare achieved on farm. Furthermore the survey confirms that the project consortium





represents the innovators in this field i.e. those organisations who have developed inspection concepts and protocols based on welfare outcomes.

The inspection concepts developed by these control and CB's are not harmonized yet, which is the task of the next work package of the AWARE project.





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