

# Evaluation of the EU legislation on organic farming

Study report



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## Executive Summary

### Objectives and scope of the evaluation

The first EU legislation on organic farming, Council Regulation (EEC) 2092/91 in 1991, has been identified as one important driving force for the development of the EU organic farming sector. It provided a legal definition of organic farming through production rules and defined control and labelling requirements. This provided a basis for protecting consumers and organic farmers against false and misleading organic claims. Following on from the European Action Plan for Organic Food and Farming, the original regulations have been substantially revised, resulting in Council Regulation (EC) 834/2007 and additional implementing regulations. This report presents the results of an evaluation of the relevance and effectiveness of Council Regulation (EC) 834/2007 and its implementing rules with respect to the objectives of the Regulation and the objectives of organic production as laid down in the Regulation.

The study consists of three parts:

Part A provides a **concise description** of the

- development of the EU organic sector and the world market in organic products;
- support measures applied to the EU organic farming sector;
- applicable organic farming legislation and its development;
- model of the intervention logic of the legislation.

Part B answers eight **evaluation questions** used to assess the Regulation with regard to the

- adequacy of the scope;
- adequacy of the production and processing rules;
- adequacy of the overall control system;
- adequacy of the import regime;
- consumer perceptions of organic farming;
- degree of simplification of the current legislative measures compared to the legal framework applicable before 2009;
- creation of EU added value through the EU legislative framework for organic farming;
- contribution to the sustainable development of the organic farming sector.

Part C draws **overall conclusions and policy recommendations** and indicates areas for improvement.

The evaluation covers 27 EU Member States (Croatia has not been considered) but focuses on 13 case study countries<sup>1</sup> to examine in detail the different aspects of implementation of measures laid down by the legislation. The period under examination is from 2009 onwards. However, the period since 2000 is used as a reference point to encompass the situation governed by the previous legislation on organic farming.

## Descriptive part

### Development of the EU organic sector and the world market in organic products

In 2011, more than 9.5 million hectares were managed organically on nearly 240 000 farms in the European Union. This corresponds to an average share of 5.4 % of the total agricultural area. In recent years, the organic farming sector has experienced a dynamic evolution. In the 27 Member States, the organic area has more than doubled between 2000 and 2011 and expanded by 53 % between 2005 and 2011, i.e. after the accession of the Central and Eastern European countries. However, the bulk of this expansion occurred mainly in only a few countries: Spain, France, Germany and Poland. A similar dynamic development can also be observed in the demand for organic food. The total value of the EU-27 organic market was approximately 19.7 billion EUR in 2011. By far the largest organic market in the EU was Germany with 6.6 billion EUR. Sales per capita were particularly high in Denmark (162 EUR), Luxembourg (134 EUR) and Austria (127 EUR). Not surprisingly, the EU-12 countries have relatively low market values and per capita consumption. The current situation of organic supply and demand in EU Member States is also reflected in the numbers of processors and importers. These are located mostly either in countries characterised by a large organic market, a large organic area or both. From a global perspective, the EU organic farming sector is one of the key players with a 26 % share of the global organic area and the second largest market for organic food in the world.

### Support measures applied to the EU organic farming sector

Support for organic farming is provided in a variety of different ways across EU Member States. Most Member States have implemented specific area payments to compensate for additional costs or income foregone resulting from organic management. Payments have been implemented under Axis 2 (Improving the environment and the countryside) of their rural development programmes (RDP)<sup>2</sup> or under Article 68 of Council Regulation (EC) 73/2009<sup>3</sup> (Specific support to farmers). A large number of Member States or regions have also implemented support

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<sup>1</sup> Austria, Bulgaria, Czech Republic, Denmark, Estonia, France, Germany, Italy, Netherlands, Poland, Slovenia, Spain, United Kingdom.

<sup>2</sup> Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

<sup>3</sup> Council Regulation (EC) 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers.

for organic farming under Axis 1 (Improving the competitiveness of the agricultural and forestry sector), although in most cases with no or with only partly special provisions for organic farming. In very few cases, organic farming is also addressed under RDP measures of Axis 3 (Improving the quality of life in rural areas).

In some EU countries, organic farms may also benefit from (partly) special provisions in the framework of quality support programmes under Article 68 of Council Regulation (EC) 73/2009, as well as from contributions to producer organisations under the Common Market Organisation (CMO) for fruit and vegetables. Besides CAP measures, a wide range of other national or regional policy instruments exist, such as financial support for producing, processing and marketing organic products, training, advice and information policies as well as support for research on aspects of organic farming.

### **EU organic farming legislation and its development**

The current organic farming legislation describes the underlying objectives and principles of organic agriculture and sets organic production requirements. Thus, the legislation provides a legal definition of organic farming and formulates certain objectives with respect to environmental protection, the preservation of natural resources (including biodiversity), application of high animal welfare standards and production methods based on natural substances and processes. Furthermore, it defines the control and labelling requirements thereby providing a legal basis for supply chain activities. The regulatory framework follows the general structure of EU legislation with Council Regulation (EC) 834/2007 for basic issues and the Commission Regulation (EC) 889/2008 and 1235/2008 for implementing rules. Since 2009 the legislative framework has been supplemented several times, e.g. with rules on aquaculture (Regulation (EC) 710/2009), wine production (Regulation (EC) 203/2012) in 2009, trade with third countries (Regulation (EC) 508/2012) in 2012 and controls (Regulation (EC) 392/2013) in 2013.

### **Model of intervention logic**

The overarching objective of the Regulation is to establish a basis for a sustainable development of organic farming in the EU. The three global objectives of the EU Regulation on organic farming, as defined in Article 1 of Regulation (EC) 834/2007 are '*ensuring the effective functioning of the internal market*', '*guaranteeing fair competition*' and '*ensuring consumer confidence and protecting consumer interests*'. In the model of intervention logic, the global objectives have been linked to specific objectives, which were derived from the rules on organic production, controls, labelling and for trade with third countries. In doing so, the expected logical cause-and-effect relations envisaged by the rules have been reconstructed.

## Replies to the evaluation questions

### Methods and data sources

A range of different methods and data sources was used to gain a comprehensive basis for answering the eight evaluation questions, including:

- analyses of the regulatory environment of organic farming in the 13 case study countries primarily by means of interviews with stakeholders and an analysis of national regulations, private standards and grey literature. These provided an in-depth knowledge of the implementation, adequacy and effectiveness of the organic farming legislation in individual EU Member States;
- a case study analysis of the fraud case 'Gatto con gli stivali' to understand how effectively the control system prevents fraud;
- a case study analysis of three potential suspect cases of organic products imported from countries outside of the EU to understand the adequacy and effectiveness of the import regime;
- semi-structured interviews with EU-level stakeholders/experts to collect specific information on the adequacy and effectiveness of the Regulation. This was supported by a review of, a large number of relevant documents;
- a web-based consumer survey with 3 000 respondents conducted in six Member States (Estonia, France, Germany, Italy, Poland and the United Kingdom) to fill the gaps in the literature regarding the degree of knowledge about, and the perception of the EU organic logo;
- a web-based stakeholder survey with 265 respondents conducted to collect the views from a larger number of different actors. This information was verified through the bibliographic research.

### Adequacy of the scope of the Regulation

The scope of Council Regulation (EC) 834/2007 on organic farming covers unprocessed and processed agricultural products used for food and feed, vegetative propagating materials and seeds, yeast and aquaculture. Mass catering is explicitly excluded. The same applies to non-food products (such as cosmetics and textiles). The situation is, however, less clear for a number of non-food products closely linked to organic agriculture such as wool, beeswax or some essential oils. The first evaluation question looks at whether or not the current scope is adequate to meet the needs of operators and consumers of organic food.

*The evaluation concluded that the scope of the Regulation is mostly adequate to meet the current needs of the organic farming supply and distribution chain. It is not fully adequate to meet the needs of consumers of organic products.*

A basic requirement for the adequacy of the scope is that it is clearly formulated and fully understood by the implementing and enforcing bodies. According to the stakeholders, this is true in most cases except for the organic status of non-food agricultural raw materials (wool, beeswax, etc.) that have been produced according to the requirements of Regulation (EC) 834/2007. For these products, there is uncertainty as to how their organic status can be communicated on the final product. The current situation, with no clear guidance on their certification and labelling, can lead to confusion.

Mass catering using organic ingredients is regulated in 11 of the 13 case study countries through national and/or private standards.<sup>4</sup> The importance of organic mass catering varies from less than 1 to more than 10 % of total organic sales in the case study countries. There is no indication of cross border trade in procurement and catering services of organic food. A need for a flexible approach to the development of organic mass catering (both in public canteens and in private restaurants) was identified, due to the difficulty of obtaining all organic ingredients used in the preparation of a wide variety of dishes. Stakeholders expressed concern that inclusion of mass catering within the remit of the Regulation would reduce flexibility and increase the regulatory burden which could potentially stifle growth of the sector. However, there was also support among some stakeholders for inclusion of mass catering. Key reasons for this were improved transparency for consumers and greater visibility and recognition of organic products in Green Public Procurement<sup>5</sup> in countries where there are no national rules. The exclusion of mass catering from the scope of the Regulation is therefore judged to be adequate for the current needs of the organic farming supply and distribution chain, but maybe not fully adequate to protect consumer interests.

As far as non-food products are concerned, industry trade data suggest growth in the market particularly for cosmetics and textiles. Many cosmetics, textiles, household cleaning products and some other non-food products using the term 'organic' are found in the market place. As not all of them are certified according to a recognised organic standard, and consumers may not be aware that such products are not covered by the Regulation, the use of the protected terms is considered to be potentially confusing. However, including them in the scope of the Regulation would require specific characteristics of non-food products to be taken into account making the Regulation more complicated. There are European and international initiatives for both organic cosmetics and organic textiles which aim to define what constitutes a valid organic claim. As with organic mass catering, the exclusion of organic cosmetics and textiles from the scope is adequate

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<sup>4</sup> Mass catering is regulated at a national level in Austria, Denmark, Estonia, France, Germany, and Slovenia, whilst private standards for mass catering exist in Italy (various), Germany (BIOLAND), Spain (CAAE), Czech Republic (Pro-Bio), the Netherlands (Stichting EKO-Keurmerk) and the United Kingdom (Soil Association).

<sup>5</sup> Green Public Procurement is a voluntary instrument developed by the European Commission to encourage environmental criteria to be considered in public procurement. The GPP core criteria for catering refer explicitly to Regulation (EC) 834/2007 and state that a minimum percentage of food which must be organically produced may be specified. GPP guidelines do not provide further details about the potential implications for labelling or verification.

in terms of meeting the current needs of the organic farming supply and distribution chain, but does not fully ensure consumer confidence in terms of clarity of the use the protected terms.

### **Adequacy of the production rules**

According to Article 3 of the Regulation, organic production is an integrated farm management system which aims to contribute to high levels of biodiversity, preserve natural resources, respect high animal welfare standards and produce high quality food in response to consumer demand. The underlying principles of organic production (Article 4 to 7) emphasise the need for prevention in preference to direct intervention for certain problems (e.g. pests, diseases, weeds) in designing systems. They also restrict the use of external inputs. Most inputs are completely prohibited and oblige organic producers to adopt certain husbandry practices considered beneficial to achieve the aims. The objectives and principles are operationalised by a number of production rules, which complete the legal definition of organic farming in the European Union. The second evaluation question examines whether these production rules provide a good framework to achieve the objectives of organic production and contribute to achieving the global objectives of the Regulation.

*The evaluation concluded that the production rules are generally adequate in terms of achieving the global objectives of the Regulation and the objectives of organic production.*

A basic precondition for the adequacy of the legal framework is that the Regulation leads to a harmonised concept of organic production in the EU. This in turn requires that the rules are implemented uniformly in national law and that Member States do not apply a large number of additional rules not covered by the scope of the Regulation. The analysis of provisions provides evidence that this precondition is fulfilled since all case study countries have implemented the existing EU legislation on organic farming in national law and only a limited number of additional provisions exist.

According to the views of stakeholders, stating objectives and principles directly in the Regulation has promoted a harmonised perception of the organic farming concept. However, differences in interpretation and consequent variations in national implementation in certain sectors may hinder the full potential of the impact of the Regulation. For example, by requiring only a limited part of the feed to be produced on the farm itself or in the same region, the Regulation does not fully guarantee the link between livestock production and the land. Another example is the insufficient clarity in the definition of multi-annual crop rotation which may result in the application of short rotations.

As far as the objective of establishing a sustainable management system is concerned, there is sound scientific evidence that organic production practices have a positive impact on biodiversity, soil fertility and minimising water and air pollution. Some of the positive impacts can be directly attributed to rules (e.g. ban of synthetic N fertilisers, herbicides, strict limitation on

other fertilisers and crop protection products, use of multi-annual crop rotations including legumes, requirement to use organic fertilisers and manures). The restrictions of input use and the incentive to use forage for livestock also have a direct impact on the reduced use of energy, but there are no rules directly addressing the sustainable use of energy, for example in greenhouse production, processing, packaging or transport. The rules also have some positive impact on limiting water and air pollution (e.g. decreasing nitrogen leaching, eutrophication and CO<sub>2</sub> emissions), but there are no rules directly addressing water use (except for aquaculture) or climate change. Some evidence is presented that soils under organic management have higher organic carbon concentrations than conventionally managed land and thus a potential for carbon sequestration. They can also capture more water and are therefore potentially more resilient to extreme weather events. The rules also include detailed animal welfare provisions going beyond most animal welfare legislation. However, the objectives of the Regulation on this issue cannot be achieved by rules alone. Further improvement in animal welfare could be achieved through better monitoring of the existing rules. There is no scientific literature on the environmental impacts of organic production of greenhouses and of organic processing so judgement about these sectors is not possible.

As far as the objective of providing high quality products is concerned, the production rules result in lower residues in organic products and contribute to food safety, but there is so far no strong evidence of the increased nutritional and organoleptic value of organic products. The consumer survey, carried out as part of the evaluation, shows that most organic products meet consumer expectations regarding high quality and protection of the environment.

The system of exceptional rules, established to allow regional differences in climate, sector development and specific husbandry practices to be taken into account, is not fully adequate. A definitive judgement is difficult because of a lack of reliable data on organic supplies, but for the sectors examined (young poultry, feed and seed) the present system of exceptional rules appears to hinder rather than support the development of organic supplies.

The GMO provisions are adequate to ensure the lowest possible adventitious presence of GMOs in organic products. Very few cases of contamination were reported but stakeholders are concerned about additional burdens if thresholds were to be lowered. Concerns were also expressed in relation to future availability of certain GMO-free critical ingredients and about the reliability of GM-free vendor declarations.

The common framework of the production rules provides a good basis for fair competition. Distortion of competition may however occur if differences in implementation of the Regulation affect production costs, thereby giving competitive advantages to operators in some countries. This can arise due to a number of reasons, such as the lack of clarity in the Regulation resulting in different implementation (e.g. fertigation practices applied in some Member States in greenhouse production), issues that are left to the discretion of EU Member States (e.g. definition of slow growing strains of poultry) or issues arising from stricter national rules for all

agricultural producers including organic ones (e.g. the licensing of plant protection agents). However, the evaluation is hindered by the lack of comparable data on costs of organic production and intra-EU trade in the affected sectors, making a definitive judgement on the potential distortion of competition difficult to reach.

### **Adequacy of the overall control system**

In order to ensure that organic operators along the supply-chain comply with the rules of organic farming and that consumers' confidence in organic products is justified, an effective control system has to be in place in all Member States. This consists of two elements: a) annual on-site controls of organic operators carried out by private accredited control bodies or designated public control authorities and b) the public surveillance system, which encompasses the entire EU framework of activities of national competent authorities and accreditation bodies to supervise and monitor the organic control system at the level of the control bodies. The third evaluation question examines how well the control system achieves the global objectives of the Regulation, in particular in relation to fair competition among organic farmers within the EU and consumer confidence in organic products. Particular attention is paid to how adequately the control system ensures organic operators' compliance with the production rules, and whether the procedures of the control system are implemented effectively in the Member States.

*The evaluation concluded that the overall control system of organic farming is largely adequate in terms of achieving the global objectives of the Regulation but with some shortcomings in implementation.*

The requirement for annual on-site controls is considered adequate to ensure compliance with the Regulation, but risk-oriented approaches could achieve the same result at a lower cost. However, such approaches are yet to be developed for the organic control system. Additional risk-based controls required by the Regulation are in general adequate to ensure fair competition and consumer confidence. In fact, stakeholders and scientific literature stress the potential of dynamic risk-based inspections to improve the effectiveness of the control system and to reduce costs for organic operators.

So far, however, risk-based inspections are implemented differently and only to a limited extent in the Member States. Thus, the potential of this approach to increase the effectiveness of controls is not fully exploited. Guidance at EU level may be necessary to ensure a harmonised approach. This is also true for other elements of the control system that are not consistently implemented in the Member States. Information from the 13 case study countries revealed, for example, that the application of residue testing varies greatly among Member States and even within one Member State. In addition, different sanctions are being applied for the same infringement.

As laid down in the Regulation, all organic operators are subject to the control system. Member States may, however, exempt operators who sell products directly to the final consumer and do not produce, prepare, store these products other than in connection with the point of sale. This exemption is justified as being adequate in cases where such operators only sell packed and labelled food, because the risk of commingling and incorrect labelling is low. At the same time, the supervision system has to ensure that such retail businesses are notified to the respective competent authorities and that the conditions for exemption are periodically verified.

No indication could be found that the distribution of responsibilities among the main actors involved in the control system is inadequate. As far as the national system of supervision over the control bodies is concerned, the evaluation reveals that for some Member States competent authorities may not fulfil their supervisory role fully due to insufficient procedures for supervision and limited resources. The analysis of the 'Gatto con gli stivali' fraud case showed that there may be some deficiencies in the exchange of information between the different actors of the control system.

Finally, the consumer survey revealed that for the most part consumers trust the actors of the organic control system, but this is built on perceptions rather than factual knowledge which might be due either to the lack of or poorly targeted consumer information about organic farming and its control system.

### **Adequacy of the import regime**

In the last two decades, organic supply and distribution chains have become increasingly globally organised. As a result, a large number of products sold on the EU market are imported. For farmers and consumers in the EU, it is important that organic products from third countries are produced in accordance with equivalent requirements and that the control systems guarantee the same level of conformity as within the EU. The fourth evaluation question explores whether the current import regime is adequate to achieve the global objectives of the Regulation of ensuring an effective functioning of the internal market, fair competition and protection of consumer interests.

*The evaluation concluded that the import rules are largely adequate in terms of achieving the global objectives of the Regulation but with some shortcomings in implementation.*

A key element of the import rules is the assessment of the equivalence of production and control rules in third countries, whilst at the same time recognising that production conditions in countries outside the EU can be different from those within the EU. The Regulation provides three different mechanisms for this purpose. Firstly, equivalency is recognised by the inclusion of a country in the 'third country list' (i.e. the national organic legislation of the country in question is formally recognised as being equivalent to that of the EU). Secondly, individual imports can be authorised by Member State authorities at the request of an importer located in the EU. This option was the most relevant import procedure under the previous organic regulation and is due

to be phased out in July 2014. Thirdly, EU control bodies can be authorised by the European Commission to carry out controls in third countries. This latter approach has been in force since July 2012.

Findings from the literature review and views of stakeholders reveal that there are shortcomings with respect to the equivalence assessment for all import procedures. For recognition of third countries, the concerns are related to work capacities required at the Commission in the long term to follow up on the equivalence assessment. For import authorisations, there is the risk of different interpretations of equivalency by control bodies and various approaches have been adopted for issuing import authorisations by Member States. An import procedure based on recognised control bodies addresses this problem, but this requires significant administrative input from the Commission and control bodies need clear instructions to carry it out in a more uniform manner.

In order to ensure functioning of the internal market, import procedures are required to allow a smooth, continuous and timely delivery of products from third countries. In this respect, a key consideration is whether or not the shift from import authorisations to control body recognition creates market distortions. An analysis of the database of the Organic Farming Information System (OFIS) shows that the number of import authorisations dropped since July 2012 but is still relatively high. A more detailed analysis of import authorisations reveals that the phasing out of import authorisations is unlikely to have an immediate negative impact on import flows. However, a key question is whether the market mechanisms will function properly. Since it is difficult to anticipate fully the reactions of the market in response to the phasing out of the import authorisations, it is useful to monitor supply and, where necessary, take action to avoid potential undersupply of certain imported products.

Another concern with regard to a smooth, continuous and timely delivery of products from third countries which applies to all three import regimes, is the administrative procedure implemented to issue certificates of inspection. Importers complain that the procedures implemented by some third country control bodies are slow and the paper-based procedure further slows down the process.

The adequacy of the import regime is also determined by the effectiveness of the control system in third countries; i.e. whether the system is able to ensure that production and processing of organic food really complies or is equivalent with the EU rules. Findings from the review of publications and the results of the stakeholder survey provide no indication that the control system in third countries is less effective per se than the control system in the EU. The results of the import case study suggest that the risk of fraud could be reduced by specific preventive measures (e.g. training for operators), risk-orientated control or residue sampling. These are still not very common in some third countries. Furthermore, there were concerns regarding the supervision of control bodies operating in third countries. The surveillance of recognised control bodies has become highly relevant, when Member State authorities are no longer involved in

assessing single imports with respect to their equivalence. More experience gained over a longer period would be needed to come to a sound judgement on this issue.

### **Consumer perception of organic farming**

Consumer demand for organic food has been a key factor for the development of organic farming in the EU. For the sake of consumer protection and fair competition, Council Regulation (EC) 834/2007 lays down specific rules for labelling organic products. A key element of these rules is the new EU organic logo which aims to improve recognition of organic products in all EU countries and to provide consumers with confidence that organic food is produced entirely in line with the Regulation. The use of a logo requires consumer understanding of the concept of organic farming as well as knowledge of and trust in the organic logo. For this reason, the fifth evaluation question examines consumers' understanding of the concept of organic farming and knowledge of the EU organic logo and other compulsory indications.

*The evaluation concluded that while the concept of organic farming is largely understood by most consumers in the EU, the new EU organic logo and the other compulsory indications are so far not very well recognised by consumers.*

Most of the participants in the survey were familiar with the main issues of organic farming, such as growing without the use of synthetic chemicals and genetically modified seeds and the use of production methods which protect the environment. However, a number of the consumers surveyed mistakenly believe, for example, that organic food 'needs to be produced on small farms' or 'needs to be produced locally' neither of which are requirements of the Regulation. Given the generally good understanding of the concept of organic farming, the results to some extent contradict previous research which found knowledge of organic principles to be generally quite low.

Recognition of the EU organic logo, which was introduced in 2010 and whose use became compulsory without exceptions in July 2012, was limited. About a quarter of all respondents had seen the EU organic logo before. A comparative analysis of the EU organic logo and other organic and non-organic food logos showed that in all six countries except Italy the EU organic logo was better known than the old EU organic logo. However, in all countries other organic logos exist in the market place which are better known than the EU organic logo.

Furthermore, the results reveal that consumers' knowledge about additional mandatory indications is low. Less than 10 % of the respondents were aware of the additional mandatory indications, such as 'EU Agriculture' or 'non-EU Agriculture' and the code number of the control body. The reason could be that the code number is not easy to recognise and remember since it has no clear visual image. The respondents favoured the existence of the indications 'EU/non-EU Agriculture', yet they did not believe this indication to be wholly adequate in improving recognition. In a globalised world, many processed products contain ingredients from EU and non-EU countries. These products need therefore to be labelled with 'EU/non-EU Agriculture' –

the gain of information might be low. Therefore, in its present form this indication might not be very promising in supporting consumers' purchase decisions. According to the Regulation, products can be labelled with the name of a country if 98 % of all raw materials have been farmed in that country. This is rarely the case for processed food products so by allowing only 2 % of raw materials to be from outside the country indicated, the Regulation is much stricter than similar indications on regional food.

Familiarity with the production standards and the logo alone is not enough to affect consumption decisions. Trust is also an important element. Although the level of trust in the EU organic logo is relatively high according to the results of the consumer survey, the purchase relevance of the logo is still limited. Only 13 % of respondents consider the EU organic logo to be relevant for their purchasing decisions and other organic logos were perceived to be more important at the point of sale. This is probably due to the fact that the EU organic logo was only recently introduced and is still not well-known.

Probably for the same reason, the majority of respondents do not perceive the EU logo as an indication for quality. On the other hand, typical attributes of organic farming such as freedom from chemical residues and from synthetic additives were perceived as quality indicators by a large share of consumers indicating that the EU organic logo has a potential to serve as quality indicator.

### **Simplified administration and management**

The EU introduced the first regulation for organic food in 1991 (EEC/2092/91) with the aim of protecting organic farming by ensuring fair competition between producers and improving the credibility of such products in the eyes of consumers. Over the next 15 years, the regulation was amended many times, until a comprehensive revision was initiated resulting in Council Regulation (EC) 834/2007 with implementing rules and repeal of the previous regulation. The sixth evaluation question aims to establish whether this revision of the legal framework has contributed to simplification in terms of the administration and management of the legal measures, compared to the legal framework in existence prior to that. Simplification is understood here to mean the reduction of red tape for both producers and administrations by making rules more transparent, easier to understand and less burdensome to comply with.

*The evaluation concluded that the current legislative framework for organic farming has significantly improved the transparency of the legislative measures applicable before 2009, but has not resulted in a simplified administration and management.*

Several changes contributed to greater transparency such as the inclusion of objectives, principles and key production rules in the main legislative text, the introduction of title and article headings and the bringing together of related provisions of the production rules (e.g. general farm and conversion rules). Nevertheless, there is lack of precision and lack of clarity in

some terms. Areas where this was felt to be particularly relevant included the status of animals in the case of non-simultaneous conversion, soil protection rules, definition of a region, as well as the definition of terms such as 'irregularities and infringements' or 'high quality'. Furthermore, the structure of the two regulations has created uncertainty and resulted in control bodies and competent authorities spending more time on clarifying interpretations.

Furthermore, there is greater transparency in the approval process for various permitted substances as a result of the inclusion of clear criteria in the Regulation and also through the formation of an expert group (EGTOP) to develop evidence-based recommendations. However, the approval process is time consuming and labour intensive and does not fulfil all expectations of operators. Furthermore, the expert recommendations cannot replace a political process for more complex decisions. No change was made to the approval process for permitted products (rather than substances) that can be used by operators. This is handled either at national level or by individual control bodies but in some case study countries there is a lack of guidance to operators regarding what products can be used.

While there is a greater transparency, the new regulatory regime has not significantly reduced administration and management for operators, control bodies or competent authorities, for example, because of the need for more interpretation of the legislation. Red-tape remains a barrier for operators to become organic, especially for small-holders. As far as the inclusion of exceptional rules rather than derogations is concerned, stakeholders noted some limited improvements for farmers (due to the removal of exceptional rules for feeding ruminants) and for control bodies (due to reduced need to grant the exceptions). However, any reductions on the side of the control are offset by increases in workload for competent authorities who are now responsible for granting authorisations under the exceptional rules, and for the Commission which has to approve the use of exceptional rules in specific Member States.

### **The EU added value of the organic farming legislation**

Any activity at EU level, such as the EU legislation on organic farming, requires that this results in EU added value which is understood here as the extra value of EU action compared to similar action taking place only at regional or national level. In the case of the organic farming legislation, EU added value is particularly relevant, since organic farming has the potential to contribute to several EU priorities and is specifically targeted by EU-funding instruments. The seventh evaluation question looks at the extent to which the organic farming legislation has provided EU added value, over and above what would have been achieved by the independent action of Member States or regions. Particular attention is given to the coherence with EU policy priorities, effectiveness in delivering these priorities and to the question of whether subsidiarity is ensured.

*The evaluation concluded that the legislation provides EU added value through good coherence with EU global objectives for organic farming and other key EU priorities, and that it is generally effective in delivering these priorities, although some linkages could be improved.*

The documentary analysis shows that there is particularly good coherence between the legislation and EU priorities for innovation, agricultural product quality, agri-environment, biodiversity, water quality, soil conservation, animal welfare as well as consumer protection and food labelling. There is also good coherence with issues related to the EU priorities for the internal market, climate change mitigation, sustainable production and consumption, food safety and competitiveness. Furthermore, there are some opportunities to improve coherence through improved linkages between the legislation and specific elements of EU priorities for sustainable use of water and market data collection.

As far as the delivery of EU policy priorities is concerned, the results of the evaluation provide evidence that the legislation is effective in creating EU added value for environmental, climate mitigation and animal welfare priorities. There is generally good complementarity with EU funding instruments, particularly the CAP and the funds for research and information. The legislation is however only moderately effective in achieving the EU priority of better regulation. Effectiveness of the legislation could be improved by making clearer links between objectives, general principles and detailed rules, and by translating objectives for water and energy use, and habitat management into operational rules.

Little evidence is available to judge the allocation of responsibilities according to the principle of subsidiarity, and it was found that the views of competent authorities differ on this issue.

### **Contribution of the organic farming legislation to the sustainable development of the organic sector**

The overarching objective of Council Regulation (EC) 834/2007 is to provide the basis for the sustainable development of the organic farming sector. Although the term is not defined in the Regulation, the legislation does make clear that a sustainable development has to be seen in the context of the dual societal role of organic production methods, i.e. providing food in response to consumer demand for organic products, and delivering public goods that contribute to the protection of the environment and animal welfare, as well as to rural development. The eighth evaluation question considers the extent to which the organic farming legislation has contributed to the sustainable development of the sector, and whether this development has been economically, environmentally and socially sustainable.

*The evaluation concluded that, within the context of wider market influences and other factors, the legislation has contributed to the development of the sector. This development is sustainable, particularly in situations where there is a supportive policy environment.*

Regulation (EC) 834/2007 has maintained the impetus created by the previous legislative framework in supporting a strong EU domestic and import market for organic food, principally through defining detailed rules for organic farming. By unifying a previously fragmented policy area, the legislation has provided an important basis for growth of the sector. The contribution to

market development may be somewhat weakened because some production rules allow a broader interpretation and thus may have adverse effect on fair competition between actors in different parts of the EU (for example the definition of 'region' for feed and 'factory farming' for manure).

As far as the economic sustainability of this development is concerned, the legislation provides a clear basis for developing organic businesses and for designing supportive policies, particularly those funded under Member States' rural development programmes. However, it should be recognised that organic farmers' decisions are influenced by a wide range of external pressures, not just by the legislation.

Furthermore, there is sound evidence that the Regulation has established a framework which guides farmers to practices beneficial for the environment. However, environmental sustainability of growth in the sector relies partly on the way in which the rules and organic concept have been interpreted, rather than being exclusively attributable to the legislation. The environmental opportunities for the future, where the organic production rules could play a role, include the potential to close the productivity gap between organic and conventional systems and the opportunities for increased organic conversion of low-intensity farming systems and holdings.

Limited evidence is available on the social sustainability of the sector's development, but there is a clear potential for socio-economic benefits if organic development can be targeted at small farms in disadvantaged rural areas, for example through group certification and tailored support measures in RDPs.

## Overall conclusions and recommendations

The evaluation shows that the EU legislation on organic farming generally provides a sound basis for a sustainable development of organic production in the European Union. However, the analysis also points to a number of areas where the regulatory framework could be improved. Based on the description of the economic and regulatory framework of the organic farming sector and the judgement of the eight evaluation questions, six types of measures addressing two different fields of action can be derived: a) ensuring the adequacy of the legal provisions and b) increasing the effectiveness of the legal provisions.

The first field of action encompasses three measures concerned with ensuring the adequacy of the legislation, i.e. that the state achieved by the rules is sufficient in relation to the objective laid down in the Regulation. Very few areas have been identified, where more detailed rules should be considered at EU or Member State level (e.g. provisions with respect to organic pullet rearing and hatchery). In many cases the rules are adequate but there is a lack of a harmonised interpretation and enforcement in Member States. For this reason, it is suggested that more

guidance and clarification be provided for Member State authorities, control bodies and other actors. For example, clarification of the meaning of terms such as ‘sustainable use of natural resources’ or guidance on how objectives like ‘high biodiversity’ can be translated into operational rules. Furthermore, there are areas where more guidance or harmonised enforcement is difficult because sufficient information is not available. Collecting and making available more information to support the Commission and Member State authorities in streamlining the rules and monitoring their implementation (e.g. through the collection of market data) could improve this situation.

The second field of action refers to rules that are judged to be adequate but whose impact could be increased, i.e. the extent to which objectives pursued by an intervention are achieved. This could be realised by a) changes to the provisions (e.g. by shifting from the annual control to a risk-based control system), b) the use of certain support measures and tools (e.g. well-targeted output-based criteria for the monitoring of animal welfare outcomes, that can be monitored as part of inspection systems and be used by operators in self-assessment) or by c) providing more information and capacity building to relevant actors (e.g. an information campaign addressing consumers to raise awareness regarding the common concept, the EU organic logo and the additional compulsory indications).

## Résumé exécutif

### Objectifs et champ de l'évaluation

Etabli en 1991, le premier Règlement (CEE) 2092/91 du Conseil concernant le mode de production biologique fut l'un des moteurs du développement du secteur européen de l'agriculture biologique. Ce texte fournissait une définition légale de l'agriculture biologique basée sur le respect de règles de production, et définissait des exigences en matière de contrôle et d'étiquetage. Cette base de référence permettait ainsi de protéger les consommateurs et les producteurs biologiques des allégations fausses et trompeuses. Suite au Plan d'action européen en matière d'alimentation et d'agriculture biologique, ce cadre réglementaire a été révisé significativement et remplacé par le Règlement (CE) 834/2007 du Conseil et ses Règlements d'application. Ce rapport présente les résultats de l'évaluation de la pertinence et de l'efficacité du Règlement (CE) 834/2007 du Conseil et de sa mise en œuvre vis-à-vis des objectifs du Règlement et des objectifs de l'agriculture biologique tels que définis par le règlement.

L'étude est constituée de trois parties distinctes :

La partie A fournit une **description concise** des thèmes suivants

- développement de la production biologique de l'UE et du marché mondial des produits biologiques;
- mesures de soutien appliquées au secteur européen de l'agriculture biologique;
- cadre réglementaire de l'agriculture biologique et son évolution;
- logique d'intervention de la réglementation.

La partie B répond à huit **questions d'évaluation** qui interrogent

- l'adéquation du champ d'application de la réglementation;
- la cohérence des règles de production et de transformation;
- l'efficacité du système de contrôle;
- la pertinence du régime d'importation;
- la perception des consommateurs sur l'agriculture biologique;
- le degré de simplification du cadre réglementaire actuel comparé au cadre législatif avant 2009;
- la création de valeur ajoutée associée au cadre réglementaire de l'agriculture biologique;
- la contribution du cadre réglementaire au développement durable du secteur.

La partie C présente les **conclusions générales et les recommandations** pour l'amélioration du règlement, en indiquant les marges d'amélioration.

L'évaluation couvre les 27 Etats-Membres de l'UE (la Croatie n'a pas été incluse dans le champ d'étude) mais considère plus particulièrement 13 pays<sup>6</sup> pour lesquels ont été réalisées des « études de cas » afin d'étudier en détail les différents aspects de la mise en œuvre des mesures définies dans la réglementation. La période d'étude est prise en compte à partir de 2009. Cependant, les années comprises entre 2000 et 2009 servent de référence de comparaison pour la situation en vigueur avant 2009.

## Partie descriptive

### Evolutions du secteur biologique UE et du marché mondial

En 2011, dans l'Union Européenne, plus de 9,5 millions d'hectares étaient cultivés selon les principes de l'agriculture biologique dans près de 240 000 fermes, soit l'équivalent de 5,4 % de la SAU totale. La production biologique a connu une forte évolution ces dernières années, la surface biologique ayant à l'échelle des 27 Etats Membres, plus que doublé entre 2000 et 2011. Cette évolution a notamment été marquée par l'intégration des pays d'Europe Centrale et d'Europe de l'Est avec une hausse de 53% des surfaces entre 2005 et 2011. Cependant, l'évolution des surfaces concerne plus particulièrement certains pays de l'UE-15 : Espagne, France, Allemagne et la Pologne. Une dynamique de développement similaire est observée au niveau de la demande pour des aliments biologiques. La valeur totale du marché biologique de l'UE-27 atteignait ainsi 19,7 milliards d'EUR en 2011. Le marché allemand domine largement avec 6,6 milliards d'EUR tandis que les ventes par habitant sont particulièrement élevées au Danemark (162 EUR), Luxembourg (134 EUR) ainsi qu'en Autriche (127 EUR), les pays de l'UE-12 présentant des chiffres relativement plus faibles en termes de valeurs de marché et de consommation par habitant. La situation de l'offre et de la demande en produits biologiques dans les Etats-Membres s'exprime également à travers le nombre de transformateurs et d'importateurs, principalement localisés dans les pays caractérisés par de gros volumes de marché et/ou de large surface de production biologique. A l'échelle mondiale, le secteur biologique européen est l'un des acteurs-clés avec 26 % des superficies et le deuxième plus gros marché d'aliments biologiques au monde.

### Mesures de soutien appliquées au secteur EU de l'agriculture biologique.

Le soutien à l'agriculture biologique est assuré de différentes manières selon les Etats-Membres. La plupart des Etats Membres ont mis en œuvre des paiements à la surface spécifiques pour compenser les coûts plus élevés ou les pertes de revenus résultant du mode de gestion biologique. Les paiements ont été distribués au titre de l'axe 2 (Amélioration de l'environnement

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<sup>6</sup> Autriche, Bulgarie, République Tchèque, Danemark, Estonie, France, Allemagne, Italie, Pays-Bas, Pologne, Slovaquie, Espagne, Royaume-Uni.

et le l'espace rural) des programmes de développement rural (PDR)<sup>7</sup> ou au titre de l'article 68 du Règlement (CE) 73/2009<sup>8</sup> du Conseil (Soutien spécifique aux agriculteurs). Un grand nombre d'Etats-Membres ou de régions ont également développé des mesures de soutien à l'agriculture biologique au titre de l'axe 1 (Amélioration de la compétitivité des secteurs agricoles et sylvicoles) bien que, dans la plupart des cas, les mesures ne soient pas dédiées, ou seulement partiellement, au mode de production biologique. Dans quelques rares cas, l'agriculture biologique est également soutenue au titre de l'axe 3 du PDR (Qualité de vie en milieu rurale et diversification de l'économie rurale).

Dans certains Etats-Membres, les fermes biologiques peuvent également bénéficier de soutiens (en partie) spécifiques en faveur de l'amélioration de la qualité des produits agricoles au titre de l'article 68 du Règlement (CE) 73/2009 du Conseil ainsi que des aides aux organisations de producteurs dans le cadre de l'organisation commune de marché fruits et légumes. En dehors des mesures de la politique agricole commune, il existe une large gamme d'instruments de soutien issus de politiques publiques nationales ou régionales tels que des soutiens financiers pour la production, la transformation et la commercialisation de produits biologiques, des politiques de formation, de conseil et d'information, ainsi que le financement de projets de recherche sur l'agriculture biologique.

### **Cadre réglementaire appliqué à l'agriculture biologique et évolution**

La réglementation décrit les objectifs et principes de l'agriculture biologiques et impose un ensemble de règles de production. Ainsi, la législation définit en quoi consiste effectivement l'agriculture biologique et formule certains objectifs en lien avec la protection de l'environnement, la préservation des ressources naturelles (dont la biodiversité), l'application de normes élevées pour le bien-être animal et des méthodes de production à partir de substances et de procédés naturels. De plus, il établit des exigences en termes de contrôle et d'étiquetage et, par ce biais, fournit une base légale à l'ensemble des activités de la filière. Le cadre réglementaire suit la structure générale de la législation européenne avec le Règlement (CE) 834/2007 du Conseil concernant les points sensibles et les fondamentaux et les Règlements (CE) 889/2008 et 1235/2008 de la Commission qui définissent les règles d'application. Depuis 2009, le cadre législatif a été complété plusieurs fois par de nouvelles dispositions (Règlement (CE) 710/2009 pour la production d'animaux aquacoles, Règlement (CE) 203/2012 pour la production viticole, Règlement (CE) 508/2012 pour les échanges avec les pays tiers ainsi le Règlement (CE) 392/2013 sur les contrôles en 2013.

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<sup>7</sup> Règlement (CE) 1698/2005 du Conseil du 20 septembre 2005 concernant le soutien au développement rural par le Fonds européen agricole pour le développement rural (FEADER).

<sup>8</sup> Règlement (CE) 73/2009 du Conseil du 19 janvier 2009 établissant des règles communes pour les régimes de soutien direct en faveur des agriculteurs dans le cadre de la politique agricole commune et établissant certains régimes de soutien en faveur des agriculteurs.

## Logique d'intervention de la réglementation

L'objectif principal de la réglementation est d'établir une base pour un développement durable de la production biologique dans l'UE. Les trois objectifs généraux de la réglementation communautaire sur l'agriculture biologique tels que définis dans l'article 1 du Règlement (CE) 834/2007 sont : « assurer le bon fonctionnement du marché intérieur », « garantir une concurrence loyale » et « donner confiance aux consommateurs et protéger leurs intérêts ». Dans le cadre logique, les objectifs généraux ont été reliés à des objectifs spécifiques, découlant des règles de production, du contrôle, de l'étiquetage et d'échanges avec les pays tiers. Les relations de cause à effet attendues de la mise en œuvre des règles de production ont ainsi été reconstituées.

## Réponses aux questions d'évaluation

### Méthodes et sources des données

Différentes méthodes et sources de données ont été utilisées pour obtenir une base cohérente de réponse aux huit questions d'évaluation :

- Analyse de l'environnement réglementaire des exploitations certifiées en production biologique dans les treize pays où des études de cas nationales ont été conduites, par le biais d'interviews avec les parties prenantes et par l'analyse des réglementations nationales, des standards privés et de la littérature grise. Cela a fourni une bonne connaissance de la mise en œuvre, de l'adéquation et de l'efficacité de la législation dans chaque Etat-Membre;
- Analyse de la fraude « Gatto con gli stivali » pour comprendre l'efficacité du système de contrôle dans la prévention des fraudes;
- Analyse de trois cas potentiellement suspects de produits biologiques importés de pays tiers pour comprendre dans quelle mesure le régime d'import est adéquat et efficace;
- Des entretiens semi-directifs avec des parties prenantes et experts au niveau européen pour collecter des informations spécifiques sur l'adéquation et l'efficacité de la réglementation. De nombreux documents pertinents ont également été examinés ;
- Un sondage, via internet, auprès des consommateurs. Ce sondage a été conduit dans six Etats-Membres (Allemagne, Estonie, France, Italie, Pologne et Royaume-Uni) et a permis de récolter 3 000 réponses, comblant ainsi le manque d'information de la littérature et permettant d'évaluer le degré de connaissance et la perception des consommateurs sur le logo biologique européen ;
- Un sondage, via internet, auprès des parties prenantes, avec au total 265 réponses. Il a permis de connaître les points de vue d'un nombre important d'acteurs variés et de vérifier la robustesse des informations issues de la recherche bibliographique.

## Adéquation du champ d'application de la réglementation

Le champ d'application du Règlement (CE) 834/2007 du Conseil pour la production biologique couvre les produits agricoles bruts et transformés destinés à l'alimentation humaine et animale, le matériel de reproduction végétative et semences, les levures et les produits de l'aquaculture. La restauration collective en est explicitement exclue, tout comme les produits non-alimentaires (tels que les cosmétiques et les textiles). La situation est cependant moins claire pour certains produits non-alimentaires étroitement liés à la production biologique tels que la laine, la cire d'abeille ou certaines huiles essentielles. La première question d'évaluation interroge l'adéquation du champ d'application du règlement vis-à-vis des besoins des opérateurs et des consommateurs de produits biologiques.

*L'évaluation conclut que le champ d'application de la réglementation est globalement adéquat pour satisfaire les besoins actuels des opérateurs de la production et de la distribution de produits issus de l'agriculture biologique, mais n'est pas totalement adéquat pour répondre aux besoins des consommateurs de produits biologiques.*

Pour être considéré comme étant adéquat, le champ d'application du règlement, doit être formulé clairement et totalement compris par les services mettant en œuvre cette réglementation. Selon le point de vue des opérateurs, ceci est en effet le cas, excepté pour le statut des matières premières non-alimentaires mentionnées précédemment (laine, cire d'abeille, etc.) produites conformément au cahier des charges du règlement (CE) 834/2007. Les règles en matière de communication sur le statut de ces productions sur les produits finaux sont considérées comme peu claires. La situation actuelle, sans règles précises sur la certification et l'étiquetage, peut créer de la confusion.

La restauration collective utilisant des ingrédients biologiques est réglementée dans onze des treize pays d'étude de cas par des standards privés et/ou publiques<sup>9</sup>. L'importance de la restauration collective (restauration à caractère social et restaurants privés) varie entre moins de 1 % et 10 % du total des ventes biologiques dans les pays étudiés. Il n'y a pas d'indication d'échanges transfrontaliers de matières premières et de produits finis biologiques. L'encadrement d'un tel secteur requiert de la flexibilité car il est difficile d'obtenir en qualité biologique tous les ingrédients nécessaires pour la réalisation d'un grand nombre de plats. Les intervenants interrogés craignent que l'intégration du secteur au sein de la réglementation UE réduise la flexibilité et augmente la charge administrative, ce qui aurait pour impact d'étouffer le potentiel de développement du secteur. Cependant, certains d'entre eux y sont favorables, en raison principalement de la nécessité d'améliorer la transparence pour les consommateurs et d'assurer une meilleure visibilité et reconnaissance des produits biologiques dans l'attribution

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<sup>9</sup> La restauration collective est réglementée au niveau national en Autriche, Estonie, France, Allemagne, Slovaquie et au Danemark alors que des standards privés pour la restauration collective existe en Italie (variable), Allemagne (BIOLAND), Espagne (CAAEE), République Tchèque (Pro-Bio), au Pays-Bas (Stichting EKO-Keurmerk) et au Royaume-Uni (Soil Association).

des marchés publics verts<sup>10</sup> dans les pays où il n’y a pas de réglementation nationale. Ainsi, l’exclusion de la restauration collective du champ d’application du règlement est jugée surtout adéquate vis-à-vis des besoins actuels des opérateurs de la filière, mais peut-être seulement partiellement adéquate pour protéger les intérêts des consommateurs.

En ce qui concerne les produits non-alimentaires, les données sur les échanges commerciaux suggèrent une croissance de ce marché, particulièrement sur les segments des cosmétiques et des textiles. De nombreux produits textiles, cosmétiques, d’entretien ménager ou autres, employant la mention « biologique » sont vendus dans les magasins. Dans ce cas, l’emploi de l’allégation « biologique » ou « bio » est considérée comme susceptible de porter à confusion étant donné que ces produits ne sont pas tous certifiés par un standard biologique reconnu et que les consommateurs peuvent ne pas être informés de l’exclusion de ce type de produits de la réglementation EU sur la production biologique. Cependant, leur intégration au sein du champ d’application de la réglementation impliquerait la prise en compte des spécificités des produits non-alimentaires, ce qui aurait pour conséquence de compliquer la réglementation. D’autre part, dans les secteurs cosmétiques et textiles, des initiatives européennes et internationales visant à identifier les allégations « bio » valides sont en place. Comme dans le cas de la restauration collective, il est conclu que l’exclusion des cosmétiques et des textiles du champ d’application est adéquate pour satisfaire les besoins actuels de la chaîne de production et de distribution de produits issus de l’agriculture biologique, mais ne permet pas de garantir pleinement aux consommateurs la clarté des conditions d’utilisation des termes faisant référence à la production biologique.

### **Cohérence des règles de production**

Selon l’Article 3 du Règlement (CE) 834/2007 du Conseil, la production biologique est un système de gestion intégrée de l’agriculture qui contribue à atteindre un niveau élevé de biodiversité, préserver les ressources naturelles, respecter des normes élevées en matière de bien-être animal et produire des denrées alimentaires de haute qualité en réponse à la demande des consommateurs. Les principes sous-jacents de la production biologique (Articles 4 à 7) privilégient la mise en œuvre de pratiques préventives face à l’émergence de certains problèmes (maladies, ravageurs, adventices). Ils restreignent également l’utilisation d’intrants extérieurs, pour la plupart totalement interdits, et obligent les éleveurs à adopter certaines pratiques d’élevage cohérentes avec les objectifs énoncés. Les objectifs et principes sont traduits opérationnellement par des règles de production qui complètent le cadre légal de l’agriculture biologique dans l’Union Européenne. La seconde question d’évaluation interroge dans quelle

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<sup>10</sup> Les marchés publics verts sont des instruments volontaires développés par la Commission Européenne afin d’encourager l’intégration de critères environnementaux dans la passation de marchés publics. Le critère principal pour la restauration collective fait explicitement référence au Règlement (CE) 834/2007 et propose de spécifier un pourcentage minimum d’aliments produits en conformité avec les règles biologiques. Les guides pour ce type de marchés ne fournissent pas de précisions concernant d’éventuelles implications en termes d’étiquetage et de vérification.

mesure les règles de production permettent d'atteindre les objectifs spécifiques de la production biologique ainsi que les objectifs généraux de la réglementation.

*L'évaluation conclut que les règles de production sont généralement adéquates pour satisfaire les objectifs généraux de la réglementation ainsi que les objectifs de la production biologique.*

Un des préalables principaux pour assurer la cohérence du cadre réglementaire est que la réglementation aboutisse à un concept harmonisé de l'agriculture biologique à l'échelle de l'UE. Ceci nécessite que les règles soient mises en œuvre de manière uniforme dans les réglementations nationales et que les Etats-Membres n'ajoutent pas un trop grand nombre de règles additionnelles hors du champ des textes européens. L'analyse de la mise en œuvre montre que ces pré-requis sont acquis étant donné que tous les pays d'étude de cas ont traduit nationalement la réglementation communautaire et que le nombre de dispositions additionnelles reste limité dans ces pays.

Selon le point de vue des parties prenantes, une perception harmonisée du concept d'agriculture biologique a bien été promue par la formulation explicite dans le règlement d'objectifs et de principes. Cependant, des divergences d'interprétation et par voie de conséquence de mise en œuvre nationale des règles dans certains domaines ont pu diminuer l'impact de la réglementation en termes d'harmonisation. Par exemple, la réglementation ne garantit pas totalement le lien entre la production animale et sol puisqu'elle exige seulement qu'une partie de l'alimentation soit produite sur la ferme ou dans la même région. Autre exemple, le manque de précision quant à la définition des rotations multi-annuelles qui peut amener à des rotations courtes. Concernant l'objectif d'établir un système de gestion durable pour l'agriculture, des recherches scientifiques démontrent l'impact positif de l'agriculture biologique sur la biodiversité, la fertilité des sols et la réduction de la pollution de l'eau et de l'air. Certains de ces impacts positifs découlent directement des règles énoncées par le règlement (ex. interdiction d'engrais minéral azoté et herbicides, encadrement strict des autres engrais et pesticides, rotation pluriannuelle des cultures comprenant les légumineuses, utilisation obligatoire d'effluents et autres engrais organiques). La restriction des intrants extérieurs et l'incitation à fournir une part de l'alimentation du bétail en fourrages et pâturages présentent également un impact direct de réduction de la consommation d'énergie, mais il n'y a aucune disposition concernant de manière directe l'utilisation durable de la ressource énergie (notamment concernant la production sous-serres, la transformation, l'emballage ou le transport). Les règles de production ont également un impact direct sur la réduction de la pollution de l'eau et de l'air (pratiques entraînant une réduction du lessivage des nitrates, de l'eutrophisation et de l'émission de CO<sub>2</sub>), mais aucune règle n'aborde de façon directe la gestion quantitative de l'eau (excepté en aquaculture) ou le changement climatique. Certaines recherches révèlent des concentrations de matière organique dans les sols des exploitations biologiques supérieures à ceux des exploitations conventionnelles, indiquant ainsi une capacité supérieure à la séquestration du carbone ainsi qu'une meilleure rétention de l'eau, ce qui permet de ce fait une meilleure résistance à la sécheresse. Les règles comprennent enfin des dispositions détaillées en matière de

bien-être animal. Cependant, les objectifs de la réglementation à ce sujet ne peuvent pas être atteints uniquement par l'établissement de règles. Des améliorations supplémentaires concernant le bien être animal restent possibles, notamment par un meilleur suivi des règles existantes. Enfin, l'impact environnemental des cultures sous serres et celui de la production de denrées alimentaires biologiques transformées n'ont pas fait l'objet de recherches scientifiques et il n'est donc pas possible de conclure sur ces deux secteurs.

Concernant l'objectif de produire des produits de haute qualité, les pratiques exigées par la réglementation limitent les résidus au sein des produits biologiques et contribuent à la sécurité sanitaire des aliments, mais aucune recherche ne démontre pour l'instant une valeur nutritionnelle et organoleptique supérieure des produits biologiques. L'enquête auprès des consommateurs réalisée dans le cadre de cette évaluation révèle que la plupart des produits biologiques correspondent aux attentes des consommateurs en termes de qualité et qu'une part importante de consommateurs estime que la production biologique participe à la protection de l'environnement.

La justification des règles exceptionnelles, prévues par le règlement au titre des disparités régionales dues au climat, au développement de secteur ou à des pratiques spécifiques d'élevage, est remise en question. Il est difficile d'émettre un jugement définitif en raison du manque de données fiables sur l'offre en intrants biologiques, pourtant, pour les secteurs étudiés (poulettes, aliment du bétail et semences) il semble que le système actuel des règles exceptionnelles a limité, plutôt que soutenu, le développement de l'offre.

Les dispositions concernant les OGM sont estimées adéquates pour limiter le plus possible les risques de contaminations accidentelles des produits biologiques. Seuls de rares cas de contamination ont été recensés et les intervenants interrogés soulignent la lourdeur des charges qui leur incomberaient si les seuils de tolérance étaient revus à la baisse. D'autres inquiétudes sont émises concernant la disponibilité future de certains ingrédients non OGM indispensables et la fiabilité des déclarations des vendeurs attestant des produits sans OGM.

Le cadre général des règles de production fournit une base adéquate pour garantir la concurrence loyale mais des distorsions de compétitivité peuvent survenir si des divergences de mise en œuvre de la réglementation affectent les coûts de production et procurent un avantage concurrentiel aux opérateurs de certains pays. Cela peut survenir pour plusieurs raisons : manque de clarté dans la réglementation qui donne lieu à des interprétations différentes (ex : ferti-irrigation utilisée sous serres dans certains Etats-Membres), dispositions laissées à la subsidiarité des Etats-Membres (ex : définition des souches à croissance lente en volaille) ou distorsions provenant de règles nationales plus strictes établies par certains pays et s'appliquant à l'ensemble des producteurs, dont les producteurs biologiques (ex : autorisations de mise sur le marché des pesticides). Cependant, l'évaluation est limitée par le manque de données de coûts de production comparables d'un pays à l'autre et de données d'échanges intra-communautaires.

Il n'est donc pas possible de formuler un jugement ferme sur ces déséquilibres potentiels concernant les distorsions de concurrence.

### **Efficacité du système de contrôle**

Pour garantir que les opérateurs de la filière biologique se conforment aux règles de l'agriculture biologique tout le long de la chaîne d'approvisionnement et que la confiance des consommateurs dans les produits biologiques est justifiée, un système de contrôle effectif doit être mis en place dans tous les Etats-Membres. Ce système consiste en deux éléments: a) des contrôles annuels sur place des opérateurs biologiques, réalisés par des organismes de contrôle privés accrédités ou par des autorités publiques de contrôle désignées et b) un système de surveillance public qui englobe l'ensemble des activités des autorités nationales compétentes et des organismes d'accréditation pour superviser et surveiller le système de contrôle au niveau des organismes de contrôle. La troisième question d'évaluation interroge la capacité du système de contrôle à garantir les objectifs généraux de la réglementation, en particulier en ce qui concerne la concurrence loyale entre les producteurs biologiques de l'UE et la confiance des consommateurs dans les produits biologiques. Une attention particulière est portée à la capacité du système de contrôle à assurer le respect du cahier des charges par les opérateurs de la filière biologique ainsi qu'à la mise en œuvre effective au sein des Etats-Membres des procédures du système de contrôle.

*L'évaluation conclut que le système général de contrôle de l'agriculture biologique est largement approprié pour atteindre les objectifs généraux de la réglementation. Cependant, des défaillances sont à signaler au niveau de sa mise en œuvre.*

L'obligation de contrôles annuels sur place est considérée comme étant efficace pour assurer le respect de la réglementation. Cependant, des approches orientées sur le risque permettraient le même résultat à un moindre coût. Cependant, de telles approches restent à développer au sein du système de contrôle biologique. Des contrôles supplémentaires, basés sur l'analyse du risque et exigés par la réglementation, permettent généralement d'assurer la concurrence loyale et la confiance des consommateurs. En fait, les acteurs interrogés et la littérature scientifique soulignent le potentiel des inspections basées sur l'analyse dynamique du risque pour améliorer l'efficacité du système de contrôle et réduire les coûts pour les opérateurs biologiques.

Cependant, jusqu'à présent, les inspections basées sur l'analyse du risque sont mises en œuvre de différentes manières et seulement partiellement dans les Etats-Membres. Ainsi, le potentiel de ces inspections n'est pas totalement utilisé et pour assurer une approche harmonisée, des orientations de niveau européen seraient nécessaires. Cela vaut également pour d'autres éléments du système de contrôle qui ne sont pas mis en œuvre de manière homogène dans les Etats-Membres. Les informations obtenues lors des 13 études de cas nationales révèlent, par exemple, que l'application de l'analyse des résidus varie grandement parmi les Etats-Membres et

même au sein d'un Etat-Membre. Egalement il arrive que différentes sanctions soient appliquées pour la même infraction.

Comme le prévoit la réglementation, chaque opérateur de la filière biologique est soumis au système de contrôle. Toutefois, les Etats-membres peuvent exempter du système de contrôle les opérateurs qui vendent les produits directement au consommateur final et qui ne produisent, préparent ou stockent pas de produits à d'autres fins que le point de vente. Cette exemption est justifiée car elle est adéquate, dans les cas où ces opérateurs vendent exclusivement des produits pré-emballés et pré-étiquetés, en raison du faible risque de confusion et d'erreur d'étiquetage. Dans le même temps, le système de supervision doit s'assurer que de tels commerces de détail sont notifiés auprès des autorités compétentes respectives et que les conditions d'exemption sont périodiquement vérifiées.

Aucun résultat n'a révélé d'inadéquations dans la répartition des responsabilités parmi les acteurs principaux impliqués dans le système de contrôle. En ce qui concerne le système de surveillance national des organismes de contrôle, l'évaluation révèle, pour certains Etats-Membres, que les autorités compétentes peuvent ne pas assurer pleinement leur rôle de superviseur en raison d'une insuffisance des procédures de supervision et de ressources limitées. L'analyse du cas de fraude 'Gatto con gli stivali' a montré qu'il peut exister des déficiences dans l'échange d'information entre les différents acteurs du système de contrôle.

Enfin, le sondage auprès des consommateurs a révélé que les consommateurs ont confiance dans les opérateurs du système de contrôle biologique mais que cette confiance résulte davantage d'un sentiment général que d'une connaissance précise du système. Cela est peut-être dû à un manque d'information ou à une information mal adaptée des consommateurs concernant l'agriculture biologique et son système de contrôle.

### **Pertinence du régime d'importation**

Depuis une vingtaine d'années, l'organisation de l'offre et la distribution des produits biologiques sont de plus en plus globalisées, en conséquence de quoi, une quantité croissante de produits est importée sur le marché UE. Il est important, pour les producteurs européens comme pour les consommateurs, que les produits biologiques provenant des pays tiers soient fabriqués suivant des normes équivalentes et que les systèmes de contrôle assurent un niveau de conformité équivalent à celui qui est atteint dans l'UE. La quatrième question d'évaluation étudie dans quelle mesure le régime d'importation est efficace pour atteindre les objectifs globaux du Règlement vis-à-vis du fonctionnement effectif du marché communautaire, de la compétition loyale et de la protection des intérêts des consommateurs.

*L'évaluation conclut que les règles d'importation sont efficaces pour atteindre les objectifs globaux du Règlement. Cependant, certaines défaillances sont à signaler au niveau de leur mise en œuvre.*

Un des éléments clés du régime d'importation est l'appréciation de l'équivalence des modes de production et des règles de contrôle des pays tiers, qui toutefois considère bien que les conditions de production hors UE peuvent être différentes de celles de l'UE. La réglementation prévoit trois procédures d'équivalence possibles. Premièrement, l'équivalence est accordée à l'échelle du pays, qui est alors inclus dans la liste des pays tiers (c.-à-d. que la réglementation nationale biologique du pays en question est formellement reconnue comme équivalente à celle de l'UE). Deuxièmement les importations individuelles peuvent être autorisées par les autorités d'un Etat-Membre sur la demande d'un importateur localisé dans l'UE. Cette option était la procédure d'importation plus pertinente sous le régime précédent et elle est amenée à disparaître en juillet 2014. Troisièmement, les autorités de contrôle UE peuvent être autorisées par la Commission Européenne à réaliser des contrôles dans les pays tiers. Cette dernière approche est en vigueur depuis juillet 2012

La littérature et le point de vue des opérateurs révèlent des lacunes dans l'appréciation de l'équivalence et ce pour tous les types de procédures d'importation. Pour le régime pays équivalents, ces lacunes concernent la capacité de la Commission, à suivre l'équivalente sur le long terme. Pour les autorisations d'importation, il existe un risque d'interprétations différentes des règles d'équivalence selon les organismes de contrôle et les Etats-Membres ont adopté différentes approches pour accorder les autorisations d'importation. Enfin, la procédure d'importation s'appuyant sur des organismes de contrôle reconnus, s'attèle à ce problème mais nécessite une contribution administrative importante de la part de la Commission et les autorités de contrôle ont besoin d'instructions claires pour agir de manière plus uniforme.

Pour assurer le fonctionnement du marché intérieur, les procédures d'importation doivent assurer un approvisionnement régulier, continu et en temps voulu des produits, depuis les pays tiers. A cet égard, l'élément important à considérer est de savoir si le passage du régime d'autorisation d'importation à celui des organismes équivalents cause ou non des distorsions sur le marché. Une analyse des données du système d'information sur l'agriculture biologique (OFIS) montre que le nombre de demandes d'importation a chuté depuis juillet 2012 mais reste relativement élevées. Une analyse plus détaillée des autorisations d'importation montre que l'abandon progressif de ces autorisations ne devrait pas induire d'effet négatif immédiat sur les flux d'importation. Toutefois, une question clé est de savoir si les mécanismes de marché fonctionneront correctement. Puisqu'il est difficile de totalement anticiper les réactions du marché en réponse à l'abandon progressif des autorisations d'importation, il semble utile de surveiller l'offre et de prendre, si nécessaire, les mesures adéquates pour éviter un sous-approvisionnement de certains produits importés.

Un autre point qui concerne l'approvisionnement régulier, continu et en temps voulu depuis les pays tiers, pour les trois régimes d'importation, est la procédure administrative de délivrance des certificats d'inspection. Les importateurs regrettent que les procédures mises en place par certains organismes de contrôle des pays tiers soient lentes et que le support papier ralentisse encore plus ces procédures.

L'évaluation du caractère adéquat du régime d'importation est également déterminée par l'efficacité du système de contrôle dans les pays tiers, c'est-à-dire si le système est capable de garantir que la production et la transformation des produits biologiques est vraiment conformes ou est équivalent aux règles européennes. En ce qui concerne l'efficacité des systèmes de contrôle dans les pays tiers comparée à l'UE, aucune différence particulière n'a été identifiée lors de l'analyse des publications ou des résultats du sondage auprès des parties prenantes. Les résultats de l'étude de cas importation suggèrent que les risques de cas de fraudes pourraient être réduits par des mesures préventives spécifiques (par exemple, la formation des opérateurs), des contrôles basés sur une évaluation du risque ou la mesure des résidus qui sont encore peu utilisés dans certains pays tiers. Par ailleurs, des préoccupations concernent la supervision des organismes de contrôle opérant dans les pays tiers. La surveillance par des organismes de contrôle reconnus est devenue très pertinente, dans la mesure où les autorités des Etats-Membres n'interviennent plus dans l'octroi d'équivalence à chaque cas d'importations. Toutefois davantage de retours d'expérience sur le long terme sera nécessaire pour avoir un jugement équilibré de cette question.

### **Perception des consommateurs sur l'agriculture biologique**

La demande des consommateurs d'aliments produites selon les principes de l'agriculture biologique a été un facteur clé dans le développement de l'agriculture biologique dans l'UE. Pour la protection des intérêts des consommateurs et pour une compétition loyale, le Règlement (CE) 834/2007 établit des règles en matière d'étiquetage pour les produits issus de l'agriculture biologique. Un des éléments clés de ces règles d'étiquetage est l'introduction du nouveau logo biologique de l'Union Européenne, destiné à améliorer la reconnaissance des produits biologiques sur tout le territoire de l'UE et à fournir aux consommateurs la garantie que l'alimentation biologique est produite entièrement en conformité avec la réglementation. L'utilisation d'un logo requiert la compréhension du concept de l'agriculture biologique aussi bien que la connaissance de ce logo et la confiance des consommateurs dans ce logo. Pour cette raison, la cinquième question d'évaluation étudie la compréhension qu'ont les consommateurs du concept de l'agriculture biologique ainsi que leur connaissance du logo UE et des autres mentions obligatoires.

*L'évaluation conclut que même si le concept d'agriculture biologique est largement compris de la plupart des consommateurs de l'UE, le nouveau logo biologique UE et les autres mentions obligatoires ne disposent pas d'une grande notoriété auprès des consommateurs.*

La plupart des participants à l'enquête connaissait les principales caractéristiques de l'agriculture biologique telles que la non utilisation de produits chimiques de synthèse ou d'organismes génétiquement modifiés, l'utilisation de procédés respectueux de l'environnement. Cependant, une part importante des répondants ont également accordé certains attributs n'appartenant pas aux dispositions légales de l'agriculture biologique tels que « doit être produit dans de petites exploitations » ou « doit être produit localement ». Le niveau de compréhension du concept

d'agriculture biologique, globalement bon, révélé par l'étude vient contredire, dans une certaine mesure, les résultats d'études antérieures concernant d'une compréhension généralement limitée des principes de l'agriculture biologique.

La reconnaissance du logo biologique UE, introduit en 2010 et devenu obligatoire sans exception depuis juillet 2012, s'avère être limitée. Environ un quart des participants ont déclaré avoir déjà vu le logo biologique UE. Une analyse comparative de ce logo avec d'autres logos alimentaires biologiques et non-biologiques a montré que dans les six pays, excepté l'Italie, le logo UE était toutefois mieux connu que le précédent. Cependant, dans tous les pays, d'autres logos biologiques existent sur le marché et disposent d'une meilleure reconnaissance que le logo biologique UE.

Par ailleurs, les résultats révèlent que le niveau de connaissances des consommateurs relatif aux autres mentions obligatoires est plutôt faible. Moins de 10% des participants connaissent les autres mentions obligatoires telles que mention « Agriculture UE » ou « Agriculture non-UE » et numéro de code de l'organisme de contrôle. Cela pourrait être lié au fait que le numéro de code n'est pas facile à reconnaître et à mémoriser car il ne dispose pas d'une identification visuelle claire. Les personnes interrogées souscrivent davantage à la mention « Agriculture UE / non-UE », sans toutefois la considérer comme tout à fait suffisante pour une reconnaissance améliorée. Dans un monde globalisé, beaucoup de produits contiennent des ingrédients issus de pays UE et non-UE. Ces produits devraient donc pouvoir être étiquetés « Agriculture UE / non-UE » mais le gain d'information reste faible. Ainsi, dans sa forme actuelle, cette indication ne semble donc pas orienter les consommateurs dans leur acte d'achat. Selon la réglementation, les produits biologiques peuvent être étiquetés avec le nom d'un pays dans le cas où 98% de la matière première provient de ce pays, mais c'est un cas qui se présente rarement pour les produits agroalimentaire. En autorisant uniquement 2% des matières premières étrangères au pays indiqué, la réglementation est bien plus stricte que d'autres indications de production alimentaire régionale.

La connaissance des règles de production et du logo n'est pas suffisante pour orienter les décisions d'achat. La confiance des consommateurs est également un élément important. Bien que la confiance dans le logo UE biologique soit en moyenne relativement élevée selon les résultats du sondage auprès des consommateurs, l'importance du logo dans l'acte d'achat reste limitée. Seulement 13% des participants considèrent le logo biologique UE comme ayant une influence sur la décision d'achat, et les autres logos biologiques ont été perçus comme plus importants. Cela est probablement dû au fait que le logo biologique UE soit récent et encore peu connu.

C'est probablement aussi la raison pour laquelle la majorité des participants ne perçoivent le logo UE comme un indicateur de qualité. D'un autre côté, les attributs attachés typiquement à l'agriculture biologique telles que l'absence de résidus chimiques et d'additifs synthétiques sont

perçus comme des indicateurs de qualité par une large majorité des consommateurs indiquant que le logo biologique UE peut potentiellement servir comme un indicateur fort de qualité.

### **Administration et gestion simplifiée**

L'Union Européenne a établi la première réglementation communautaire relative à la production biologique en 1991 (CEE/2092/91) dans le but de protéger l'agriculture biologique en garantissant la concurrence loyale entre les producteurs et en améliorant la crédibilité des produits aux yeux des consommateurs. Durant les 15 années suivantes, la réglementation fera l'objet de plusieurs amendements, jusqu'à sa révision complète qui résultera dans l'abrogation des règlements et leur remplacement par le Règlement (CE) 834/2007 du Conseil avec ses règlement d'applications. La sixième question d'évaluation vise à établir si la révision du cadre réglementaire a contribué à la simplification des mesures légales, en termes d'administration et de gestion, par rapport au cadre réglementaire existant préalablement.

La simplification désigne ici la réduction de la lourdeur administrative, à la fois pour les producteurs et les administrations, obtenue par la conception de règles plus transparentes, plus compréhensibles et moins contraignantes à mettre en œuvre.

*L'évaluation conclut que le cadre législatif actuel pour l'agriculture biologique a permis d'améliorer de manière significative la transparence des mesures législatives applicables avant 2009, mais n'a pas simplifié l'administration et la gestion du dispositif.*

Plusieurs modifications ont contribué à améliorer la transparence telles que l'intégration des objectifs, principes et règles clés de production dans le texte principal de référence, l'introduction de titres et sous-titres et le regroupement de règles de production connexes (exemple des règles de production générales et règles de conversion). Toutefois, certains termes manquent de précision ou de clarté, en particulier en ce qui concerne le statut des animaux dans le cas de conversion non simultanée, les règles de protection des sols, la définition de la région et la définition de termes tels que 'irrégularités et infractions' ou 'haute qualité'. En outre, la structure des deux règlements a créé de l'incertitude et provoqué un surcroît de travail pour les organes de contrôle et les autorités compétentes pour interpréter les textes.

De plus, le procédé d'approbation des différentes substances autorisées a été rendu plus transparent, grâce à l'établissement de plusieurs critères clairs dans la réglementation et par la constitution d'un groupe d'experts (EGTOP) chargé de mettre au point des recommandations. Cependant, le processus d'approbation reste long et mobilise beaucoup de ressources sans satisfaire toutes les attentes des opérateurs. De plus, les recommandations des experts ne peuvent remplacer une procédure politique dans les cas les plus complexes. Aucun changement n'a été introduit en ce qui concerne l'approbation de produits autorisés (par opposition aux substances) pouvant être utilisés par les opérateurs. Cette disposition continue d'être gérée au niveau national ou par les organismes de contrôle individuels mais dans certains des pays d'étude

de cas, il existe un manque d'accompagnement des opérateurs concernant les produits utilisables.

Bien qu'il ait amélioré la transparence, le nouveau régime réglementaire n'a pas significativement simplifié l'administration et la gestion pour les opérateurs, les organismes de contrôle et les autorités compétentes, par exemple en raison des marges d'interprétation. Les lourdeurs administratives restent un frein à la conversion pour les opérateurs, en particulier les petits. En ce qui concerne l'intégration des règles exceptionnelles en remplacement des dérogations, les parties prenantes ont noté peu d'avancés pour les agriculteurs (dues à la suppression de règles exceptionnelles pour l'alimentation des ruminants) et pour les services de contrôles (dues à la réduction du besoin d'accorder les exceptions). Néanmoins, les réductions au niveau du contrôle sont contrebalancées par une augmentation de la charge de travail pour les autorités compétentes qui sont responsables des autorisations concernant les règles exceptionnelles et pour la Commission qui doit approuver l'utilisation des règles exceptionnelles dans des Etats-Membres.

### **La valeur ajoutée de la législation EU pour l'agriculture biologique**

Toute activité entreprise au niveau de l'UE, telle que la législation UE sur l'agriculture biologique, doit apporter une valeur ajoutée UE, qui peut être définie comme la valeur ajoutée d'une intervention à l'échelle communautaire par rapport à une action similaire mise en œuvre à l'échelle régionale ou nationale. Dans le cas de la réglementation de l'agriculture biologique, la valeur ajoutée UE est particulièrement importante dans la mesure où l'agriculture biologique peut contribuer à plusieurs priorités de l'UE et est particulièrement ciblée par des financements européens. La septième question d'évaluation vérifie dans quelle mesure la législation européenne sur l'agriculture biologique contribue à une valeur ajoutée UE supérieure à celle qui aurait été obtenue par une action isolée d'Etats-Membres ou de régions. Une attention particulière est accordée à la cohérence vis-à-vis des priorités de la politique de l'UE, à la capacité à servir ces priorités, et à la question de savoir si la subsidiarité est garantie.

*L'évaluation conclut que la législation dégage une valeur ajoutée européenne, par sa bonne cohérence avec les objectifs généraux de l'UE pour l'agriculture biologique et avec les autres priorités clés de l'UE, auxquels elle contribue efficacement, bien que certains liens puissent être renforcés.*

Les analyses documentaires montrent qu'il existe une cohérence particulièrement bonne entre la réglementation et les priorités de l'UE pour l'innovation, la qualité des produits agricoles, l'agro-environnement, la biodiversité, la qualité de l'eau, la conservation des sols, le bien-être animal tout autant que la protection du consommateur et l'étiquetage des produits alimentaires. Elles montrent aussi une bonne cohérence avec les priorités de l'UE pour le marché intérieur, l'atténuation du changement climatique, les modes de production et de consommation durables, la sécurité alimentaire et la compétitivité. Par ailleurs, la cohérence peut être améliorée avec

certaines éléments spécifiques des priorités de l'UE concernant l'utilisation durable de l'eau et de la collecte de données de marché.

Concernant la réalisation des priorités de la politique de l'UE, les résultats de l'évaluation montrent que la réglementation est efficace pour générer une valeur ajoutée qui contribue aux priorités environnementales, d'atténuation du changement climatique et de bien-être animal, et se révèle être généralement complémentaire des moyens de financement européens tels que la PAC et les fonds pour la recherche et l'information. En revanche, sa contribution à la priorité de l'UE pour mieux légiférer reste limitée et pourrait être améliorée en établissant des liens plus clairs entre les objectifs, les principes généraux et les règles détaillées, ainsi qu'en traduisant, en règles opérationnelles, les objectifs d'utilisation durable de l'eau et de l'énergie et de gestion des habitats.

Peu d'éléments permettent de juger de l'allocation des responsabilités concernant le principe de subsidiarité et il a été constaté que les avis des autorités compétentes diffèrent sur ce point.

### **Contribution du cadre réglementaire au développement durable de l'agriculture biologique**

L'un des objectifs principaux du Règlement (CE) 834/2007 est de fournir la base pour le développement durable du secteur de l'agriculture biologique. Bien que ce terme ne soit pas défini dans la réglementation, cette dernière insiste sur le fait que le développement durable doit être vu dans le contexte du double rôle sociétal des modes de production biologique, c.-à-d. produire des aliments en réponse à une demande des consommateurs pour des produits biologiques, et produire des biens publics qui contribuent à la protection de l'environnement et au bien-être animal, ainsi qu'au développement rural. La huitième question d'évaluation vise à évaluer dans quelle mesure la réglementation a contribué au développement durable du secteur, c'est-à-dire sur le plan économique, environnemental et social.

*L'évaluation conclut que, dans un contexte où se mêlent des influences économiques de marché et d'autres facteurs, la réglementation a contribué au développement du secteur. Ce développement est durable, particulièrement dans des situations où l'environnement politique est favorable.*

Le Règlement (CE) 834/2007 a maintenu l'impulsion créée par l'ancienne réglementation en encourageant un marché domestique et d'importation d'aliments biologiques fort, principalement par la définition de règles détaillées pour l'agriculture biologique. En unifiant le cadre réglementaire, auparavant fragmenté, la réglementation a fourni une base importante pour le développement du secteur. La contribution au développement du marché peut être quelque peu affaiblie parce que certaines règles de production peuvent être interprétées de façons plus ou moins strictes, entraînant ainsi des distorsions de compétitivité entre les acteurs de différentes régions de l'UE (par exemple la définition d'une « région » pour l'alimentation animale et de « l'agriculture industrielle » pour le fumier).

Concernant la durabilité économique de ce développement, la réglementation propose une base claire pour le développement des entreprises biologiques et pour l'élaboration de politiques de soutien, particulièrement celles issues des programmes de développement rural des Etats-Membres. Cependant, il est important de noter que les décisions des producteurs biologiques sont influencées par un large éventail de facteurs extérieurs, en dehors de la législation.

De plus, la réglementation a établi un cadre qui encourage les agriculteurs à adopter des pratiques favorables à l'environnement. Toutefois, la viabilité écologique du développement du secteur dépend en partie de la manière dont les règles et le concept de l'agriculture biologique sont interprétés, et ne peut être entièrement attribué à la législation. Les bénéfices environnementaux pour le futur dans lesquelles la production biologique peut jouer un rôle, incluent le potentiel de réduction des écarts de productivité entre les systèmes biologique et conventionnel et la conversion des systèmes de production extensifs.

La durabilité sociale du secteur n'est pas vraiment démontrée mais il existe un fort potentiel en termes de bénéfices sociaux-économiques si le développement pouvait être favorisé dans les petites exploitations des zones rurales désavantagées, au travers, par exemple, de la certification de groupes ou de mesures adaptées du règlement de développement rural.

## Conclusions générales et recommandations

L'évaluation montre que la réglementation UE relative à la production biologique fournit, d'une manière générale, une base solide pour le développement durable de la production biologique dans l'Union Européenne. Cependant, l'analyse révèle également un certain nombre de points d'amélioration possibles du cadre réglementaire. Suite à la description du contexte économique et réglementaire du secteur de l'agriculture biologique et aux jugements issus des huit questions d'évaluation, peuvent être déduits six types d'actions, regroupées en deux domaines qui sont garantir la pertinence des dispositions légales et améliorer l'efficacité de ces dispositions.

Afin de garantir la pertinence du cadre législatif par rapport aux objectifs établis dans la réglementation, trois types de recommandations peuvent être formulées. Tout d'abord, pour quelques domaines seulement, l'introduction de règles plus détaillées devrait être envisagée au niveau européen ou à celui des Etats-Membres (par exemple concernant les dispositions d'incubation et d'élevage de poulets biologiques). Ensuite, dans de nombreux cas, les règles actuelles sont satisfaisantes, mais leur interprétation et mise en œuvre manque d'homogénéité entre Etats-Membres. Pour celles-ci, il est suggéré de clarifier les dispositions et d'accompagner davantage les autorités des Etats-Membres les organismes de contrôle et les autres acteurs, par exemple, en clarifiant le sens de termes comme « utilisation durable des ressources naturelles » ou en expliquant comment des objectifs tels que « un niveau élevé de biodiversité » peuvent être traduits en règles opérationnelles. Enfin, dans certains domaines, une mise en œuvre plus adéquate ou mieux harmonisée est difficile du fait d'un manque d'information. Rassembler et

mettre à disposition de la CE et des Etats-Membres davantage d'information pour la simplification des règles et le suivi de leur mise œuvre (à travers, par exemple, des données de marché) permettraient d'améliorer la situation.

Le deuxième champ d'action se réfère aux règles jugées pertinentes mais dont l'impact pourrait être augmenté, c'est à dire dont on pourrait améliorer l'atteinte des objectifs poursuivis. Cela pourrait être réalisé par un changement des dispositions (par exemple, en remplaçant le contrôle annuel par un système basé sur l'analyse du risque), l'utilisation de certaines mesures de soutien et outils (par exemple des critères précis et ciblés de rendement pour le suivi des résultats en matière de bien-être animal, pouvant être aussi bien utilisés lors des contrôles d'inspection ou par les opérateurs eux-mêmes lors d'auto-évaluation) ou par un niveau plus élevé d'information et le renforcement des capacités des acteurs (par exemple une campagne d'information destinée aux consommateurs pour sensibiliser au concept UE d'agriculture biologique, au logo biologique UE et aux indications additionnelles obligatoires).

## Table of Contents

<b>Executive Summary</b>	i
<b>Résumé exécutif</b>	xvii
<b>Part A Descriptive part</b>	1
<b>1 Evaluation of the EU legislation on organic farming – An introduction</b> Jürn Sanders	3
<b>2 Development of the EU organic sector and the world market in organic products</b> Jürn Sanders, Helga Willer	15
<b>3 EU organic farming legislation and its development</b> Jürn Sanders, Otto Schmidt	25
<b>4 Support measures applied to the EU organic farming sector</b> Jürn Sanders	31
<b>5 Intervention logic of the EU legislation on organic farming</b> Susanne Padel, Anja Viehweger, Jürn Sanders	41
<b>Part B Replies to the evaluation questions</b>	51
<b>6 Adequacy of the scope of the Regulation</b> Susanne Padel, Liz Adams, Carolyn Foster	53
<b>7 Adequacy of the production rules</b> Susanne Padel, Anja Vieweger, Laura Nocentini, Alice Devot, Otto Schmid, Matthias Stolze	73
<b>8 Adequacy of the overall control system</b> Matthias Stolze, Beate Huber, Jochen Neuendorff	131

<b>9</b>	<b>Adequacy of the import regime</b>	<b>165</b>
	Beate Huber, Jochen Neuendorff, Matthias Stolze	
<b>10</b>	<b>Consumer perception on organic farming</b>	<b>191</b>
	Katrin Zander, Raffaele Zanolì	
<b>11</b>	<b>Simplified administration and management of the organic farming legislation</b>	<b>219</b>
	Susanne Padel, Carolyn Foster	
<b>12</b>	<b>The EU added value of the organic farming legislation</b>	<b>235</b>
	Jana Poláková, Clunie Keenleyside, Henrietta Menadue	
<b>13</b>	<b>Contribution of the organic farming legislation to the sustainable development of the organic farming sector</b>	<b>255</b>
	Jana Poláková, Clunie Keenleyside, Henrietta Menadue	
<b>Part C</b>	<b>Overall conclusions and recommendations</b>	<b>271</b>
<b>14</b>	<b>Towards an improved legislative framework for organic farming – Overall conclusions and recommendations</b>	<b>273</b>
	Jörn Sanders, Susanne Padel, Laura Nocentini, Matthias Stolze, Beate Huber, Katrin Zander, Jana Poláková, Clunie Keenleyside	
	<b>List of References</b>	<b>295</b>
	<b>Bibliography</b>	<b>297</b>
	<b>Regulations</b>	<b>319</b>
	<b>Directives</b>	<b>321</b>

## List of Tables

Table 1.1:	Overview of evaluation themes and Evaluation Questions (EQ)	5
Table 1.2:	Share of participants in different consumption classes (in percentage)	12
Table 2.1:	Development of the organic area in EU Member States between 2000 and 2011	17
Table 2.2:	Changes of the organic area per land use category in EU Member States between 2007 and 2011	18
Table 2.3:	Changes in organic livestock production in EU Member States between 2007 and 2010	19
Table 2.4:	Key data on organic farming in different global regions in 2011	20
Table 2.5:	Changes in organic sales per capita (left) and total sales in EU Member States between 2007 and 2011	22
Table 4.1:	Overview of organic action plans or similar support schemes in EU Members States implemented in 2007-2011	39
Table 6.1:	Estimates of catering sales values in 2011 in some Member States based on national sources	58
Table 6.2:	Summary of the main arguments of mass caterers in the case study countries regarding inclusion/exclusion of mass catering	60
Table 7.1:	Link between the production rules in Regulation (EC) 834/2007 and related provisions in Regulation (EC) 889/2008	76
Table 7.2:	Production rules and organic objectives and principles	80
Table 7.3:	Management of the non-organic seed exceptional rule in 2011 in EU Member States where case studies were carried out	107
Table 7.4:	Analysis of the evolution of the exceptions granted (volume and diversity) compared to the development of organic areas between 2007 and 2011	108
Table 7.5:	Number of exceptional rules that are in use for specific sectors based on Regulation (EC) 834/2007 and (EC) 889/2008	122
Table 8.1:	Views of stakeholders regarding the importance of annual inspections and additional risk-based inspections to ensure fair competition (mean values)	135
Table 8.2:	Average number of control visits of organic control bodies and control authorities per operator and year (one control body/control authority per country)	136
Table 8.3:	Views of stakeholders regarding the inclusion of the retail sector in the control system (mean values)	141
Table 8.4:	Views of stakeholders regarding the importance of sampling and testing, systematic investigations and the definition of non-compliance and sanction categories to ensure fair competition (mean values)	145
Table 8.5:	Views of stakeholders regarding the differences in the control system between Member States (mean values)	146
Table 8.6:	Mean values of extent of trust in different actors or institutions in different countries	154

Table 8.7:	Mean values of extent of confidence in control bodies and rules in different countries	154
Table 9.1:	The different approaches and options of the import regime	166
Table 9.2:	Views of stakeholders regarding the equivalence of organic standards and controls in third countries compared to EU requirements	169
Table 9.3:	Number of import authorisations per product group notified in the period 01.01.-21.06.2013	172
Table 9.4:	List of third countries and relevant specifications	174
Table 9.5:	Number of countries where at least one control body is recognised to carry out controls and issue certificates of inspection in third countries differentiated for individual product categories	176
Table 9.6:	Identified irregularities in unprocessed organic foods sold on the German market between 2002 and 2011, differentiated by country of origin	178
Table 9.7:	Views of control bodies and authorities regarding the effectiveness of the control system for imported organic products (mean value)	181
Table 9.8:	Views of importers regarding the effectiveness of the control system for imported organic products	181
Table 10.1:	Share of consumers giving a correct answer with regard to the legal definition of specific production requirements of organic food (in percentage; n = 500 per country)	195
Table 10.2:	Share of consumers giving a correct answer with regard to the legal definition of specific production requirements of organic food differentiated in the level of expertise and consumption of organic food (in percentage)	196
Table 10.3:	Share of consumer having seen the EU logo before (in percentage; n = 500 per country)	197
Table 10.4:	Share of answers with regard to meanings of the EU logo (in percentage; n = 500 per country)	198
Table 10.5:	Logos tested in the consumer survey	199
Table 10.6:	Share of logos recognised by respondents as organic logos (in percentage; n = 500 per country)	200
Table 10.7:	Share of respondents being aware of additional mandatory indications (n = 500 per country)	202
Table 10.8:	Degree of confidence in different (organic) logos (Mean values)	204
Table 10.9:	Share of respondents trusting in the respective indications (in percentage; n = 500 per country)	205
Table 10.10:	Views of consumers regarding trust in organic food by frequency of organic food consumption (Mean agreement with statements)	206
Table 10.11:	Share of respondents indicating the relevance of different (organic) logos for the purchase decision on organic food (in percentage)	207
Table 10.12:	Share of respondents identifying different characteristics of high quality products (in percentage; n = 500 per country)	210

Table 10.13:	Share of respondents for which different logos indicate high product quality (in percentage; n = 500 per country)	211
Table 11.1:	Structure of Regulation (EC) 834/2007 compared with old regime	222
Table 12.1:	EU priorities directly related to common rules in Regulation (EC) 834/2007 on internal market with organic products	240
Table 12.2:	EU priorities indirectly related to common rules in EU organic farming legislation on internal market with organic products	243

## List of Figures

Figure 1.1:	Overview of tools used to gather data and information for answering the evaluation questions (EQ)	7
Figure 2.1:	Share of organic area in the total utilised agricultural area (left) and share of EU-27 total organic area (right) in different Member States in 2011	16
Figure 2.2:	Organic sales per capita (left) and total organic sales (right) in EU Member States in 2011	21
Figure 2.3:	Number of organic importers and processors in 2011	23
Figure 2.4:	Distribution of organic food sales by single market in 2011 and the ten countries with the largest markets for organic food 2011	24
Figure 3.1:	Overview of the EU legislative framework of organic farming	26
Figure 4.1:	Maintenance payments in 2011 and average public expenditure per ha in 2008-2009 in EU Member States	34
Figure 4.2:	Overview of identified national or regional public measures addressing organic farming which are not (co-) funded by the EAFRD or EAGF in 2007-2011	37
Figure 5.1:	Global objectives of Regulation (EC) 834/2007 and relevant objectives of the CAP 2007-2013 in relation to the legislative measures of the regulation	44
Figure 5.2:	Global, intermediate and specific objectives of Regulation (EC) 834/2007 in relation to its legislative measures	46
Figure 5.3:	The different types of production rules in relation to the specific principles and objectives of the Regulation (EC) 834/2007	48
Figure 5.4:	Labelling and control rules, and rules of trade with third countries in relation to the specific objectives of the Regulation (EC) 834/2007	49
Figure 6.1:	Views of stakeholders regarding the coverage of mass catering in the Regulation (n= 265)	59
Figure 6.2:	Views of stakeholders regarding coverage of cosmetics and textiles in the Regulation (n= 265)	65
Figure 7.1:	Number and categorisation of production rules for different sectors in Regulation (EC) 834/2007	77
Figure 7.2:	Compensation of local land-use intensity by landscape complexity	84
Figure 7.3:	Views of consumers regarding the availability of organic products	97
Figure 7.4:	Share of area grown with exceptional rule non-organic seeds of total organic area, 2011 (ha)	105
Figure 9.1:	Views of consumers regarding trust in organic products coming from other countries (Mean agreement with statements)	184
Figure 10.1:	View of consumers regarding the indication 'EU/non-EU Agriculture' (Mean agreement with statements)	203

Figure 10.2:	Views of consumers regarding trust in organic food (Mean agreement with statements)	206
Figure 10.3:	Views of consumers regarding the EU logo for organic products (Mean agreement with statements)	208
Figure 11.1:	Views of stakeholders whether the new organic farming legislation is more transparent than Regulation (EEC) 2092/91 (219 respondents)	223
Figure 12.1:	EU added value test	235
Figure 14.1:	Overview of measures to ensure the adequacy and increase the effectiveness of the legislation	291

## List of Abbreviations

<b>AFI</b>	Anti Fraud Initiative
<b>AGES</b>	Österreichische Agentur für Gesundheit und Ernährungssicherheit Austrian Agency for Health and Food Safety
<b>AIAB</b>	Associazione Italiana per l'Agricoltura Biologica Italian Association for Organic Agriculture
<b>ANI</b>	Animal Needs Index
<b>ANSI</b>	American National Standards Institute
<b>BDIH</b>	Bundesverband der Industrie- und Handelsunternehmen Federal Association of Manufacturers and Distributors
<b>CAAE</b>	Comité Andaluz de Agricultura Ecológica Andalusian Committee for Organic Agriculture
<b>CAP</b>	Common Agricultural Policy
<b>CEE</b>	Central and Eastern European
<b>CERTCOST</b>	Economic analysis of certification systems for organic food and farming
<b>CMS</b>	Cytoplasmic Male Sterility
<b>COSMOS</b>	Cosmetics Organic Standard
<b>DEFRA</b>	Department for Environment, Food and Rural Affairs
<b>DG SANCO</b>	Directorate for Health and Consumers of the European Commission
<b>EAFRD</b>	European Agricultural Fund for Rural Development
<b>EAGF</b>	European Agricultural Guarantee Fund
<b>EAV</b>	EU Added Value
<b>EC</b>	European Commission
<b>ECO-PB</b>	European Consortium for Organic Plant Breeding
<b>EEC</b>	European Economic Community
<b>EGTOP</b>	Expert Group for Technical Advice on Organic Production
<b>ENRD</b>	European Network for Rural Development
<b>EOAP</b>	European Organic Action Plan
<b>EOCC</b>	European Organic Certifiers Council
<b>EU</b>	European Union

<b>EU-12</b>	Poland, Czech Republic, Cyprus, Latvia, Lithuania, Slovenia, Estonia, Slovakia, Hungary, Malta, Bulgaria, Romania
<b>EU-15</b>	Belgium, Greece, Luxembourg, Denmark, Spain, Netherlands, Germany, France, Portugal, Ireland, Italy, United Kingdom, Austria, Finland, Sweden
<b>FAO</b>	Food and Agriculture Organisation
<b>FEDERBIO</b>	Federazione Italiana Agricoltura Biologica e Biodinamica Italian Federation of Organic and Biodynamic Agriculture
<b>FNAB</b>	Fédération nationale d'agriculture biologique des régions de France National Federation of Organic Agriculture regions of France
<b>FP</b>	Framework Programme
<b>GfRS</b>	Gesellschaft für Ressourcenschutz Society for Resource Protection
<b>GHG</b>	Greenhouse Gas
<b>GM</b>	Genetically Modified
<b>GMO</b>	Genetically Modified Organism
<b>GOTS</b>	Global Organic Textile Standard
<b>GPP</b>	Green Public Procurement
<b>HNV</b>	High Nature Value
<b>ICEA</b>	Istituto per la Certificazione Etica ed Ambientale Environmental and Ethical Certification Institute
<b>IFOAM</b>	International Federation of Organic Agriculture Movements
<b>IOAS</b>	International Organic Accreditation Service
<b>IRM-ORGANIC</b>	Training on improved risk management tools for organic inspectors (Leonardo Da Vinci – Lifelong Learning Program)
<b>ISO</b>	International Standards Organisation
<b>N</b>	Nitrogen
<b>NGOs</b>	Non-Governmental Organisations
<b>NSF</b>	National Sanitation Foundation
<b>NUTS</b>	Nomenclature of Territorial Units for Statistics
<b>OFIS</b>	Organic Farming Information System
<b>ÖLG</b>	Öko-Landbaugesetz German Organic Farming Law

<b>PGI</b>	Protected Geographical Indication
<b>PGO</b>	Protected Designation of Origin
<b>RDP</b>	Rural Development Programme
<b>REFIT</b>	Regulatory Fitness and Performance Programme
<b>SAU</b>	
<b>SCOF</b>	Standing Committee of Organic Farming
<b>SKAL</b>	(Company name of a Dutch inspection body for organic production)
<b>SMEs</b>	Small and Medium Sized Enterprises
<b>UAA</b>	Utilisable Agricultural Area
<b>USDA</b>	United States Department of Agriculture

## List of country codes

<b>AT</b>	Austria
<b>BE</b>	Belgium
<b>BG</b>	Bulgaria
<b>CY</b>	Cyprus
<b>CZ</b>	Czech Republic
<b>DE</b>	Germany
<b>DK</b>	Denmark
<b>EE</b>	Estonia
<b>ES</b>	Spain
<b>FI</b>	Finland
<b>FR</b>	France
<b>GR</b>	Greece
<b>HU</b>	Hungary
<b>IE</b>	Ireland
<b>IT</b>	Italy
<b>LT</b>	Lithuania
<b>LU</b>	Luxembourg
<b>LV</b>	Latvia
<b>MT</b>	Malta
<b>NL</b>	Netherlands
<b>PL</b>	Poland
<b>PT</b>	Portugal
<b>RO</b>	Romania
<b>SE</b>	Sweden
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# **PART A**

## **Descriptive part**



## Chapter 1

# Evaluation of the EU legislation on organic farming – An introduction

### 1.1 Background and aims of the evaluation

For many decades, the European organic sector was characterised by a system of voluntary private standards and third party inspection of those farms who wanted to use these organic labels. This changed when European governments introduced national legislation on organic farming in the 1980s. France was the first country to introduce such a legal framework in 1980, followed by Austria in 1983 and Denmark in 1987. The aims of these state rules were to protect consumers from misleading claims and creating a level playing field for organic producers.

In response to the growing consumer demand for certified organic products, and with the aims of protecting organic farming, as well as ensuring fair competition between producers, and transparency at all stages of production and processing across the EU, the European Council introduced in 1991 an EU-wide definition of organic farming with the Regulation (EEC) 2092/91<sup>1</sup>. The regulation sets out rules for organic crop production with reference to agricultural products and foodstuffs. The most commonly used terms in the different European countries, e.g. organic, biological, and ecological,<sup>2</sup> were protected. Rules on organic livestock and foodstuffs were introduced eight years later with Regulation (EC) 1804/1999, supplementing the existing organic regulation. These legislative measures are understood as one of the most important driving forces for the organic farming sector in the EU (Dabbert, 2001). The regulatory framework facilitated trade of organic products within and outside the EU and provided the possibility to address organic farming specifically under the European agri-environment measure (Regulation (EEC) 2078/92).

Despite EU-wide rules for organic farming, internal trade of organic products was still hampered mainly due to many different national and private standards and their implementation (European Commission, 2004). To minimise this problem, the European Commission<sup>3</sup> recognised the need to develop common objectives, a multilateral concept of equivalence and a further harmonisation of inspection requirements, as well as to put more emphasis on the EU organic logo. In the

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<sup>1</sup> Full references of all regulations mentioned in this report are given in the List of References.

<sup>2</sup> Different spellings and the terms used in other European languages were also included in the legislation.

<sup>3</sup> The European Commission is hereinafter also called Commission.

European Action Plan for Organic Food and Farming (EOAP)<sup>4</sup> of 2004, the European Commission proposed therefore to improve and reinforce the Community's organic farming standards as well as import and inspection requirements, and specified a number of actions with respect to standards and inspection (ibid.). Consequently, Regulation (EEC) 2092/91 was revised, which resulted in the adoption of the new Council Regulation (EC) 834/2007<sup>5</sup> in 2007 and the Commission Implementing Regulation (EC) 889/2008 (production and labelling) and (EC) 1235/2008 (import) in 2008. This new organic farming legislation, which came into force on the 1<sup>st</sup> of January 2009, describes the underlying objectives and principles of organic agriculture, sets organic production standards and defines the control and labelling requirements. Since then the legislative framework has been supplemented, e.g. by rules on aquaculture in 2009 (Regulation (EC) 710/2009) and wine production in 2012 (Regulation (EC) 203/2012), amending Regulation (EC) 889/2008.

In view of these changes to the regulatory framework and the dynamic development of the organic farming sector, the question arises, to what extent the new organic farming legislation has proven to be adequate to achieve its objectives and to what extent has it contributed to a sustainable development of organic farming in the EU. Against this background, this evaluation aims to examine the adequacy<sup>6</sup> and effectiveness<sup>7</sup> of the Council Regulation (EC) 834/2007 and its implementing rules with respect to:

- ensuring the effective functioning of the internal market, guaranteeing fair competition and to ensuring consumers' confidence (i.e. with respect to the global objectives of the Regulation as set out in Article 1)
- establishing a sustainable management system for agriculture, producing products of high quality and producing a wide variety of foods and other agricultural products that respond to consumers' demand for goods produced by the use of processes that do not harm the environment, human health, plant health or animal health and welfare (i.e. with respect to the objectives of organic production as set out in Article 3).

More specifically, this work addresses eight evaluation questions that are grouped under seven evaluation themes (see Table 1.1). In answering the evaluation questions, the role of each of the legislative measures applied within the organic legislative framework is assessed. The examination period is mainly from 2009 onwards. The period since 2000 is used as a reference to cover the situation governed by the previous legislation on organic farming. Furthermore, the period from 2013 onwards is taken into consideration to evaluate the adequacy and justification of phasing out exceptional production rules and the abolition of the import authorisations for

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<sup>4</sup> The action plan is hereinafter also called EU Organic Action Plan (EOAP).

<sup>5</sup> Council Regulation (EC) 834/2007 is hereinafter also called Regulation.

<sup>6</sup> Adequacy is defined here as the state of being sufficient in relation to intervention's objectives.

<sup>7</sup> Effectiveness is defined here as the extent to which objectives pursued by an intervention are achieved.

products from third countries, as well as to contextualise the EU added value of the organic farming legislation.

The evaluation itself is carried out in the framework of the Regulatory Fitness and Performance Programme (REFIT) of the European Commission. The programme aims to identify burdens, inconsistencies, gaps and ineffective measures, in order to make EU legislation more effective and efficient in achieving its public policy objectives (European Commission, 2012).

**Table 1.1:** Overview of evaluation themes and Evaluation Questions (EQ)

Theme 1	- To what extent is the <b>scope of the Regulation</b> adequate to match the current needs of the organic farming supply and distribution chain and those of the consumers of organic products? (EQ 1)
Theme 2	To what extent have the <b>organic production rules</b> been adequate to achieve the global objectives of the Regulation and the general objectives of organic production, as laid down in the regulation? (EQ 2)
Theme 3	- To what extent has the overall <b>control system</b> of organic farming, from the Commission, through Member States competent authorities, control authorities, control bodies to accreditation bodies, been adequate to achieve the global objectives of the Regulation? (EQ 3)
Theme 4	- To what extent have the <b>import rules</b> been adequate to achieve the global objectives of the Regulation? (EQ4)
Theme 5	- To what extent is the concept of organic farming understood by the <b>consumers</b> in the EU? (EQ 5)
Theme 6	- To what extent has the current legislative framework for organic farming contributed to achieving a <b>simplified administration</b> and management of the legislative measures applied to the organic sector as compared to the legal framework applicable before 2009? (EQ 6)
Theme 7	- To what extent has the EU legislative framework for organic farming created <b>EU added value</b> , notably by introducing common rules on the internal market? (EQ 7) - To what extent has the EU legislative framework for organic farming contributed to the <b>sustainable development of the organic farming</b> sector? (EQ 8)

Source: Own presentation.

## 1.2 Methodologies and methodological challenges

### 1.2.1 General considerations

Evaluating the degree of adequacy of the Regulation, and its implementing rules, ideally requires a) to measure the distinct effects of the rules on the objectives and b) to have clear thresholds indicating whether an impact is adequate and effective or not. These requirements are however not always given. Therefore this evaluation like many other evaluation exercises is facing two main challenges.

First, quantitative methods using robust data would be well suited to measure the effects of the rules on the objectives. In the case of organic farming legislation, however, such data is rarely

available. Also, it is worth noting that quantitative approaches alone are often less effective for understanding the mechanisms by which a particular provision results in the observed impact. Thus there is a danger to measure an impact but not to understand it fully, which is described in social science as a Cartesian trap. To avoid this, a mix of quantitative and qualitative methods is often used, which may result in a more comprehensive evaluation of an intervention (Rao and Woolcock, 2003; Bamberger et al., 2010).

And second, if it is possible to measure the effects of rules on the objectives, any judgement of their adequacy requires clear thresholds to qualify them. The challenge of this evaluation is that the objectives of organic production and the objectives of the Regulation use several ill-defined terms and the Regulation does not suggest any thresholds that clearly indicate whether an objective is achieved or not. For example, the Regulation lays down that organic production aims to establish a sustainable management system for agriculture that contributes to a high level of biological diversity, but it does not provide any definition as to what a high level of biodiversity means and also does not suggest any quantitative thresholds that could be used.

To address these challenges, the following common evaluation approach was applied. First, judgement criteria were deduced for each evaluation question – either from the intervention logic of the organic farming legislation (see Chapter 5) or the background of the evaluation question. Each criteria was operationalized by specifying several indicators and (if applicable) thresholds as well as by defining relevant terms. This evaluation used available statistics, the views of stakeholders and experts, the findings from documentary analyses (including scientific evidence where it exists), the outcomes from specific case studies and surveys as data sources. To arrive at the judgement these different pieces of information were subsequently triangulated and critically reflected following usual approaches in social science (Alvesson and Sköldberg, 2000; Silvermann, 2010). In the case of contrary results, reasoning was given, why certain results were given a higher priority or a greater importance than others. Finally, based on the judgement, recommendations were developed that show in which area the EU legislation on organic farming could be improved to ensure its adequacy and to improve its effectiveness.

## 1.2.2 Tools used for data gathering

A range of different data and information sources were used for the different evaluation questions (see Figure 1.1) that are described in more detail below.

**Figure 1.1:** Overview of tools used to gather data and information for answering the evaluation questions (EQ)

	EQ 1	EQ 2	EQ 3	EQ 4	EQ 5	EQ 6	EQ 7	EQ 8
	Scope	Production rules	Control system	Import regime	Consumer perception	Simplification	EU-added value	Sustain. Develop.
<b>National case studies</b>								
Review of documents	■	■	■				■	■
Data gathering	■	■	■					
Interviews	■	■	■			■	■	■
<b>Fraud case study</b>								
			■					
<b>Import case study</b>								
				■				
<b>Documentary analysis</b>								
Other relevant legislations	■						■	■
Private standards	■	■						
EU or national policy documents		■	■			■	■	■
Scientific publications		■	■	■	■	■		
<b>Semi-structured interviews</b>								
			■	■		■		
<b>Stakeholder survey</b>								
	■		■	■			■	
<b>Consumer survey</b>								
	■	■	■	■	■			

Source: Own presentation.

### National case studies

In order to gain an in-depth knowledge of the implementation and adequacy of the organic farming legislation in individual Member States, national data was collected in 13 EU Member States (Austria, Bulgaria, Czech Republic, Denmark, Estonia, France, Germany, Italy, Netherlands, Poland, Slovenia, Spain, United Kingdom). The choice of countries reflects a) different sizes of the national organic sector (share of organic land area, share of organic farms), b) different market shares (total and per capita), c) different certification and control systems, and d) a balanced representation of EU-15 and EU-12 Member States.<sup>8</sup>

Data collection included:

- national documents such as regulations, selected private standards, national scientific and grey literature and documents describing the set-up of the national control system;

<sup>8</sup> Since the evaluation started in 2012, Croatia has not been considered.

- semi-structured interviews with national organic stakeholders<sup>9</sup> to gather their views in relation to the scope of the Regulation, implementation of the rules in certain production sectors, control system, potentials for simplification, EU added value of the Regulation and sustainable development of the organic sector;
- data and information on a) GMO contamination and availability of GMO-free additives, b) certification and control systems and c) products labelled as organic in the market originating from non-food scopes.

### **Fraud case study**

In order to understand how effective the control system prevents fraud, and thus ensures consumer confidence and fair competition on the organic marketplace, information and data have been collected about the fraud case 'Gatto con gli stivali' affecting a number of EU Member States. 'Gatto con gli stivali' was one of the largest fraud cases in the EU concerning organic products covered by the EU legislation. Approximately 703 000 tons of falsely-labelled conventional products were sold as organic, corresponding with an estimated financial damage of around 220 million EUR.

In a first step, key deficiencies were identified, described and related to the responsibilities of relevant actors of the control system (control bodies, competent authorities, accreditation bodies, EU Commission), by analysing:

- several public documents such as press releases, press reports and case summaries, as well as material from two workshops<sup>10</sup> organised to analyse and discuss the causes and consequences of the fraud case;
- several unpublished internal documents (minutes from meetings, internal communications) exchanged between operators, control bodies and authorities in different EU Member States and email exchanges on the fraud case;
- interviews with stakeholders (representatives of the Italian fiscal police, control bodies, competent authorities and operators in different Member States of the European Union).

To identify which results of the case studies are specific to the fraud case and which results can be generalised, in a second step, personal or telephone interviews and email consultations were conducted with key-actors from the European Organic Certifiers Council (EOCC), Italian

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<sup>9</sup> In total 246 interviews were carried out with representatives of the following target groups: competent authorities, authority for/ministry of agriculture, authority for/ministry of environment, authority for/ministry of consumers affairs, organic producer organization, farm advisor, scientist, control bodies, environmental NGO, organic retailer, organic mass caterer, companies dealing with cosmetics/textiles, product-specific business groups, product-specific wholesaler, trader or processor.

<sup>10</sup> BLE-Expert-Workshop: 'Potentials for improvement of the control system' in Bonn (DE) in March 2012; AFI/FEDERBIO workshop: 'The making of cats in boots' in Bologna (IT) in September 2012.

Federation of Organic and Biodynamic Agriculture (FEDERBIO), IFOAM EU Group, competent authorities of different Member States (Austria, Germany, Italy) and representatives of the EU Commission.

### **Import case study**

The import case-study was carried out to understand the adequacy and effectiveness of a) the procedures set-out in the import regime, b) the supervision of recognised control bodies and control authorities and c) the control measures applied and the control system in place in third countries. Three relevant cases of organic products imported from countries outside of the European Union were chosen for the case study: Organic bananas from Latin America, organic soybeans from South-Eastern Europe and organic tea from Asia. The three products were selected, because they all were affected by frequently occurring residue cases (pesticides, GMOs) in the years 2010 to 2012 and all three were of high market importance.

In a first step, based on internal documents of a control body, three exemplary suspect cases under the current import regime were analysed, with regard to key deficiencies of the control system currently implemented in third countries, the supervision currently taking place and the procedures of the applied import regime.

In a second step, the results of the analysis were discussed and reflected with key-experts and stakeholders involved in controls and trade with organic products from third countries. Furthermore, preventive measures addressing potential risks associated to imported products were derived as well as targeted control measures that could be implemented by control bodies during their control visits in third countries.

### **Documentary analysis (in addition to case studies)**

In addition to documents analysed and reviewed in the case studies, a large number of further documents were reviewed, such as:

- Regulation (EC) 834/2007, Regulation (EC) 889/2008 and Regulation (EC) 1235/2008;
- international standards for textiles and cosmetics (GOTS, ISO, Nature, COSMOS), as well as EU regulations on textiles, cosmetics and eco-labels;
- scientific publications on the impact of organic production rules on the environment and animal welfare;
- publications on the effectiveness of (organic) certification systems, including material provided from the Commission with respect to Member State and stakeholder responses to the Commission survey on the application of Council Regulation (EC) 834/2007, as well as publication and internal working documents of the EU-funded research project CERTCOST
- publications dealing with the EU import regime for organic products;

- published studies that deal with the recognition of the new EU logo by consumers, as well as material from the CERTCOST-project on product labelling and willingness-to-pay;
- documents, academic articles and policy studies that a) deal with relevant EU priorities and strategies, b) address impacts of organic farming relating to EU priority areas or c) focus on the sustainable development of the organic sector.

### **Semi-structured interviews (in addition to case studies)**

In addition to interviews carried out in the case studies, additional key persons were interviewed to collect specific information on the adequacy and effectiveness of the Regulation. Interviews were carried out with:

- representatives of the European Commission DG Agriculture and Rural Development (Organic Farming Unit) to get insights on a) the import regime (approval of third countries, approval of control bodies, follow-up in case of imported products which do not comply with the rules), b) control system (supervision and exchange of information with Member States), c) production rules (sustainable management, exceptional rules) and d) the results of the Irish Presidency Questionnaire on Council Regulation (EC) 834/2007 on organic production and labelling of organic products;
- importers to examine the effectiveness of the import regime. A special focus was laid on the question whether there is any difference experienced so far between the old and the new import system, as well as on the question whether there are differences perceived between products imported from countries listed on the Third Country List and products from countries not listed;
- control bodies already approved under the revised import scheme, to get an insight in first experience with the new import system and to cross-check the results gathered so far;
- representative of UNCTAD, to examine the effectiveness of the import regime and crosscheck results from the analysis;
- members of the EU Expert Group for Technical Advice on Organic Production (EGTOP) to explore the potential of further simplification of selected rules.

### **Stakeholder survey**

In order to collect the views from a larger number of different actors and to verify information gained through the bibliographic research, a web-based stakeholder survey was conducted. The questionnaire included closed and open questions. For the survey, two existing address databases (maintained by FiBL and by the Anti-Fraud Initiative) of 1 025 stakeholders were used. In total, 265 stakeholders responded to the stakeholder survey, which corresponds to a response rate of 26 %. A majority of the responses came from Germany (75 responses), Italy (38), the UK (19), Austria (18), Czech Republic (15), Belgium (15), France (13) and the Netherlands (10). About one-quarter of respondents were representatives of control bodies or control authorities

respectively, and another quarter from organic operators. The stakeholder survey was mainly used to:

- gather data about the adequacy and effectiveness of the organic control system and the impacts of exceptions;
- assess whether the procedures of the import regulation from third countries represent administrative barriers for EU companies;
- explore whether procedures of the import regime are adequate and effective to assure conformity of organic products imported from third countries with EU requirements;
- gather views from stakeholders on the adequacy of the scope of the Regulation and the degree of simplification achieved by the current legislative framework as compared to the legal framework applicable before 2009.

### **Consumer survey**

In order to fill the gaps in the literature regarding the degree of knowledge on, and the perception of the EU organic logo, a web-based consumer survey was conducted in six Member States. Questions covered knowledge of organic farming, recognition and knowledge of the EU logo and the compulsory indications, their contribution to ensuring consumer confidence and related attitudes. The selection of study countries took market size and different organic 'labelling traditions' into account and included Member States where a) the old European logo was the most important organic logo and no well-known national logos exist (Italy and Poland), b) countries where the old EU logo was used additionally to an important national logo (Estonia and France) and c) countries where the old EU logo was of minor relevance and well-established national logos exist which are appreciated by consumers (Germany and UK) (see e.g. Padel, 2010 for details).

The recruitment of participants was conducted by one market research agency in all six countries. In total, 3 000 interviews were included in the analysis, 500 in each study country. A gender quota was set in advance to one third men and two third women, which is frequently observed when analysing food purchase behaviour (Spiller et al., 2004; Zander and Hamm, 2010). The age of the participants was between 18 and 75 years. On average, about one fifth of the respondents stated that they never or almost never buy organic food. About half of them buy organic food occasionally and about 30 % buy organic food regularly, at least once per week (Table 1.2).

**Table 1.2:** Share of participants in different consumption classes (in percentage)

	All	DE	EE	FR	IT	PL	UK
<b>Non-organic consumers</b>	<b>21</b>	<b>19</b>	<b>20</b>	<b>24</b>	<b>19</b>	<b>17</b>	<b>25</b>
never/almost never	21	19	20	24	19	17	25
<b>Occasional organic consumers</b>	<b>50</b>	<b>40</b>	<b>57</b>	<b>51</b>	<b>52</b>	<b>54</b>	<b>48</b>
less than once per month	20	16	23	22	19	20	19
about once or twice per month	31	24	35	29	33	34	29
<b>Regular organic consumers</b>	<b>29</b>	<b>41</b>	<b>22</b>	<b>26</b>	<b>29</b>	<b>29</b>	<b>26</b>
about once per week	22	31	16	20	23	21	22
several times per week	7	10	6	6	6	9	5

*Question: How often do you buy organic food?*

Source: Own presentation based on the results of the consumer survey.

### 1.3 Structure of the evaluation report

This evaluation report is divided into three parts: a) descriptive part, b) answers to the eight evaluation questions and c) overall conclusions and recommendations.

Part A (**descriptive part**) provides a concise description of the development of the EU organic sector in the context of the world market of organic products (Chapter 3), support measures applied to the EU organic farming sector (Chapter 4) and the applicable organic farming legislation and its development. The descriptive part includes also a model of the intervention logic of the Regulation, showing the relationship between the legislative measures, the expected impacts, the objectives of the measures, and the objectives of the legislation as a whole and in relation to other relevant policies (Chapter 5).

In Part B (**replies to the eight evaluation questions**), the adequacy of the scope of the Regulation (Chapter 6), the production and processing rules (Chapter 7), the overall control system (Chapter 8) and the import regime (Chapter 9) is examined. Furthermore, the consumer knowledge about the concept of organic farming (Chapter 10) and the degree of simplification of the current legislative measures compared to the legal framework applicable before 2009 (Chapter 11) is analysed. At the end of Part B, two overarching issues of the Regulation are addressed: the creation of EU added value through the legislative framework for organic farming at EU level (Chapter 12) and the contribution of the Regulation to the sustainable development of the organic farming sector (Chapter 13). The answer to each evaluation question includes a description of the context of the question, the judgement criteria and data sources used, a detailed description of the results including the reasoning followed in the analysis, as well as the resulting judgement for each question.

In Part C, **overall conclusions and policy recommendations** are presented (Chapter 14) based on the descriptive part and the answers to all evaluation questions. The overall conclusions indicate in which way the existing legislative framework could be further developed to ensure that the objectives of the Regulation and the objectives of organic production are achieved in an adequate and effective way.



## Chapter 2

# Development of the EU organic sector and the world market in organic products

## 2.1 The EU organic production

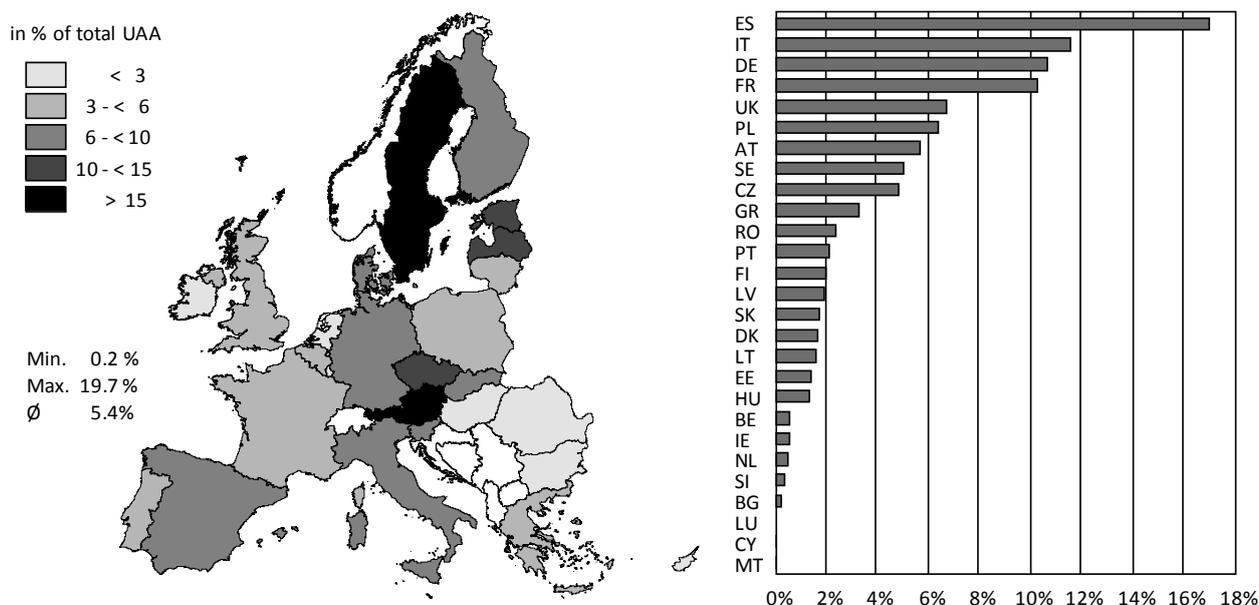
### Organic production in the EU

In 2011, more than 9.5 million hectares were managed organically on nearly 240 000 farms in the European Union. This corresponds to an average share of 5.4 % of the total agricultural area. As indicated in Figure 2.1 (right), the largest organic area is located in Spain with a share of 17.0 % of EU-27 total organic area, followed by Italy (11.5 %) and Germany (10.7 %). In relation to the share of organic area in the total agricultural area of a Member States (Figure 2.1, left), Austria is the leading country within the EU with a share of nearly 20 % in 2011. A relatively high share was also observed in Sweden (15.4 %), Estonia (14.8 %) and the Czech Republic (10.8 %). On the other hand, the relative importance is rather low in Malta, Bulgaria, Ireland, Romania, the Netherlands, Cyprus, Luxembourg and Hungary with a share of less than 3 % in the total UAA.

Corresponding to the distribution of the organic area in the EU, most organic producers are located in the two Mediterranean EU countries Italy (approximately 42 000 holdings) and Spain (approximately 32 200 holdings). Countries each with more than 20 000 organic farms are Poland, France, Germany, Austria and Greece. Approximately 80 % of all organic farms in the EU are located in these seven Member States.

An average share of 5.4 % of the organic area in the total UAA illustrates that the overall size of the organic farming industry is still rather small at EU level. However, what makes the sector very interesting is the dynamic development in the last decade. In all 27 Member States as a whole the organic area has more than doubled between 2000 and 2011 and expanded by 53 % between 2005 and 2011, i.e. after the accession of the Central and Eastern European countries (see Table 2.1). The number of organic holdings increased in these two periods on average by 75 % (2000 – 2011) and 45 % (2005 – 2011), respectively. The average farm size of the EU-27 Member States increased from 31 ha to 40 ha between 2000 and 2011.

**Figure 2.1:** Share of organic area in the total utilised agricultural area (left) and share of EU-27 total organic area (right) in different Member States in 2011



Source: Own presentation based on data from the OrganicDataNetwork Survey.<sup>1</sup>

Although there has been a common regulatory framework for organic producers and a single market for organic products, the development of organic farming differs substantially between Member States. The organic land area grew particularly in Spain (+1 240 978 ha) as well as in Poland (+587 412 ha), France (+605 208 ha) and Germany (+469 603 ha). In relative terms, highest growth rates were observed particularly in Greece and some of the EU-12 countries (Cyprus, Bulgaria, Latvia, Lithuania, Poland, Estonia and Romania), albeit - apart from Poland – from a very low absolute level. On the other hand, the organic land area grew only moderately in Denmark and Italy. It seems that both countries have reached a certain plateau with only limited potential for further growth if framework conditions are not changed. In the case of Cyprus, Bulgaria, Lithuania, Poland, Estonia and Romania, high growth rates were also observed in the period 2005 to 2011.<sup>2</sup> This is also true for Spain, Belgium and Sweden, where the organic area has more than doubled. Very low or negative growth rates were achieved in this period in Portugal, Hungary, the Netherlands, Italy and the United Kingdom.<sup>3</sup> Such national figures hide considerable differences in uptake between specific regions within the country.

<sup>1</sup> The EU-funded project 'Data network for better European organic market information' (OrganicDataNetwork) aims to increase the transparency of the European organic food market through better availability of market intelligence about the sector to meet the needs of policy makers and actors involved in organic markets. Data collection of publically available organic market data was carried out for the year 2011 and some of this data is made available for this report.

<sup>2</sup> In the case of Cyprus, the period refers to 2005 to 2010.

<sup>3</sup> In the case of Portugal, the period refers to 2005 to 2010.

This data makes it clear that the expansion of the organic area took mainly place in the EU-15. In total, 61 % of the growth between 2000 and 2011 was observed in these countries (39 % in the EU-12). The differences in growth between the EU-15 and the EU-12 can also be observed for the period 2005 to 2011 and 2010 to 2011. It is however worthwhile noting that a substantial part of the recent growth in the EU-15 is mainly due to farm conversions in Spain. Indeed, about one-third of the area expansion in the EU between 2005 and 2011 was in Spain.

**Table 2.1:** Development of the organic area in EU Member States between 2000 and 2011

	Organic area (ha)							
	2000 <sup>a</sup>	2005 <sup>a</sup>	2010 <sup>a</sup>	2011 <sup>a</sup>	Difference 2005 to 2011		Difference 2000 to 2011	
					ha	%	ha	%
 Austria	429 167	479 817	543 605	542 553	62 736	13	113 386	26
 Belgium	20 667	22 996	49 005	59 220	36 224	158	38 553	187
 Bulgaria	500	2 432	25 648	25 022	22 590	929	24 522	4 904
 Cyprus	52	1 698	3 575	3 575	1 877	110	3 523	6 775
 Czech Republic	165 699	254 982	448 202	460 498	205 516	81	294 799	178
 Denmark	157 676	134 129	162 903	162 173	28 044	21	4 497	3
 Estonia	9 872	59 742	112 972	133 779	74 037	124	123 907	1 255
 Finland	147 423	147 587	169 168	188 189	40 602	28	40 766	28
 France	369 933	550 488	845 442	975 141	424 653	77	605 208	164
 Germany	546 023	807 406	990 702	1 015 626	208 220	26	469 603	86
 Greece	26 707	288 737	309 823	309 823	21 086	7	283 116	1 060
 Hungary	47 221	128 576	127 605	124 402	- 4 174	- 3	77 181	163
 Ireland	27 231	35 266	47 864	54 122	18 856	53	26 891	99
 Italy	1 040 377	1 069 462	1 113 742	1 096 889	27 427	3	56 512	5
 Latvia	4 400	104 235	166 320	184 096	79 861	77	179 696	4 084
 Lithuania	4 709	64 544	143 644	152 305	87 761	136	147 596	3 134
 Luxembourg	1 068	3 243	3 720	3 720	477	15	2 652	248
 Malta	0	14	24	23	9	64	23	-
 Netherlands	32 331	48 765	46 233	47 205	- 1 560	- 3	14 874	46
 Poland	22 000	159 709	521 970	609 412	449 703	282	587 412	2 670
 Portugal	50 001	211 501	201 054	200 151	- 11 350	- 5	150 150	300
 Romania	17 388	92 770	182 706	229 946	137 176	148	212 558	1 222
 Slovakia	60 000	90 206	174 471	166 700	76 494	85	106 700	178
 Slovenia	5 200	23 499	30 696	32 149	8 650	37	26 949	518
 Spain	380 920	622 762	1 456 672	1 621 898	999 136	160	1 240 978	326
 Sweden	174 227	222 738	438 693	480 185	257 447	116	305 958	176
 United Kingdom	527 323	612 996	699 638	638 528	25 532	4	111 205	21
<b>Total</b>	<b>4 268 115</b>	<b>6 240 301</b>	<b>9 016 097</b>	<b>9 518 233</b>	<b>3 277 932</b>	<b>53</b>	<b>5 250 118</b>	<b>123</b>

<sup>a)</sup> In the case of CY, GR and LU data from 2010 has been carried forward to 2011.

Source: Own calculation based on Eurostat data, national data provided by FiBL-AMI and the OrganicDataNetwork Survey.<sup>4</sup>

<sup>4</sup> Structural data of the FiBL-AMI survey is in most cases based on Eurostat data. However, the Eurostat data base does not include all data available from all countries (e.g. crop and livestock data from Germany) and therefore national sources are used too. Furthermore, national figures are used by FiBL and AMI as soon as then are available, which is often before data is entered into the Eurostat database. However, in principle, the data should be the same. Data for the year 2011 have been collected in the framework of the OrganicDataNetwork-project.

Detailed data on organic land use is available for all EU Member States for the period 2007 to 2011. In 2011, 39 % of the EU-27 organic area was used for arable cropping and 48 % for permanent grassland. The remaining area was used for permanent crops or other/non-classified land use activities. Between 2007 and 2011, the organic arable area and permanent pasture grew by 0.75 million and 1.3 million hectares, respectively. The arable area expanded particularly in France, Poland, Spain and Sweden, whereas a remarkable decrease of about 167 000 ha was observed in Italy (Table 2.2), which was probably due to a decrease of organic support payments (see Zanolini et al., 2010). Organic grassland increased mainly in Spain but also in France, the Czech Republic, Poland and Germany.

**Table 2.2:** Changes of the organic area per land use category in EU Member States between 2007 and 2011

	Arable crops			Permanent crops			Permanent grassland		
	in ha								
	2007	2011 <sup>a</sup>	Difference 2007 to 2011	2007	2011 <sup>a</sup>	Difference 2007 to 2011	2007	2011 <sup>a</sup>	Difference 2007 to 2011
 Austria	147 250	185 439	38 189	4 063	6 045	1 982	323 938	340 837	16 899
 Belgium	11 692	12 476	784	457	576	119	20 212	35 381	15 169
 Bulgaria	5 500	12 576	7 076	3 864	6 442	2 578	861	4 491	3 630
 Cyprus	894	1 771	877	1 391	1 441	50	37	-	-
 Czech Republic	24 931	57 436	32 505	1 356	7 287	5 931	243 866	394 441	150 574
 Denmark	99 450	138 754	39 304	247	530	283	18 081	22 427	4 346
 Estonia	65 153	55 618	- 9 535	1 202	1 379	177	11 441	76 805	65 364
 Finland	111 457	130 788	19 331	568	560	- 8	1 035	3 615	2 580
 France	250 258	475 255	224 997	33 954	83 900	49 946	216 921	372 160	155 239
 Germany	379 585	411 830	32 245	13 291	13 880	589	461 500	580 416	118 916
 Greece	90 300	60 039	- 30 261	61 097	67 111	6 014	127 777	152 215	24 438
 Hungary	47 995	50 770	2 775	2 966	5 285	2 319	63 634	68 335	4 701
 Ireland	1 460	1 994	534	-	29	-	39 662	52 071	12 409
 Italy	675 071	507 685	- 167 386	224 165	274 940	50 775	219 438	275 591	56 153
 Latvia	103 516	96 430	- 7 086	1 126	918	- 208	36 748	81 132	44 384
 Lithuania	87 906	108 314	20 408	5 572	5 018	- 554	24 729	35 527	10 798
 Luxembourg	-	1 556	-	-	122	-	-	1 923	-
 Malta	-	10	-	-	12	-	-	-	-
 Netherlands	12 809	18 203	5 394	486	439	- 47	31 664	28 416	- 3 248
 Poland	93 483	301 808	208 325	50 162	75 536	25 374	82 083	231 323	149 240
 Portugal	51 433	25 510	- 25 923	27 220	32 840	5 620	148 569	131 526	- 17 043
 Romania	59 023	137 821	78 798	650	4 166	3 516	57 600	78 198	20 598
 Slovakia	34 560	28 407	- 6 153	773	1 031	258	81 375	136 496	55 121
 Slovenia	2 636	3 382	746	874	1 234	360	25 796	27 531	1 735
 Spain	146 738	291 133	144 395	169 067	361 925	192 857	429 134	869 427	440 293
 Sweden	222 569	360 528	137 959	378	465	87	72 512	107 193	34 681
 United Kingdom	197 141	197 679	538	5 250	5 824	574	452 734	435 025	- 17 709

<sup>a)</sup> In the case of BE, CY, GR and LU data from 2010 has been carried forward to 2011.

Source: Own calculation based on Eurostat data, national data provided by FiBL-AMI and the OrganicDataNetwork Survey.

Changes in organic livestock production between 2007 and 2011 are shown in Table 2.3. The number of bovine animals increased particularly in France (+ 368 000), Sweden (+ 143 000), and Denmark (+ 117 000). The Danish and French organic farming sector experienced also the biggest

increase in organic pig production. A substantial expansion in the organic poultry sector was observed in France, Germany, Italy and Denmark. In contrast, the number of organic bovine animals decreased particularly in Italy. For pig and poultry this is true for Greece and the United Kingdom, respectively.

**Table 2.3:** Changes in organic livestock production in EU Member States between 2007 and 2010<sup>a</sup>

	Bovine animals			Pigs			Poultry		
	in 1 000 Heads								
	2007	2011	Difference 2007 to 2011	2007	2011	Difference 2007 to 2011	2007	2011	Difference 2007 to 2011
 Austria	342	382	40	69	70	0	1 100	1 600	500
 Belgium	38	70	32	11	15	3	1 055	1 633	577
 Bulgaria	< 1	< 1	< 1	-	< 1	-	-	-	-
 Cyprus	-	-	-	-	-	-	-	11	-
 Czech Republic	137	175	37	2	2	0	7	37	30
 Denmark	53	170	117	0	171	171	0	1 337	1 337
 Estonia	14	22	9	0	1	1	4	11	6
 Finland	26	42	17	2	3	1	74	115	41
 France	120	488	368	5	170	165	6 172	10 951	4 779
 Germany	228	273	45	105	138	33	2 772	4 716	1 944
 Greece	25	23	- 2	196	29	- 168	159	330	171
 Hungary	17	25	7	6	4	- 2	32	139	108
 Ireland	29	31	2	1	1	0	108	86	- 22
 Italy	244	194	- 50	27	32	6	1 339	2 814	1 474
 Latvia	51	52	2	6	8	2	16	34	18
 Lithuania	20	23	3	< 1	< 1	< 1	1	3	2
 Luxembourg	-	3	-	-	< 1	-	-	22	-
 Malta	-	-	-	-	-	-	-	-	-
 Netherlands	40	49	9	56	57	1	1 137	1 833	696
 Poland	33	40	7	27	14	- 13	180	205	25
 Portugal	69	66	- 3	8	4	- 4	45	57	12
 Romania	7	7	0	1	< 1	< 1	4	47	42
 Slovakia	27	27	0	< 1	< 1	< 1	< 1	7	7
 Slovenia	17	23	5	2	2	0	19	30	11
 Spain	86	176	90	15	7	- 9	95	221	125
 Sweden	110	253	143	24	43	19	458	923	465
 UK	250	335	84	50	53	2	4 441	2 838	- 1 603

<sup>a)</sup> In the case of CY, LI, LU and PT data from 2010 has been carried forward to 2011.

Source: Own calculation based on Eurostat data, national data provided by FiBL-AMI and the OrganicDataNetwork Survey.

### The EU organic production in a global context

In a global context, the EU is one of the main producers of organic food. Worldwide about 37 million hectares were under organic agricultural management in 2011 (Willer et al., 2013). As

indicated in Table 2.4, most of the organic area is in Oceania (12.2 million hectares) and Europe (10.6 million hectares, from which more than 9.5 million hectares are in the EU), followed by Latin America (6.9 million hectares), Asia (3.7 million hectares), Northern America (2.6 million hectares) and Africa (1.0 million hectares). Thus, 26 % of the global organic area is in the EU. Only Oceania has a higher share with 33 %, most of which is extensive grassland with a relative low market output. Almost 60 % of the 6.3 million hectares organic arable land worldwide is located in the EU; it should be noted though that a breakdown by land use is not available for all countries. This is about three times as much as in the United States and 20-times as much as in Latin America. The EU also has a second leading role in the production of organic permanent crops with a share of 37 % in the global permanent cropland area, followed by Latin America (29 %) and Africa (16 %).

Between 2000 and 2011, the organically managed area increased globally by approximately 21 million hectares. In the same period, the organic area expanded by about 5 million hectares in the EU. Thus, roughly speaking, one-quarter of the global growth is due to the expansion in the EU.

**Table 2.4:** Key data on organic farming in different global regions in 2011

	Africa	Asia	EU-27	Other European countries	Latin America	North America	Oceania
<b>Land use</b> (in 1 000 ha)							
Arable crops	153	260	3 673	722	182	1 311	37
Permanent crops	408	256	956	99	755	65	59
Permanent grazing	62	601	4 552	286	4 834	1 134	11 756
Other UAA / Not classif.	450	2 589	337	11	1 087	121	333
<b>Organic area</b>							
Total (in 1 000 ha)	1 074	3 706	9 518	1 119	6 858	2 630	12 186
Share of global organic area	3%	10%	26%	3%	18%	7%	33%
Share of total agricultural area	0.1%	0.3%	5.4%	0.6%	1.1%	0.7%	2.9%
<b>Producers</b>							
Total (in 1 000 N)	540 988	619 439	236 803	54 648	315 889	16 659	14 138
<b>Farm size</b>							
Average farm size (in ha)	2	6	40	20	22	158	862

Source: Own calculation based on Willer et al. (2013).

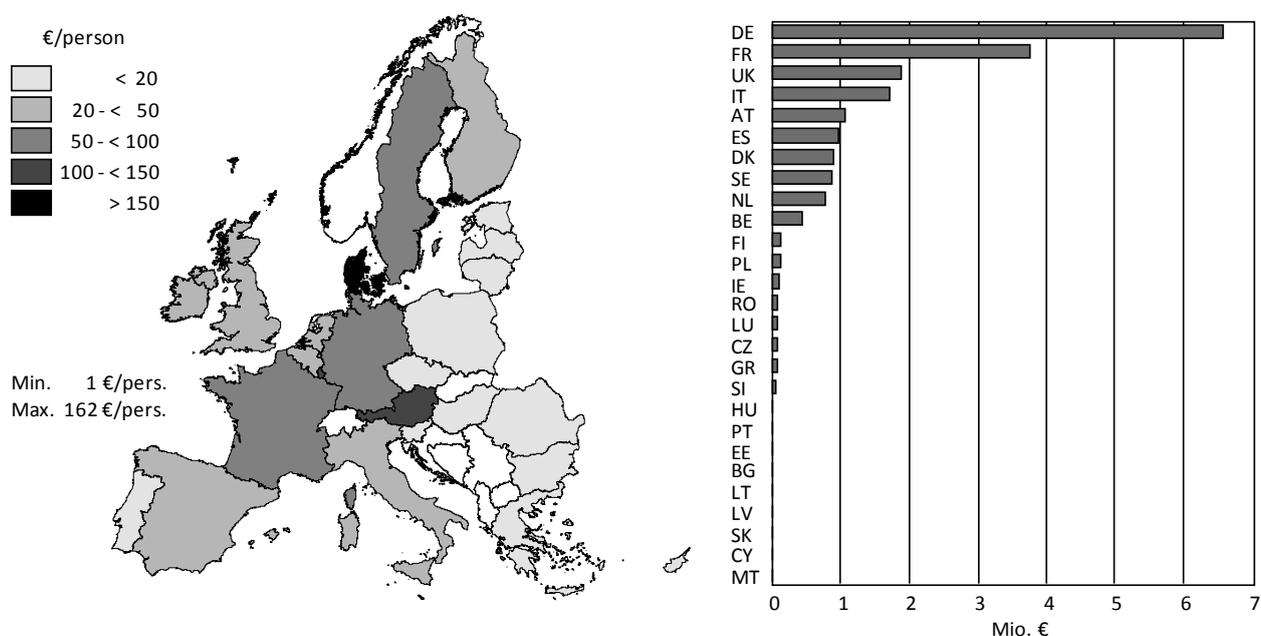
According to the recent FiBL-IFOAM survey on global organic agriculture, almost 1.8 million farms were managed globally organically (Willer et al., 2013). More than three-quarters of the organic producers are in Asia, Africa and Latin America, while 13 % are located in the EU. Not surprisingly, the average organic farm size varies substantially between individual global regions ranging from 2 ha in Africa to 862 ha in Oceania.

## 2.2 The EU market for organic food

### The market for organic food in the EU

The total value of the EU-27 organic market was approximately 19.7 billion EUR in 2011 (Schaack et al., 2013). As indicated in Figure 2.2 (right), by far the largest organic market in the EU was Germany with 6.6 billion EUR followed by France (3.6 billion EUR), the United Kingdom (1.9 billion EUR) and Italy (1.7 billion EUR). Sales per capita were particularly high in Denmark (162 EUR), Luxembourg (134 EUR) and Austria (127 EUR). Not surprisingly, relatively low market values and per capita consumption can be observed in EU-12 countries (see Figure 2.2, left).

**Figure 2.2:** Organic sales per capita (left) and total organic sales (right) in EU Member States in 2011



Source: Own presentation based on data from the OrganicDataNetwork Survey.

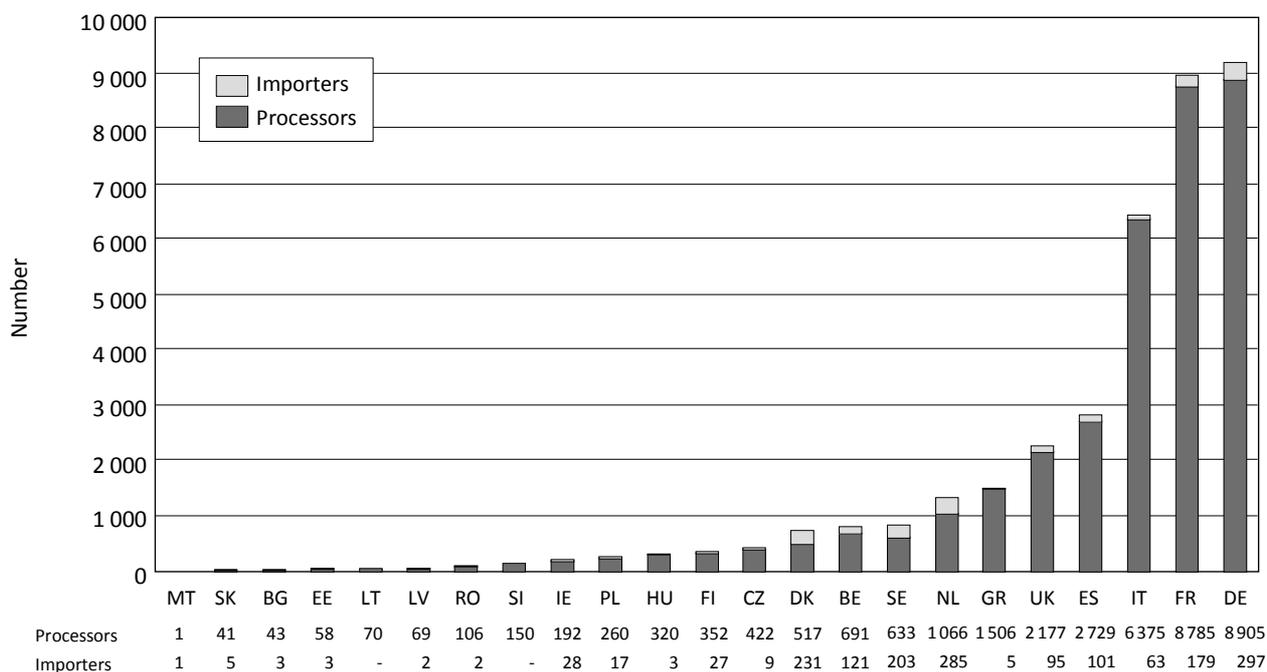
While the organic land area increased by 38 % between 2006 and 2011, the organic market grew by 56 % in this period. Even if both growth figures cannot be directly compared, they indicate that both supply and demand have developed in the same dimension at EU level. The highest market growth was observed in France (+ 2 055 million EUR) and Germany (+ 1 990 million EUR) – thus in the two countries with the largest organic market (Table 2.5). The United Kingdom is the only country in the EU where the organic food sales declined between 2006 and 2011 (- 675 million EUR). The reasons for this are not fully understood, but shorter periods of stagnation or even decline have also been observed in other countries. Among the EU-12 countries, the organic market grew particularly strongly in Romania (+70 million EUR), Poland (+ 70 million EUR), Slovenia (+ 34 million EUR) and the Czech Republic (+ 32 million EUR).

**Table 2.5:** Changes in organic sales per capita (left) and total sales in EU Member States between 2007 and 2011

	Organic sales per capita (€/person)				Total organic sales (Mio €)			
	2006	2011	Difference €	%	2006	2011	Difference Mio €	%
 Austria	64	127	63	98	496	1 065	569	115
 Belgium	23	40	17	72	258	435	178	69
 Bulgaria	0	1	1	900	1	7	6	775
 Cyprus	2	2	1	33	2	2	1	33
 Czech Republic	3	7	4	104	27	59	32	109
 Denmark	80	162	82	103	434	901	467	108
 Estonia	-	-	-	-	-	-	-	-
 Finland	11	22	11	105	57	120	63	112
 France	26	58	32	120	1 700	3 756	2 056	121
 Germany	56	81	25	45	4 600	6 590	1 990	43
 Greece	5	5	0	0	55	58	3	5
 Hungary	2	3	1	67	20	25	5	25
 Ireland	16	22	6	40	57	99	42	72
 Italy	19	28	9	46	1 130	1 720	590	52
 Latvia	-	2	-	-	-	4	-	-
 Lithuania	-	2	-	-	-	6	-	-
 Luxembourg	85	134	50	59	41	68	27	66
 Netherlands	28	46	18	64	458	761	303	66
 Poland	1	3	2	131	50	120	70	140
 Portugal	-	2	-	-	-	21	-	-
 Romania	1	4	4	700	10	80	70	700
 Slovakia	1	1	0	0	4	4	0	- 7
 Slovenia	5	19	14	280	4	38	34	850
 Spain	2	21	19	1 213	270	965	695	257
 Sweden	42	94	52	124	379	885	506	134
 United Kingdom	42	30	- 12	- 16	2 557	1 882	- 675	- 16

Source: Own calculation based on national data provided by FiBL-AMI and the OrganicDataNetwork Survey.

The current organic supply and demand situation in EU Member States is also reflected in the numbers of processors and importers. In 2011, there were more than 35 000 organic processing companies and 1 600 importers of organic products in the EU. As shown in Figure 2.3, many processors are located either in countries characterised by a large organic market, a large organic area or both (Germany, France, Italy, Spain and the United Kingdom). Interestingly, the number of processing companies is also relatively high in Greece. Presumably, this is mainly due to small processing plants for organic olive oils. Furthermore, many import companies are located in Germany, the Netherlands, Denmark, Sweden and France. In total, only about 1 500 processors and less than 100 importers were located in EU-12 countries in 2011. These figures show clearly that the processing infrastructure in the EU-12 is still underdeveloped, but data do not exist for all countries. The lack of processing facilities entails that organic processed food products consumed in the EU-12 are quite often imported from the EU-15 Member States.

**Figure 2.3:** Number of organic importers and processors in 2011 <sup>a</sup>

<sup>a</sup> No data on processors and importers for AT, CY, LU, PT and on importers for LT and SI. Data for IE, LT and UK from 2010.

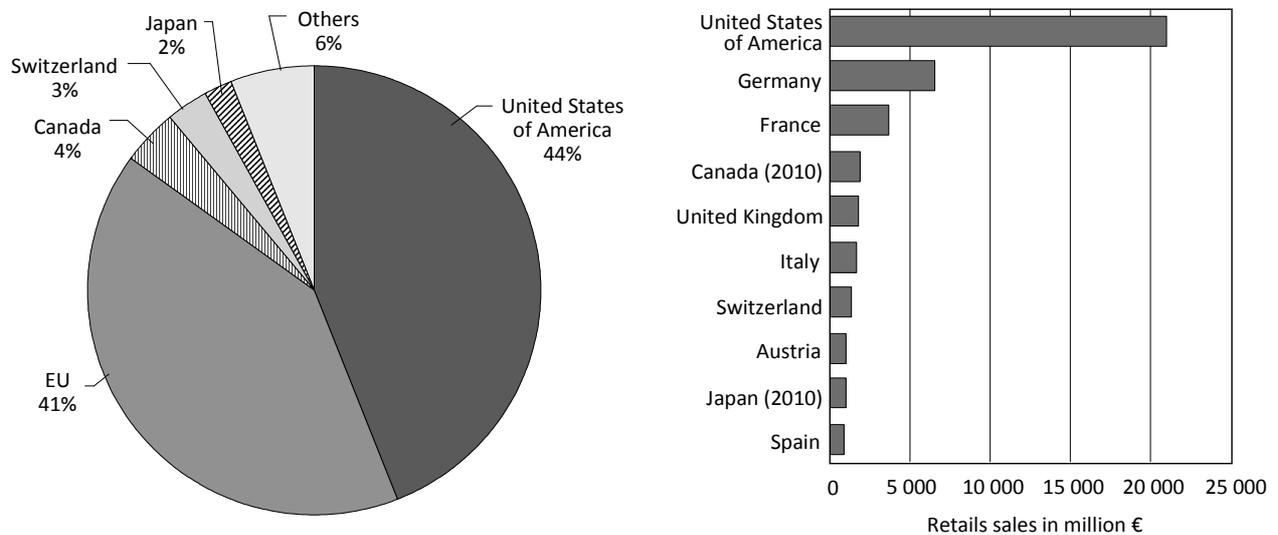
Source: EUROSTAT.

### The EU market for organic food in a global context

While some data exists for the EU organic food market, there is much less market information at a global level. According to Sahota (2013) global sales of organic food and drink reached 62.8 billion US dollars in 2011. According to data compiled by FiBL and AMI the two biggest single markets are the United States (share of 44 % in global sales) and the European Union (share of 41 % in global sales, see Figure 2.4). Even if 9 % of the total organic arable area and 55 % of the total organic permanent crop area is located in Asia, Africa and Latin America, the market share of these three regions in the global sales organic food and drink is much less than 10 %. The high degree of sales concentration highlights that most organic food production in these regions is export-gearred as a result of limited domestic market opportunities.

It is interesting to note, that in the United States half of the turnover is made up of fresh fruit and vegetables, but animal products are increasing in importance. Fruit and vegetables were also the pioneer organic products in EU countries and they now have market shares between one third and one fifth of many national markets. Animal products, especially milk and dairy products but also eggs, are achieving higher market shares in the EU than in the USA. Also dry products and bread have a higher importance in many EU countries.

**Figure 2.4:** Distribution of organic food sales by single market in 2011 and the ten countries with the largest markets for organic food 2011



Source: OrganicDataNetwork Survey.

According to the European Commission (2010), there is evidence that the growth of demand for organic products in the EU outpaces the growth of organic food supply. More recently, Sahota (2013) reported however that there is an oversupply in certain sectors of the EU organic food industry since the demand is not keeping pace with supply. A certain degree of imbalance between domestic supply and demand is a quite typical characteristic of the organic market, since a conversion period of usually up to two years allows only a medium-term response of the supply-side to changes of the demand-side.

Intra-EU trade and imports from third countries represent an important part of domestically consumed organic products in most Member States as shown in a recent study (Ecozept, 2008). In view of the growing demand for organic food, it can be assumed that trade between EU Member States and imports from third countries have increased in the last years.<sup>5</sup>

<sup>5</sup> As mentioned earlier, reliable information on imports and exports are still rare. A comprehensive study on the German situation has been published recently. Accordingly, the share of imported organic products that could also be produced in the country varies from 2 to 95 % (Schaack et al., 2011). Very high import rates were e.g. observed for tomatoes (80 %) and peppers (90 %), mainly due to the all year round demand for products that can be grown in Germany only seasonally, or linseed (95 %). The importance of (global) organic trade is also becoming clear through data from France. Approximately 30 % of consumed organic food products (in value) are imported in France (European Commission, 2010). In 2008, one-third of all organic imports were tropical products; another third were products for which France has no clear comparative advantage (e.g. aquaculture, soya, Mediterranean products, etc.) and a final third were products for which France is competitive but where domestic supply was too low compared to domestic demand (e.g. cereals, milk, meat, fruit and vegetables).

## Chapter 3

# EU organic farming legislation and its development

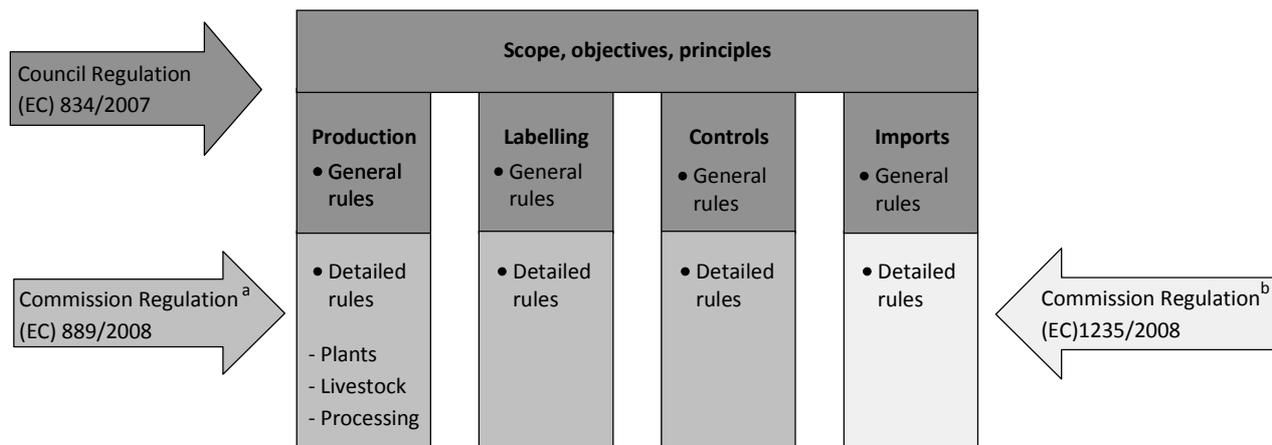
### 3.1 Introduction

The legislative framework of the EU organic farming sector is determined by Council Regulation (EC) 834/2007 on organic production and labelling of organic products which came into force in January 2009 and repealed Council Regulation (EEC) 2092/91. The organic farming legislation describes the underlying objectives and principles of organic agriculture and sets organic production requirements. The Regulation legally defines what organic farming actually is and formulates certain claims with respect to environmental protection, preservation of natural resources (including biodiversity), application of high animal welfare standards and production method based on natural substances and processes. Furthermore, it defines requirements with regard to controls, trade with third countries (i.e. not EU Member States) and labelling of organic food products and sets a regulatory framework for supply-chain activities. By defining these two areas, the Regulation aims to provide the basis for the sustainable development of organic production.

Detailed rules for the implementation have been laid down in Commission Regulation (EC) 889/2008 on organic production and labelling of organic products and Commission Regulation (EC) 1235/2008 on imports of products from third countries. Since 2009 the legislative framework has been supplemented several times, such as by rules on aquaculture in 2009 (Regulation (EC) 710/2009) and wine production in 2012 (Regulation (EC) 203/2012) both amending Regulation (EC) 889/2008. An overview of the present legislative framework of the EU organic farming sector is given in Figure 3.1. Compared to its predecessor, the new regulatory framework follows the general structure of Community legislation laying down clear competences to the Council (basic issues) and the Commission (adjustment of technical rules and updating the list of inputs allowed in organic farming).

The legal framework itself is embedded in the general rules on agricultural production, processing, marketing, labelling and controls such as Regulation (EC) 882/2004 (Controls and compliance with feed and food law, animal health and animal welfare rules) or Regulation (EU) 1169/2011 (Provision of food information to consumers), which apply to organic operators as well.

In the following, the objectives and principles as laid down in the Regulation are described. Furthermore, major changes of the legislation as compared to the legislation applied to organic farming prior to 2009 are highlighted.

**Figure 3.1:** Overview of the EU legislative framework of organic farming

<sup>a</sup> Amended by Commission Regulation (EC) 1254/2008 + 334/2011 + 426/2011 + 126/2012 + 505/2012 (Organic production, labelling and control), Commission Regulation (EC) 710/2009 (Organic aquaculture and seaweed production), Commission Regulation (EC) 271/2010 (Organic production logo), Commission Regulation (EC) 203/2012 (Organic wine production) and Commission Regulation (EC) 392/2013 (Control system for organic production).

<sup>b</sup> Amended by Commission Regulation (EC) 537/2009 + 471/2010 + 590/2011 + 1084/2011 + 1267/2011 + 126/2012 + 508/2012 + 751/2012 + 1251/2013 (Trade with third countries).

Source: Own illustration adapted from European Commission (2012).

## 3.2 Objectives and principles of organic farming

The normative basis of organic farming is laid down in a number of objectives and principles. Accordingly organic production shall pursue the following three objectives (Article 3-7 of Council Regulation (EC) 834/2007):

- establish a sustainable management system for agriculture;
- aim at producing products of high quality; and
- aim at producing a wide variety of foods and other agricultural products that respond to consumers' demand for goods produced by the use of processes that do not harm the environment, human health, plant health or animal health and welfare.

Furthermore, organic farming is to be based on the following four overall principles:

- the appropriate design and management of biological processes based on ecological systems using natural resources;
- the restriction of the use of external inputs;
- the strict limitation of the use of chemically synthesised inputs to exceptional cases;
- the adaptation, where necessary, of the rules of organic production taking account of sanitary status, regional differences in climate and local conditions, stages of development and specific husbandry practices.

In addition, specific principles are defined for farming, processing of organic food and processing of organic feed. The objectives and principles are implemented through various production rules as well as rules on controls, labelling and trade with third countries. The definition of objectives and principles is a new element of the EU legislation on organic farming, which shapes the basic orientation of the organic sector towards sustainability and food quality. However, an explicit link between objectives and principles and the production rules is not given in the Regulation.

As laid down in Article 1, the rules apply to products originating from agriculture and aquaculture, i.e. live and unprocessed agricultural products, processed agricultural products for use as food and feed as well as vegetative propagating material and seeds for cultivation. Compared to Regulation (EEC) 2092/91, the scope of the current organic legislation also covers organic yeasts for food and feed, organic aquaculture and organic wine. Not covered by the Regulation are products of hunting and fishing of wild animals as well as mass catering, which can however be regulated by national law, and non-agricultural products that are not included in Annex I of the EU Treaty (and therefore not subject to the CAP).

### 3.3 Specific rules

#### Production rules

Corresponding to the objectives and principles of organic production, the production rules (Article 11 – 22 of Council Regulation (EC) 834/2007) lay down provision for:

- plant production (e.g. cultivation practices, fertilisation strategies, prevention techniques to avoid disease, seeding strategies);
- livestock production including aquaculture animals (e.g. husbandry practices and housing conditions, breeding strategies, feeding rules and provision with regard to disease prevention and veterinary treatments);
- production of seaweed (e.g. collection and cultivation practices); as well as
- production of processed feed and food (e.g. separate handling from non-organic feed and food, restricted substances and techniques).

Furthermore, specific arrangements are made with regard to the conversion period as well as products and substances used in organic farming and the criteria for their authorization. According to their nature, production rules are obligations (most common type), restrictions, prohibitions or permissions (see Figure 5.3).

The system of derogations no longer exists that was in place in the legislation prior to 2009. It has been replaced by either permanent rules, or by exceptional production rules, which are limited either for a certain time or under certain conditions. For example, non-organic feed can only be

used until a certain date instead of allowing a certain proportion of non-organic ingredients in the diet for certain animal species.

### **Labelling**

In order to create more transparency for consumers, the Regulation contains rules on labelling of organic products (Article 23 – 26). Accordingly, the use of terms referring to organic production is restricted to products that are produced in accordance with the rules laid down in the organic farming legislation. In the case of processed food, at least 95 % by weight of its ingredients of agricultural origin must be organic. Furthermore, the labelling rules prescribe that certain product indications are compulsory. This includes the code number of the involved control body, the new Community organic production logo and an indication of the place where the agricultural raw materials were farmed, the last two had not been required before.

### **Controls**

The legislation on organic farming requires that all activities performed by operators at all stages of production, preparation and distribution of organic products are subject to a control system. This has to be set up and managed to conform to the rules on official controls on food and feed law. It defines a number of requirements with regard to the set-up of the control system, adherence to the control system, documentary obligations, measures in the case of infringements and irregularities as well as rules on the exchange of information (Article 27 – 31).

The overall control system consists of two elements: a) the annual on-site controls of organic operators and b) the public surveillance system, which in turn encompasses the entire EU framework of activities of national competent authorities and accreditation bodies to supervise and monitor the organic control system at the level of the control bodies.

Accordingly, Member States must designate one or more competent authorities responsible for the controls. These competent authorities may delegate control tasks to private control bodies under certain conditions (e.g. with regard to an effective coordination between the competent authority and the control body or with regard to the technical capacity of the control body). The rules on controls stipulate that all organic operators at various stages of the supply-chain must submit their activities to the control system and specify the kind of documentary evidence that is required from them and from the control bodies. In the case of irregularities, the rules foresee that products cannot be marketed as organic. If a severe infringement is found, the control authority or body may prohibit the operator from marketing organic products for a certain period. In order to guarantee that a product is produced organically, it is required that competent authorities, control authorities and control bodies exchange relevant information on the results of the controls – particularly if irregularities or infringements occur.

Compared to the legislation applied to organic farming prior to 2009, the link to the Official Food and Feed Control (OFFC) has been made more explicit. Accreditation to the European Standard EN 45011 or ISO 65 (international standards for certification) is now mandatory for control bodies

in the EU. Furthermore, the risk based approach of the OFFC can be applied to organic farming as well.

### **Trade with countries outside the EU (third countries)**

Since international trade with organic products is of increasing importance due to the growth of the organic sector and increasing demand, legal arrangements are made for the trade with third countries (Article 32 – 33). The Regulation specifies two different approaches for this. First, products from third countries may be placed on the market as organic, provided that production and control requirements comply exactly with Regulation (EU) 834/2007. Proof of compliance is provided through inspections of control bodies that are authorised by the EU. Applications for recognition under this option have to be submitted until 31 October 2014. However, this compliance approach is not yet implemented. Second, organic products from outside the EU may be sold as organic in the EU if production rules and control requirements are equivalent to the EU rules. Thus, organic products may be imported, if the applied rules are not exactly the same but in line with the principles and objectives of organic farming as laid down in the Regulation. This approach recognises that production conditions in countries outside the EU can be different from those within. The equivalency is recognised either by bilateral agreements (i.e. in this case, the country in question is included in the EU list of third countries) or by control bodies which are approved and supervised for this purpose by the EU Commission. For a transitional period until 1 July 2014 equivalence can also be confirmed by Member States authorities at the request of an importer located in the EU (import authorisation). This option was the most relevant import procedure under the previous organic regulation.



## Chapter 4

# Support measures applied to the EU organic farming sector

### 4.1 Introduction

For more than 20 years, European policies for organic farming have been developed on a number of levels. The first scheme specifically targeted at organic farming was introduced in Denmark in 1987, shortly followed by other countries. As part of the MacSharry reform of the Common Agricultural Policy (CAP) in 1992, the introduction of agri-environment programmes provided a unified framework for supporting conversion to and maintenance of organic production across the EU. Today there are a wide range of different policy measures in EU Member States that are financed by different funding sources and that address organic farming in one of a number of ways: with special provision (e.g. higher payment rates for organic farming), with partly special provisions (e.g. higher payment rates for organic and other specified types of farming) or where organic farming is at least mentioned specifically (e.g. as one of a number of target groups) but without any special provisions. In the following, based on the results of a previous study (Sanders et al., 2011), the support measures applied to organic farming are briefly described.

### 4.2 Support measures addressing organic farming under current rural development programmes

According to the Community Strategic Guidelines for Rural Development, Member States are encouraged to make use of the contribution of organic farming to the environmental and animal welfare objectives of the CAP. Most EU countries have followed this recommendation and provide specific area payments for organic farming under Axis 2 (Improving the environment and the countryside) of their rural development programmes. In addition, some Member States have, to a varying degree, also implemented policy measures addressing organic farming under Axis 1 (Improving the competitiveness of the agricultural and forestry sector) and Axis 3 (Improving the quality of life in rural areas and encouraging diversification of the rural economy).

### 4.2.1 Support under Axis 1: Improving the competitiveness of the agricultural and forestry sector

In 22 Member States or their regions, organic farming was addressed in one or several of the following 6 rural development programme (RDP) measures under Axis 1 in the period 2007-2011.

- **Setting up of young farmers** (Measure 112): In the Czech Republic, applications are selected on the basis of a point system, where organic farmers receive extra points. In three Spanish and two Italian regions, organic farmers receive higher payment rates than conventional farmers. Furthermore, in some regions in Italy and Spain organic farming is mentioned as a reason for intervention or as one of several target groups.
- **Modernisation of agricultural holdings** (Measure 121): In Flanders (Belgium), Madeira (Portugal) and North Rhine-Westphalia (Germany) higher grants are given to organic farmers investing in agricultural holdings to improve the overall performance of the farm; in Austria this is limited to organic livestock farmers investing in farm buildings. Organic livestock farmers along with other groups of (non-organic) farmers receive higher investment grants in Mecklenburg-Western Pomerania and Bavaria (Germany). In Bulgaria, organic farmers receive the same level of support as non-organic farmers; however a minimum of 5 % of the Measure 214 funds is reserved for investments required for conversion to organic farming. Higher evaluation scores are given for applications related to organic farming in Cyprus, Czech Republic, Latvia and Slovakia. Furthermore, various countries have mentioned organic farming as one of several target groups, but it is not clear what direct advantage for organic farmers this implies.
- **Adding value to agricultural and forestry products** (Measure 123): In Bavaria (Germany) and Slovenia, projects related to organic food production, processing or marketing receive higher support rates. In Estonia, a sub-scheme specifically targets organic farming as well as conventional dairy farmers referring to specific circumstances of the organic and dairy sectors. Rather than higher grants, a higher priority is given to projects related to organic farming under the selection schemes in Cyprus, the Czech Republic, Latvia and Slovakia. A tiered support scheme is used in Austria and in two regions in Spain to determine the level of support within which organic farming is one criterion among others to be eligible to receive a top-up grant. In Bulgaria, Denmark, Hungary, Malta, Romania and some regions of Spain, organic farming has been defined as a (particular) target group or reason for intervention, but no special provisions are made for organic farming.
- **Participation of farmers in food quality schemes** (Measure 132): Member States have adopted different approaches to refund certification and inspection costs of organic farmers. Several countries/regions use Measure 132 to cover parts of the certification and inspection cost incurred by farmers (Austria, Belgium, Cyprus, Estonia, Greece, Malta, the Netherlands, Poland, Portugal, Slovenia, most regions of Italy and Spain as well as parts of the UK). Flanders and Wallonia (Belgium) as well as Greece introduced support schemes for organic farmers in 2011. These schemes are usually also open to farmers participating in other approved quality schemes.

- **Information and promotion activities** (Measure 132): In some Member States, Measure 132 is combined with Measure 133, which supports information and promotional activities for products or foodstuffs covered by approved quality schemes. In Malta and Estonia, only organic producers may receive support through Measure 133. Other countries offer no special provisions for organic producers.
- **Setting up of producer groups** (Measure 142): In Slovenia, financial support is given to organic farmers who set up producer groups and therewith strengthen the institutional structure of the primary sector. This measure is however not exclusively targeted at organic. Farmers producing other special agricultural products (e.g. food labelled as Protected Designation of Origin (PGO) or Protected Geographical Indication (PGI)) are also eligible for aid.

In addition to the measures described above, many Member States have implemented specific training courses or advice for organic farming under Measure 111 (Vocational training and information actions) and/or Measure 114 (Use of advisory services). Since both activities are also relevant for conventional farmers, organic farming is, in most cases, neither addressed nor mentioned under these measures.

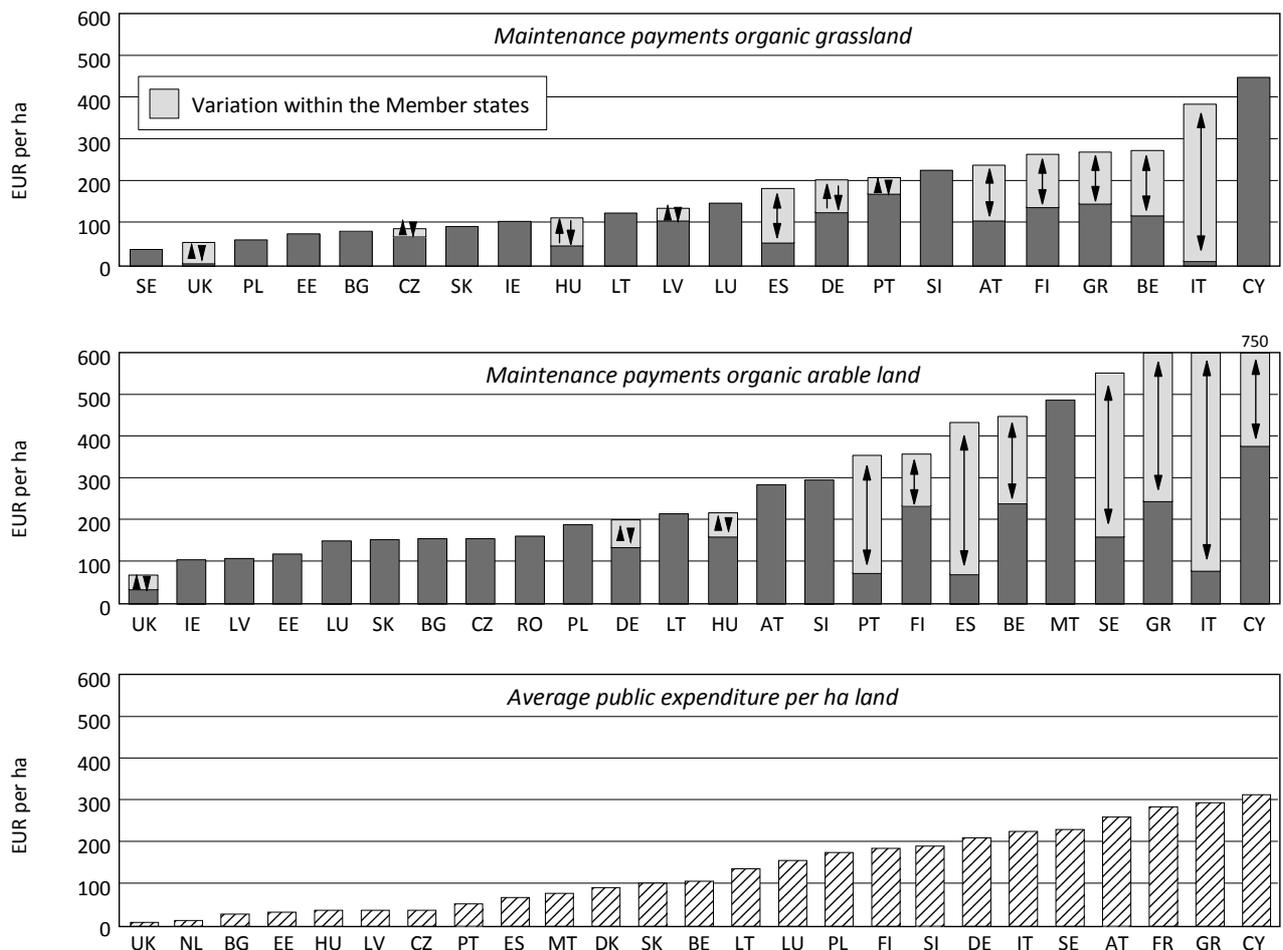
#### 4.2.2 Support under Axis 2: Improving the environment and the countryside

In 25 Member States or their regions, organic farming is addressed in one or both of the following two RDP measures under Axis 2 in the period 2007-2011.

- **Agri-environment payments** (Measure 214): For organic farming agri-environment payments are undoubtedly the most important support measure of the rural development programmes. With the exception of the Netherlands and France, all Member States have implemented specific area payments for organic farming in the framework of national/regional agri-environmental schemes (Measure 214) to compensate for additional costs and/or income foregone resulting from organic management. Differentiation of seven land types is used including arable land, grassland, vegetables and herbs, greenhouse crops, perennials and orchards, vineyards, and olive trees. There are large variations in the payment rates for the same land type across countries. For example, maintenance payment rates per hectare for grassland varied between 39 Euro and 450 Euro across the EU (Figure 4.1). Even greater variations were observed for conversion payments. Differences in payment rates are the result of a number of factors including a) different payment differentiations within the broader land types (e.g. a specific cereal payment is likely to lead to a higher payment rate than an average arable payment), b) different economic assumptions and c) different cost

and income foregone components in payment calculations.<sup>1</sup> Furthermore, policy priorities, budget allocations and constraints, consideration of different bio-physical land characteristics and the inclusion of (area-based) livestock payment components are also relevant factors.

**Figure 4.1:** Maintenance payments in 2011 and average public expenditure per ha in 2008-2009 in EU Member States



Source: Sanders et al. (2011).

<sup>1</sup> According to Regulation (EC) 1698/2005 payment rates shall cover additional costs or income foregone resulting from organic management (i.e. only those commitments going beyond the relevant mandatory requirements established by EU or national legislation). The level of payments is defined by Member States based on the following parameters: differences in yield, production costs, prices and transaction costs. Usually Member States define a typical regional organic farm and a conventional reference farm to calculate the additional costs. As reported by Sanders et al. (2011) not all countries/regions compensate 100 % of the additional costs (e.g. BE, CY, FI, PL, SE, and SI). In most countries which do not compensate 100 % of the additional costs, there are large variations between individual crops or land use types. Since additional costs are calculated on the basis of a typical farm, low compensation levels do not necessarily mean that all farmers are only partially compensated. The real implications of compensation levels depend very much on the selected organic and conventional reference farms.

High payment rates do not necessarily guarantee a high level of support for organic farms. Scheme access problems, as reported from several Member States, can reduce the potential positive impacts of high support payments. Average public expenditure for organic support payments under the agri-environmental measure per certified organic hectare varied between 7 Euro and 314 Euro for the period 2008 to 2009. On average, public expenditure amounted to 163 Euro per hectare for the EU-27 (excluding Ireland, Romania and England). Substantial differences between the Member States also exist in the design and application of eligibility criteria and requirements such as payment limits, stocking rates and additional scheme requirements beyond organic standards which are not necessarily reflected in the payment rates.

It is important to note that a wide range of options for combining organic with agri-environmental payments exists across most Member States covering nearly all the key agri-environmental themes. “Topping up” organic support payments through other agri-environmental payments utilises the comparative advantages of organic farms in providing environmental benefits and public goods, and grants additional financial support to organic farms.

- **Animal welfare** (Measure 215): Cataluña (Spain) provides additional support for organic livestock farmers under Measure 215 aiming to cover additional costs or income foregone due to commitments regarding feeding facilities or free outdoor access. In some other countries, specific organic livestock payments are integrated in Measure 214.

### 4.2.3 Support under Axis 3: Improving the quality of life in rural areas and encouraging diversification of the rural economy

In the Czech Republic, organic farming was addressed in two RDP measures under Axis 3 in the period 2007-2011:

- **Diversification into non-agricultural activities** (Measure 311)
- **Encouragement of tourism activities** (Measure 313).

Both measures aim to diversify the rural economy through grants for the introduction or expansion of activities related to local services, products, trade and tourism. Similar to provisions made for Axis 1 measures, projects related to organic farming are awarded higher points in the Czech Republic which may increase the likelihood to receive support. References to organic farming are also made in Hungary under Measure 313.

### 4.3 Support measures addressing organic farming under CAP Pillar 1

Besides rural development programmes, some EU Member States provide financial support for organic farmers in the framework of Article 68 of Regulation (EC) 73/2009 as well as top-ups in the Common Market Organisation for fruit and vegetables.

The EU rules for direct support schemes under the CAP Pillar 1<sup>2</sup> allow Member States to support specific types of farming and quality (so-called 'Article 68 measure'). France is using this measure - instead of RDP Measure 214 (agri-environment schemes)<sup>3</sup> - for conversion and maintenance payments for organic farming. Romania is following a dual approach: while maintenance payments are paid under RDP Measure 214, Article 68 is used to finance conversion payments. In Denmark, the current RDP extensification scheme under Measure 214, which provides area payments for organic farmers, is stepwise replaced by a similar Article 68 measure. In addition Greece, Italy, Spain and Sweden have also implemented specific support to farmers for improving the quality of agricultural products. These schemes are targeted not only at organic farmers, but also at farmers participating in other food quality schemes.

The Fruit and Vegetables Regime of CAP Pillar 1 aims to increase the use of environmentally-friendly cultivation and production techniques. To receive a grant, producer organisations have to prepare an operational programme in which they describe how their activities contribute to the specific national goals defined in the national strategies for sustainable operational programmes. Specific provisions are made for organic producer organisations. The Community co-financing rate for organic production in the operational programmes is 60 % of the eligible costs (usually 50 %) with a maximum financial contribution of 4.1 % of the total value of marketed produce. In general, support for the environmental actions covers additional costs and income foregone resulting from that action. Several Member States have, however, made country-specific provisions regarding the type of eligible costs related to organic farming. In Belgium, Ireland, the Netherlands and Sweden, only expenditure for specific equipment or means of production is eligible for aid (e.g. for packing and storing of organic products, use of organic dung and compost). Support for training and advisory costs are granted in Germany and Austria. The Czech Republic provides support for planting new organic orchards. In Spain, financial support is either given as a per-hectare payment or is based on invoices for specific cost items.

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<sup>2</sup> Schemes are based on Council Regulation (EC) 73/2009 establishing common rules for direct support schemes for farmers.

<sup>3</sup> For the contracts concluded by 2010/11 France implements conversion and maintenance payments for organic farming under Axis 2 of its rural development programmes through agri-environment payments (Measure 214). These payments will continue to be carried out until the end of the contracts, having a duration of 5-7 years.

### 4.3 Other national or regional organic support measures

Member States and regions have also introduced a wide range of other national and/or regional policy instruments not (co-)financed by the EU (see Figure 4.2). Examples include financial support for producing, processing and marketing organic products, a range of communication policies as well as support for research projects related to organic farming. In many cases, the identified measures have some similarities to those implemented under rural development programmes. This is particularly the case for investment aids, marketing aids and support for training programmes and advisory services. Some of them could probably also be financed under the RDP Measures 111, 114, 121 and 123. Clearly, some Member States forgo the opportunity of co-financing these measures through the EU in order to retain greater flexibility in programme planning and implementation or to avoid reporting duties.

**Figure 4.2:** Overview of identified national or regional public measures addressing organic farming which are not (co-) funded by the EU in 2007-2011

	Farm investment	Marketing & Processing	Certification & Regulation	Training & Advice	Information & Education	Public procurement	Promotion campaigns & events	Institutional support	Research	Others
AT					■		■	■	■	
BE		■	■	■			■	■	■	
BG										
CY										
CZ				■	■	■	■	■	■	■
DK			■					■	■	
EE		■	■		■		■		■	
FI		■		■					■	■
FR									■	■
DE		■		■	■	■	■	■	■	■
GR										
HU										
IE	■	■	■	■	■		■			
IT		■	■	■	■	■	■	■	■	■
LV		■			■		■	■	■	
LT		■							■	
LU				■	■	■	■	■	■	■
MT										
NL		■		■			■	■	■	■
PL			■	■	■		■		■	
PT										
RO		■	■				■			■
SK								■	■	
SI				■	■			■	■	■
ES		■		■	■	■	■	■	■	■
SE							■	■	■	
UK		■		■	■			■	■	■

■ Public support measures not (co-) financed by EAFRD or EAGF available in the whole country  
 ■ Public support measures not (co-) financed by EAFRD or EAGF available only in certain regions

Source: Sanders et al. (2011).

## 4.4 Organic action plans

National or regional organic action plans provide a strategic instrument to coordinate different supply-push and demand-pull instruments tailored to local conditions. In total, 17 national and 10 regional action plans or similar support schemes that have been implemented in 2007 - 2011 were identified in EU Member States (Table 4.1). In many cases, action plans bundle CAP measures and complementary national/regional measures not (co-) funded by the EU. The action plans differ substantially with respect to policy targets, running period, types of actions specified, financial resources, number of previous action plans, and initial year of implementation reflecting different support strategies and developmental stages of the EU's national/regional organic sectors.

**Table 4.1:** Overview of organic action plans or similar support schemes in EU Member States implemented in 2007-2011

EU Member States / Region	Running period	Number of previous actions plans	Year of implementation of the first action plan	Quantitative targets		Target year
				Share of organic land area in the total UAA	Share of organic food in the total food market <sup>a</sup>	
AT Austria	2011 - 2013	4	2001	20 %	-	2013
BE Flanders	2008 - 2012	2	2000	-	-	-
BG Bulgaria	2007 - 2013	0	2007	8 %	-	2013
CY Cyprus	-	-	-	-	-	-
CZ Czech Republic	2011 - 2015	1	2004	15 %	3 % <sup>b</sup>	-
DK Denmark	2011 - 2013/15	2	1995	15 % <sup>c</sup>	-	2020
EE Estonia	2007 - 2013	0	2007	ca. 3 % <sup>d</sup>	3 % <sup>e</sup>	2013
FI Finland	2007 - 2015	-	2007	-	-	-
FR France	2011 - 2013	1	2008	6 %	-	2012
DE Germany	since 2002	0	2002	- <sup>f</sup>	-	- <sup>f</sup>
GR Greece	-	-	-	-	-	-
HU Hungary	-	-	-	-	-	-
IE Ireland	2008 - 2012	0	2008	5 %	-	2012
IT Italy	-	-	-	-	-	-
LV Latvia	2007 - 2013	1	2007	10 %	-	2013
LT Lithuania	-	-	-	-	-	-
LU Luxembourg	2009 - 2011	0	2009	ca. 5 % <sup>g</sup>	-	-
MT Malta	-	-	-	-	-	-
NL Netherlands	2008 - 2011	2	2001	- <sup>h</sup>	-	-
PL Poland	2011 - 2014	1	2007	ca. 4% <sup>i</sup>	-	2013 <sup>i</sup>
PT Portugal	-	-	-	-	-	-
RO Romania	-	-	-	-	-	-
SK Slovakia	2011 - 2013	1	2006	5 %	-	-
SI Slovenia	2005 - 2015	1	2007	20 %	10 % <sup>j</sup>	2015
ES <sup>k</sup> Spain	2007 - 2010/11	0	2007	-	-	-
SE Sweden	2007-2010	0	-	20 %	-	2010
UK <sup>l</sup> Scotland	since 2011	0	2007	-	-	-
Wales	2005 - 2010	1	1999	10-15%	-	2010

a) Related to the annual turnover

b) 60% of organic food sales shall be organic products produced in the Czech Republic.

c) Doubling the area under organic management

d) 120 000 ha organically managed area

e) Share of organic food produced in Estonia in the total food market

f) No targets were set out in the Federal Organic Farming Scheme. Although, as part of its national sustainability strategy, Germany aims to achieve a share of 20 % in the long-run.

g) Doubling the area under organic management of the year 2006

h) Annual growth of the organically managed area by 5 %

i) 600 000 ha organically managed area; target and target year of the previous action plan

j) Share of organic food produced in Slovenia in the total food market

k) Regional action plans were also implemented in Andalucía, Asturias, Castilla-La Mancha, Cataluña, Extremadura and País Vasco.

l) In England, the regional organic action plans were phased out in 2010.

Source: Own presentation based on information supplied by national experts and amended by data from Gonzalez et al. (2011).



## Chapter 5

# Intervention logic of the EU legislation on organic farming

## 5.1 Introduction

The implementation of the EU legislation on organic farming in 1991 was a response to a growing consumer demand for certified organic products. In order to protect consumers and organic farmers against false and misleading organic claims – and thereby to ensure transparency at all stages of production and processing as well as a fair competition – a legal definition of organic farming and EU-wide rules for organic production were needed. Although the legal framework was amended several times in the past twenty years and totally revised in 2007, the underlying logic of the policy intervention is still applicable.

In the following, a model of intervention logic is presented that shows the relationships between individual rules, the expected impacts, the objectives of the rules and the objectives of the legislation as a whole. In the context of this evaluation, the main aim of developing the intervention logic model is to provide the basis for the judgement of the adequacy of the defined regulatory instrument or measures. These are the different areas of rules that exist in the regulation; i. e. rules on production, labelling, controls and trade with third countries. In Part B of this report, the adequacy of these rules is evaluated regarding the objectives of the Regulation and objectives of organic production being pertinent to needs, problems and issues of the sector; and the effectiveness of the instruments in achieving the objectives.

## 5.2 Approach

The main steps in drawing up the intervention logic can be summarized as:

- identifying the aims of the intervention and correlating needs from official documents;
- ordering the identified aim-related statements into a hierarchy of global objectives, intermediate objectives and specific or operating objectives;
- reconstructing the expected logical cause-and-effect relations envisaged by the regulator.

The approach builds on the 'Guidelines for Ongoing Evaluation of Rural Development Programmes 2007-2013'; adapted to the specific task of the evaluation of provisions in the organic sector, as shown in the Organic Action Plan Evaluation Toolbox (Lampkin, 2008).

Apart from the Council Regulation (EC) 834/2007 itself, the European Action Plan for Organic Food and Farming (EOAP) from 2004 was taken into account because it sets out the direction for EU policy development for organic farming. The action plan also refers to other policy instruments supporting the development of the sector under the CAP. It is therefore important to consider the linkages of the organic legislation to the goals of the CAP. Additionally, horizontal EU policy measures such as the official food and feed control system (Regulation (EC) 882/2004) were considered.

To describe the context of the policy intervention, the next section summarises the global objectives of Regulation (EC) 834/2007, as well as the relevant objectives of the CAP (2007-2013). This provides the basis for the characterisation of the relationship between global, intermediate and specific objectives as well as between the specific objectives and the rules for production, labelling, control and the trade with third countries.

## 5.3 Global policy intervention context

### 5.3.1 Global objectives of the Regulation (EC) 834/2007

The global objectives of the EU Regulation on organic farming are defined in Article 1 of Regulation (EC) 834/2007 as well as in the recitals of the Regulation. Accordingly, the Regulation aims *“to provide the basis for the sustainable development of organic production while ensuring the effective functioning of the internal market, guaranteeing fair competition, ensuring consumer confidence and protecting consumer interests.”* The establishment of a basis for a sustainable development of organic farming in the EU can be classified as the overarching objective of the Regulation. It is further specified and contextualised by the three objectives *“ensuring the effective functioning of the internal market”, “guaranteeing fair competition”* and *“ensuring consumer confidence and protecting consumer interests”*. Following the standard evaluation terminology, they are classified here as global objectives of Regulation (EC) 834/2007. In order to understand the meaning and relevance of these global objectives, it is important to consider the (past) specific needs of the organic farming sector in the EU and its development in the last twenty years as well as the aims and provisions of the CAP and the EU Treaty. Both aspects are shortly outlined in the following.

**Ensuring a functioning of the single market.** The EU policy is based on the fundamental assumption that an internal market is essential for economic growth and the development of markets in the EU (and therewith for achieving the objectives of the Europe 2020 strategy). The significance of the internal market is specified in the EU Treaty, which highlights its role for a sustainable development of Europe based on balanced economic growth and price stability as well as a highly competitive social market economy (European Union, 2012). Accordingly, the organic sector development is fostered if organic operators in all Member States have access to the 500 million consumers in the EU. In the past trade with organic products on the internal

market was particularly hampered by different national and private organic logos, which were often required to get access to regional markets - mainly because retailers did not market products without the logo of the national/local inspection and certification body or because consumers did not recognise them as organic (European Commission, 2004b). Against this background, the EU Regulation on organic farming aims to ensure functioning of the single market, which is mainly achieved by common provisions for the labelling of organic products and the control system.

**Guaranteeing fair competition.** Closely related to the functioning of the single market is the prevention of unfair competition. Indeed policies that lead to a distortion of competition (and therefore hamper economic development) are not compatible with the internal market and are therefore prohibited as laid down in the EU Treaty. In relation to organic farming this means that an expansion of organic farming at EU-level (and therewith a full exploitation of organic farming's potential contribution to the CAP) is primarily fostered, if there is a level playing field for all organic producers in the EU. Rules should not lead to an economic advantage for organic farmers in certain regions, if organic farmers in other regions are disadvantaged by these rules and thereby the development of organic farming in these regions is hampered.

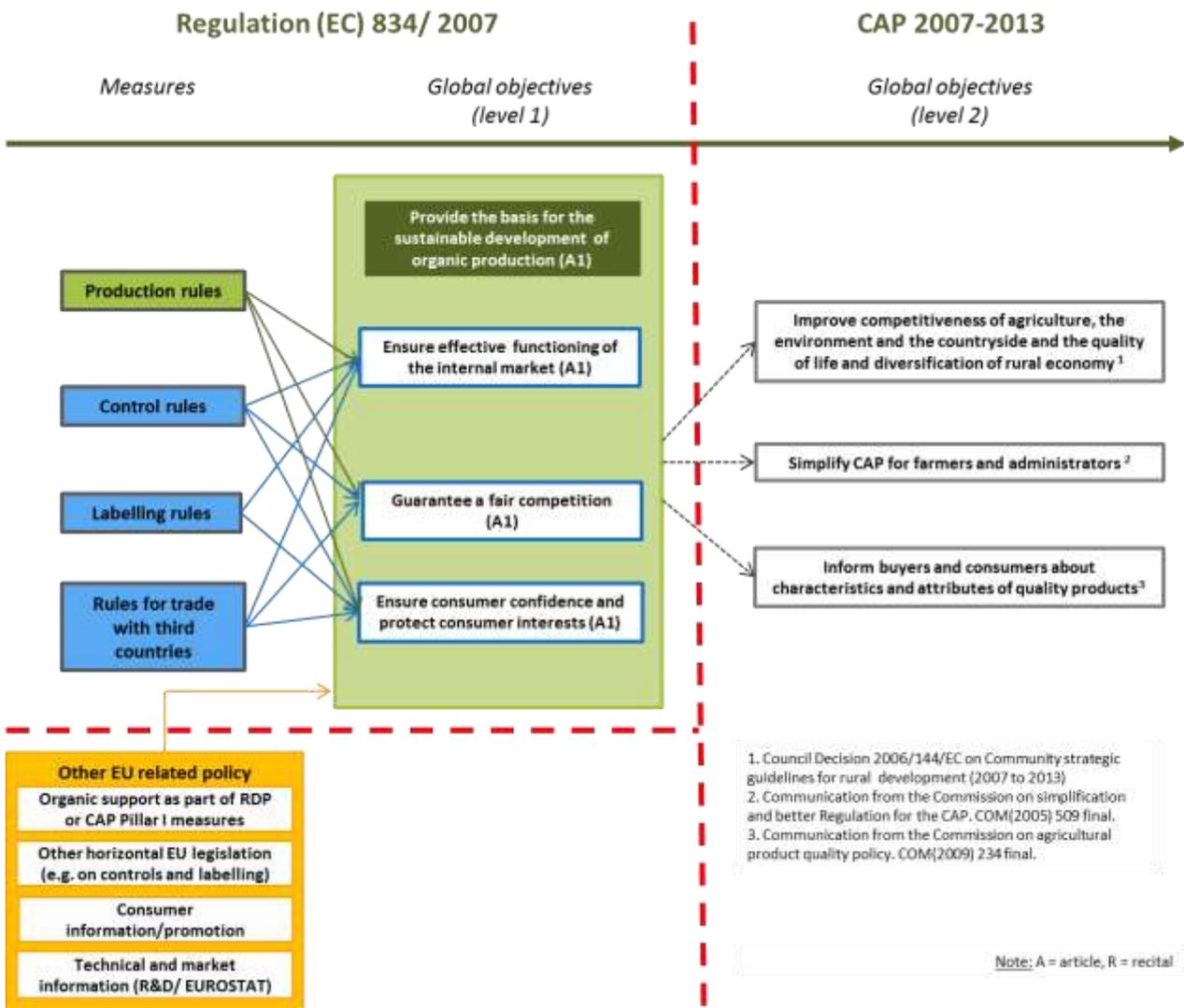
In relation to organic farming, fair competition includes also a further aspect. Products issued from organic farms need to be distinguished from those issued from conventional farms, in particular as regards the claim to produce organically. This is achieved by a legal definition of organic production methods, and a protection of the term 'organic' as regards agricultural products. It specifies the claims of organic farming with respect to environmental protection, preservation of natural resources (including biodiversity), application of high animal welfare standards and production methods based on natural substances and processes. By doing so, the legal definition of organic farming (which is operationalized by various production rules) provides a basis for consumer trust, financial remuneration for the provision of public goods and a basis to take action against fraud and infringements.

**Ensuring consumer confidence and protecting consumer interests.** A sustainable development requires that supply and demand grow hand in hand and that the share of organic products becomes large enough to establish a stable market (European Commission, 2010). This puts consumers in a key position for the development of organic farming. It is therefore crucial to ensure consumer confidence in compliance with the rules and to protect consumer interests with regard to the product quality and the impact of organic farming on the environment, human health and animal welfare.

These global objectives form the normative basis for the specific rules on production, processing, controls, labelling and trade with third countries (see Figure 5.1). Besides these rules, there are a number of other instruments that aim to foster the development of organic farming at EU-level. These include a) instruments used to support organic producers as part of CAP measures and b) the use of funds to promote the organic logo. The EU also provides statistical information; and

supports research and development projects aimed at improving various aspects of organic production (see e.g. European Commission, 2010). Also relevant are a number of horizontal measures such as the legislation on controls (Regulation (EU) 882/2004) and labelling (Regulation (EU) 1169/2011). These instruments are not part of this evaluation but provide the context for the impact of the instruments evaluated here. In many cases it might be difficult to clearly separate the impact of one from the other.

**Figure 5.1:** Global objectives of Regulation (EC) 834/2007 and relevant objectives of the CAP 2007-2013 in relation to the legislative measures of the regulation



Source: Own illustration.

### 5.3.2 Global objectives of the CAP for 2007-2013

As described at the beginning, the implementation of the EU legislation on organic farming is closely related to specific needs of the organic sector (bottom-up reasons for the policy intervention). In order to understand fully the context of the policy intervention, it is also important to consider objectives of the CAP, notably the objectives of the EU rural development policy, which provide more general reasons for the policy intervention (top-down reasons for the policy intervention).

As stated in Article 3 of the Council Regulation (EC) 1698/2005, the current EU **rural development policy** aims to improve a) the competitiveness of agriculture and forestry by supporting restructuring, development and innovation; b) the environment and the countryside by supporting land management; and c) quality of life in rural areas and encouraging diversification of economic activity. The European Action Plan for Organic Food and Farming points out that organic farming is particularly considered as a way to improve the environment, but can also make contributions to achieving the other two aims. For this reasons, the Commission strongly recommended Member States to make full use within their rural development programmes of the instruments available to support organic farming (European Commission, 2004a). In order to ensure the contribution of the organic farming sector to the aims of EU rural development policies, a clear definition of organic management practices including production rules is needed.

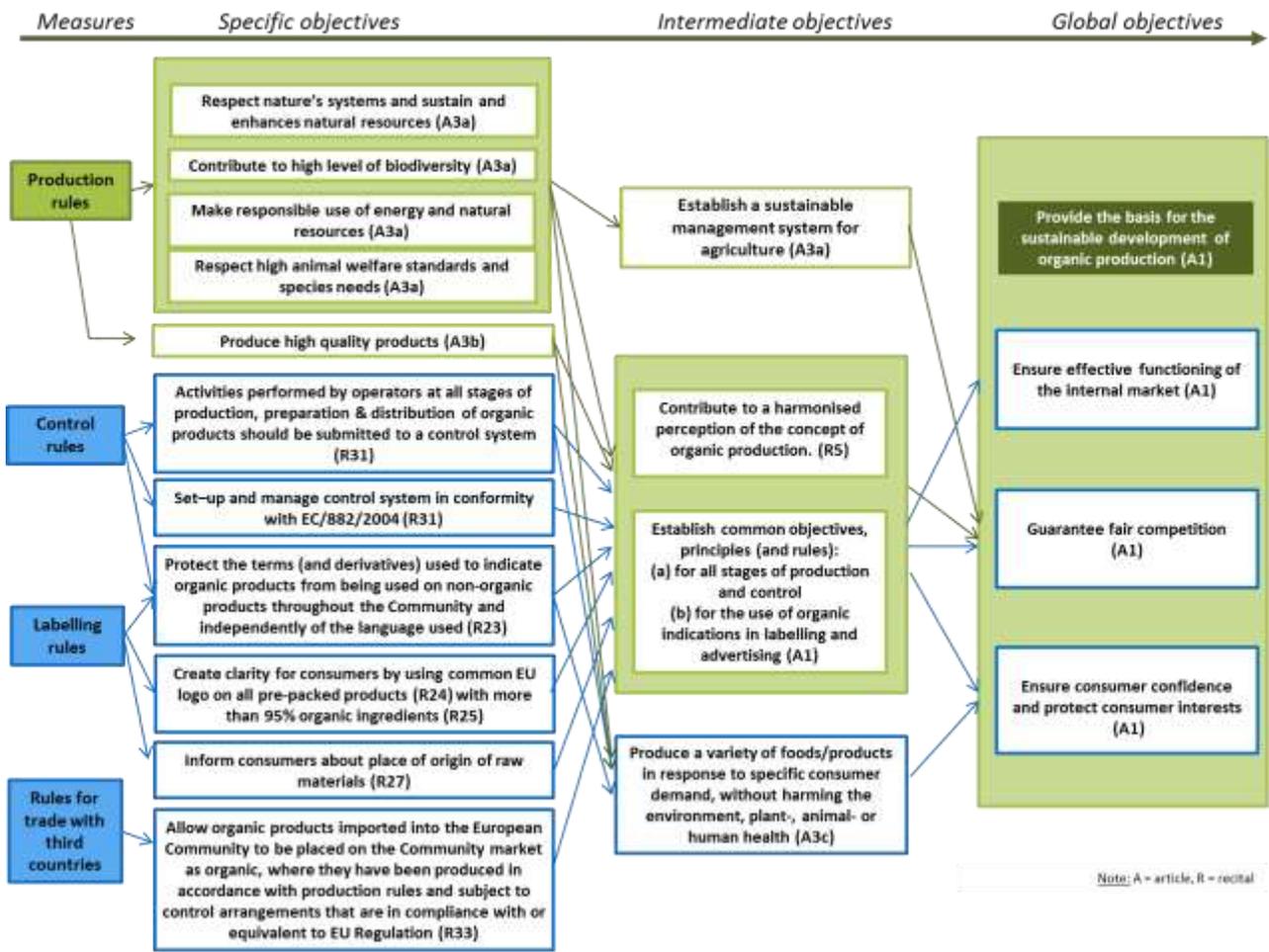
**Food quality** is a vital part of the EU agri-food sector's strategy in the global marketplace and therefore another important issue of the CAP and its recent reforms (European Commission, 2009). A wide range of support instruments exist at EU-level aiming to encourage farmers to produce high quality food (e.g. support for food quality schemes under Pillar 1 and 2 of the CAP). The decisive contribution of organic farming to the creation of products of high quality has again been expressed in the EOAP. As described above, detailed production and processing rules are needed to ensure that organic farming contributes to the CAP food quality strategy.

**Simplifying the CAP** is a key challenge that is addressed through various horizontal policy initiatives of the Commission. The main objective of CAP simplification is a revision of the legal framework as well as the reduction of administrative burdens for farmers. Simplification was also one of the aims of the process of revision of the previous organic regulation. Recital 4 of the Regulation links it to developing common objectives and establishing common principles that ensure an effective functioning of the internal market. The importance of simplification is further confirmed by Evaluation Question 6 being dedicated to it. It is obvious that simplification of the CAP cannot be a reason for policy intervention in a narrow sense but indicates the direction of the development of the CAP which is also relevant for the EU legislation on organic farming and its possible revisions in the future.

### 5.4 Intermediate objectives of the Regulation (EC) 834/2007

Intermediate objectives (Figure 5.2) are mainly used to reconstruct the relationships between global and specific objectives of the Regulation. The figure therefore repeats global objectives (see above) on the right hand side with arrows indicating links between the two levels.

**Figure 5.2:** Global, intermediate and specific objectives of Regulation (EC) 834/2007 in relation to its legislative measures



Source: Own illustration.

The first intermediate objective refers to the aim of organic production of “developing a sustainable system of agriculture” (Article 3a). The different means by which this is to be achieved are developed in specific objectives for the production rules (see below). This intermediate objective is linked to the global objective “guaranteeing fair competition” reflecting the need to protect organic farmers and to provide a basis for the delivery of public goods.

A second intermediate objective is to establish “*common objectives and principles to underpin the rules*” (Article 1.1). This addresses the need to remove the barriers for internal trade as they were recognised in the EOAP. It is expected that such a harmonised perception of the concept of organic farming will lead to “*improving and reinforcing the community’s organic farming standards, import and inspection requirements*”. It thereby contributes to a functioning of the internal market and fair competition among operators as well as transparency and consumer confidence.

The third intermediate objective is stated as one of organic production: “*producing a wide variety of products that respond to consumers’ demand*” (Article 3c). The instrument of legislation is seen as playing an important role in the policy framework of the development of the agricultural market (Recital 2) and refers to the global objective of “ensuring consumer confidence and protecting consumer interests”.

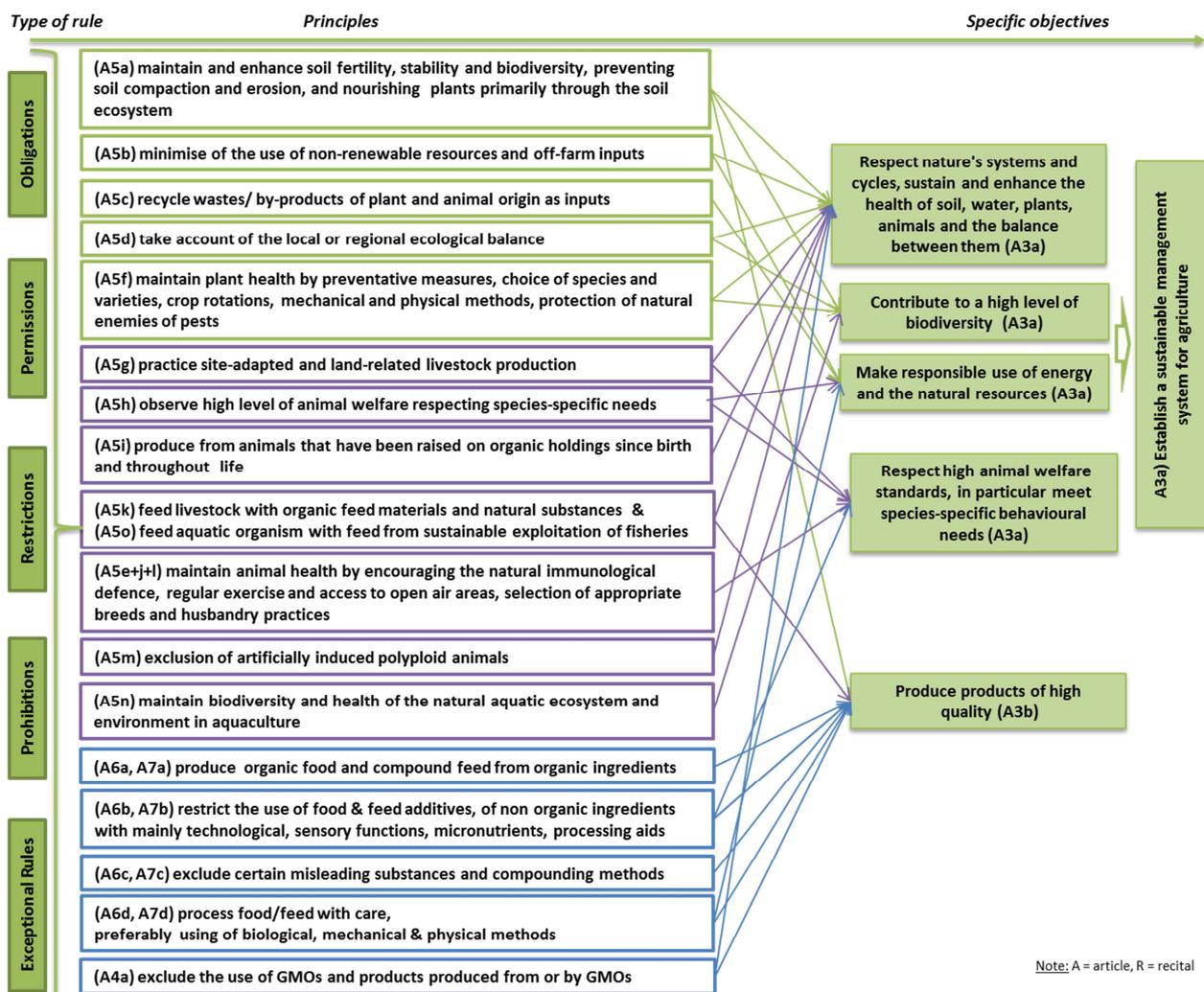
As mentioned above, the intermediate objectives have mainly been used to link global objectives with the specific objectives of the specific instruments. They are not used to develop indicators and criteria for the judgement of these objectives.

## 5.5 Relationship between measures and objectives

### 5.5.1 Rules of organic production

Statements about the specific objectives of the production rules are found in Article 3 of the Regulation. The principles applicable to farming and to the processing of food and feed (Articles 5 to 7) represent a summary of statements on the detailed rules (in Regulation (EC) 834/ 2007 and in the implementing rules). In the model of the production rules (Figure 5.3), these have been linked to the specific objectives. Figure 5.3 makes it clear that there are very few mono-causal linkages, where one rule is set to pursue one objective, but many rules can be seen as contributing to more than one specific objective of the production rules.

**Figure 5.3:** The different types of production rules in relation to the specific principles and objectives of the Regulation (EC) 834/2007



Source: Own illustration.

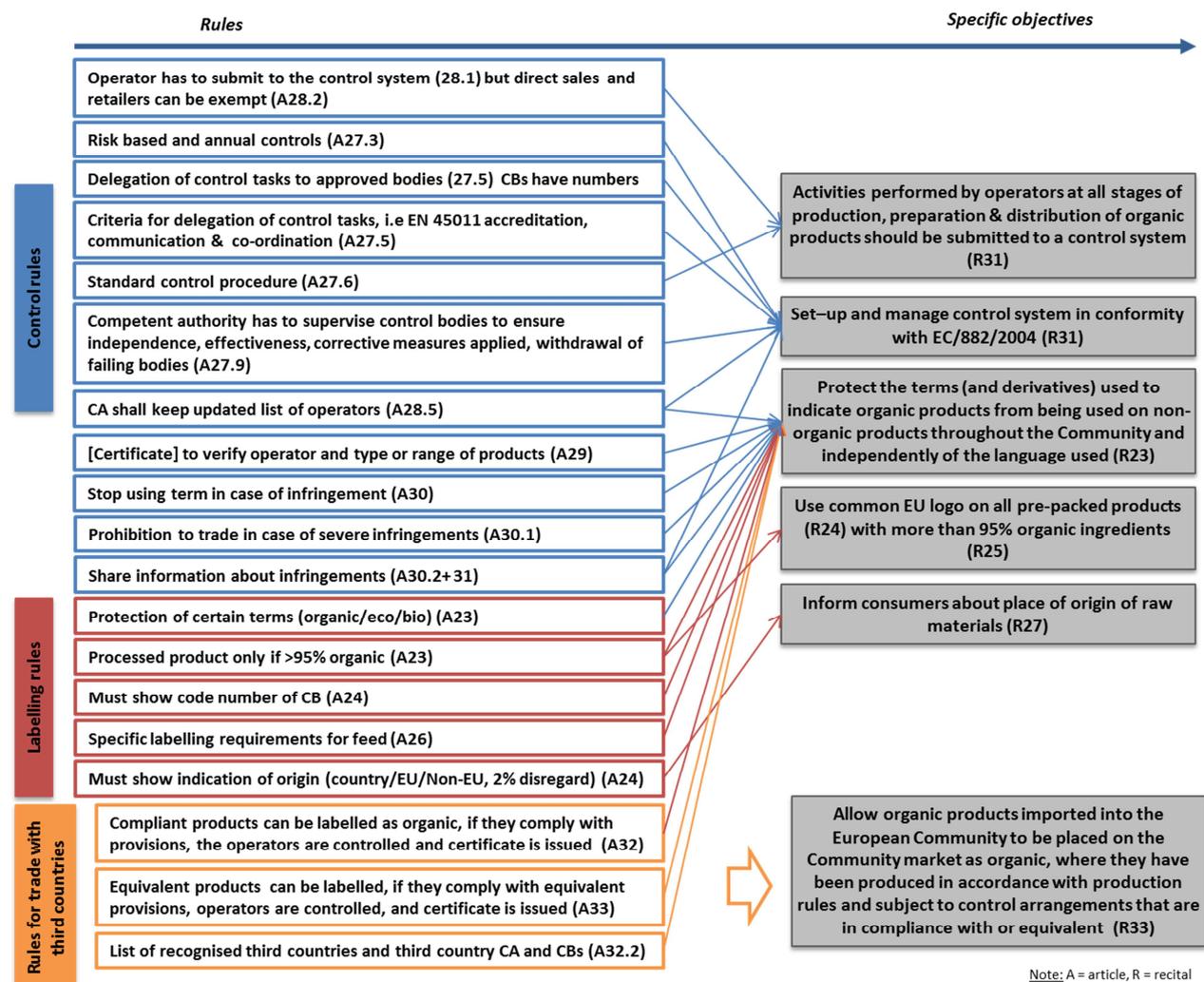
## 5.5.2 Rules for labelling, control and trade with third countries

### Labelling rules

Specific objectives of the labelling rules and the reasons why they have been implemented are found in Recitals 23 to 27. The main reason for the aim of protecting the term 'organic' (and biological, ecological and other derivatives) from use on non-organic products, is to maintain consumer confidence and ensure fair competition (Recital 23). Using the common logo on pre-packaged products that contain almost exclusively (> 95 %) organic ingredients is aimed at creating clarity for the consumer (Recital 24 and 25). The logo can be used alongside national and private organic logos (Recital 26). Consumers should also be informed about the place where the

agricultural raw materials originate (Recital 27). In Figure 5.4 a summary of the rules linked to specific objectives is provided. This illustrates that the specific objective of protecting the term ‘organic’ is not only supported by the labelling, but also by several control rules.

**Figure 5.4:** Labelling and control rules, and rules of trade with third countries in relation to the specific objectives of the Regulation (EC) 834/2007



Source: Own illustration.

### Control rules

The specific objectives of the control rules are stated in Recital 31. As illustrated in Figure 5.4 the first objective is to ensure that the activities of all operators, along the whole supply chain (from production to distribution), are submitted to a control system, so that organic products are produced in accordance with the requirements. This contributes to ensuring both effective functioning of the market and consumers' confidence.

The second objective is to ensure that the control system is set up and managed in accordance with the rules laid down in Regulation (EC) 882/2004, on official controls of food and feed. At community level, this regulation aims to establish a harmonised framework of general rules for the organisation of controls that enforce food and feed law, animal health and animal welfare rules. Further, it aims to monitor and verify that the relevant requirements thereof are fulfilled by business operators at all stages of production, processing and distribution. Important aspects relevant to the organic control system are: regularity and risk basis of controls, supervision and auditing of control bodies, regular communication of results to the competent authority, immediate action in the case of non-compliances, access of the public to information on the control activities and the establishment of national procedures on sanctions (see Padel (2010) for further details).

The control rules link also to the operational objectives for labelling as they represent an important instrument to prevent misuse of the term 'organic'.

### **Rules for the import from third countries**

The main aim of the rules for imports from third countries (Recital 33) is to allow those products to be placed on the Community market as organic, which have been produced in accordance with production rules and are subject to control arrangements that are in compliance with, or equivalent to the rules of Regulation. The following two recitals (34 and 35) make clear that the assessment of equivalency has to take the international legal framework of the Codex Alimentarius into account. Apart from this specific aim, the rules for import from third countries also support the protection of the term 'organic'.

## **5.6 Concluding remark**

The model of intervention logic presented here contextualises the global objectives of the Regulation and the objectives of organic production, which provide the normative reference to judge the adequacy of organic production rules (Evaluation Question 2), control rules (Evaluation Question 3), import rules (Evaluation Question 4) and labelling rules (Evaluation Question 5) as well as to judge the EU added value (Evaluation Question 7) and the contribution of the legislation to the sustainable development of the sector (Evaluation Question 8). The normative basis to judge the adequacy of the scope (Evaluation Question 1) and the degree of simplification (Evaluation Question 6) has been deduced from the background of the corresponding evaluation questions.

## **PART B**

# **Responses to the evaluation questions**



## Chapter 6

# Adequacy of the scope of the Regulation

## 6.1 Introduction

### Evaluation Question 1

*To what extent is the scope of the Regulation adequate to match the current needs of the organic farming supply and distribution chain and those of the consumers of organic products?*

*In answering this question the following aspects need to be examined in more detail:*

- *Whether the exclusion of mass catering from the scope of the current Regulation is still adequate?*
- *Whether there is a case for the inclusion of additional products under the scope of the Regulation, such as non-food products partly made from agricultural raw materials (e.g. textiles, cosmetics) or products closely related to agriculture (e.g. beeswax, maté, essential oils)?*

Council Regulation (EC) 834/2007 on organic farming is limited to unprocessed and processed agricultural products used for food and feed, vegetative propagating materials and seeds, yeast (for food and feed) as well as products from aquaculture. When conceiving the Regulation, the Council had already highlighted the dynamic evolution of the organic farming sector and stressed the need to re-examine the adequacy of the current scope<sup>1</sup>. Within this context, in recent years, particular attention has been paid to mass catering and non-food products (European Commission, 2012).

**Mass catering**<sup>2</sup> is explicitly excluded from the Regulation (EC) 834/2007 (Article 1(3)) but can be regulated by national organic regulations and/or private standards. Furthermore, the mass catering sector is subject to horizontal EU rules on hygiene and food labelling. At the time of conceiving the Regulation, the inclusion of the catering sector was judged to be premature and the protection of terms referring to organic production considered sufficient

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<sup>1</sup> See Article 41 for details.

<sup>2</sup> According to the definition in Article 2(aa) of Regulation (EC) 834/2007, “mass catering operations means the preparation of organic products in restaurants, hospitals, canteens and other similar food business at the point of sale or delivery to the final consumer”.

(European Commission 2012). In the meantime the market has evolved and the Commission has stressed that developments in this sector need to be followed closely (ibid).

Markets are also developing for 'organic' **non-food products** the most sizable of which are cosmetic products and textiles. These are not in Annex I of the EU Treaty<sup>3</sup> and therefore outside the scope of the Regulations. Some of these non-food products are regulated in individual Member States through national regulations and/or private organic standards. Furthermore, some product categories are covered by other horizontal EU regulations or measures, such as the voluntary EU Ecolabel scheme. In its report on the application of the Regulation the Commission points to the problem that the inclusion of non-agricultural products would change the Regulation fundamentally, but also recognised the market growth of textiles and cosmetics which make reference to organic production.

The exclusion of non-food products also concerns products that fall outside Annex I of the EU Treaty but are closely linked to agricultural products that are covered, such as beeswax, essential oils and medicinal herbs. This has led to consumer confusions and the Commission recognises the need for clarification on such products, and whether, - if produced in compliance with the requirements – they may be certified in accordance with the Regulation (European Commission, 2012).

Against this background, the aim of Evaluation Question 1 is to establish whether the existing scope<sup>4</sup> meets the current needs of the organic farming supply and distribution chain and of consumers of organic products. In particular, it was considered whether the scope is clear, whether the current exclusion of mass catering from the scope remains adequate, whether there is a case to include non-food items (such as textiles and cosmetics) partly made from agricultural raw products.

After the introduction, the judgment criteria and approach are described. The presentation of the results addresses the clarity of the scope, the adequacy of the current exclusion of mass catering and considers the case for the inclusion of non-food items to meet the needs of the organic sector and of consumers. Finally, the judgement in response to the evaluation question is presented.

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<sup>3</sup> Annex 1 of the Treaty on the functioning of the European Union lists all products subject to the CAP of the EU.

<sup>4</sup> There are two further issues that are often discussed in the connection with the scope of the Regulation, which are however not directly related to it and therefore not explored here: First, inputs used in organic production that are not products from agriculture (such as feed or seeds). They are defined through the production rules and in particular through the authorisation of substances to be used in the production rules. And second, products which are covered by the scope of the Regulation but for which no implementing rules exist (such as certain livestock species). They are covered in Chapter 7; the approval process for inputs is discussed in Chapter 11.

## 6.2 Approach

The answer to Evaluation Question 1 is based on several judgement criteria which were deduced directly from the evaluation question itself:

(1) **The current scope of the EU Regulation is (or is not) sufficiently clear to different stakeholders**

A basic requirement for the adequacy of the scope is that it is clearly formulated and fully understood by the implementing and enforcing bodies. To assess whether the scope is clear to different stakeholders, views of competent authorities, ministries of agriculture and control bodies from the 13 case study countries were considered.

(2) **The exclusion of the scope meets (or does not meet) the current needs of the organic farming supply and distribution chain**

(3) **The exclusion of the scope meets (or does not meet) the current needs of consumers**

The adequacy of the exclusion of products outside the scope is judged by examining to what extent the needs of the organic farming supply and distribution chain and those of the consumers of organic products are met. This was examined separately for exclusion of mass catering and for the non-food scopes of cosmetics, textiles and by-products of organic agriculture. To assess the needs, first the presence of additional scopes in national organic regulations and important private reference standards has been reviewed. While additional provisions and scopes reflect the needs of the organic farming sector in certain countries, the adequacy of what should be regulated at EU level also depends on other factors and for this reason additional aspects were taken into consideration. As a second indication of the needs of the organic sector, the importance of the market has been taken into consideration. This has been done by analysis of existing market data and the presence of non-food-products labelled as organic. If the corresponding markets are still small and premature, it can be questioned whether there is a need to regulate the corresponding production within Council Regulation (EC) 834/2007. If the market has reached a significant level, one may ask whether there are other private or EU initiatives which are satisfying or have the potential to satisfy the needs of the industry. For this reason, existing literature and information about other private and EU instruments were reviewed. Finally, a fourth indication is given by the responses to the web-based consumer survey carried out in Estonia, France, Germany, Italy, Poland and the United Kingdom. Furthermore, and most importantly, the views of stakeholders (including mass caterers and public procurement institutions and textiles and cosmetic businesses) from the 13 case study countries as well as expert views, including Commission officials were used.

## 6.3 Results

### 6.3.1 Clarity of existing scopes in the current Regulation

#### *Findings from an analysis of provisions and other private or public initiatives*

The scope is set out in Article 1 of Regulation (EC) 834/2007 concerning operators and products, and in Article 42 concerning products for which detailed production rules are not laid down. Also the implementing rules (Regulation (EC) 889/2008) refer to the scope in the several articles that mainly relate to production rules (e.g. Article 1 and 7 regarding livestock species covered), for further details see Chapter 7.

#### *Views of stakeholders*

In the interviews held in the 13 case study countries the stakeholders were mostly of the opinion that the current scope of the EU Regulation is clearly formulated. Two exceptions were identified where the scope is not completely clear:

- It is not clear how agricultural **non-food raw materials** (products closely related to organic agriculture) can communicate organic status in the final product. Such raw materials are produced organically in Europe, but at present not processed into organic food products. The following products were specifically mentioned: wool, leather, beeswax<sup>5</sup>, essential oils (used in food but also in cosmetics), trees and flowers and medicinal herbs.
- The definition of what is covered by the **mass catering exclusion** was considered to be unclear. Representatives from a control body and the competent authority in the United Kingdom were concerned about a lack of clarity of what the exemptions cover. In their view, the definition could be misunderstood to exempt as 'similar food businesses' kitchens that produce bulk food products for onward sale to restaurants and hospitals and do not sell directly to the final consumer. This would be undesirable from the point of view of fraud prevention. Lack of clarity of what is covered by the mass catering exclusion is also expressed by the situation in France and Estonia. Interview partners in both countries indicated that (some) mass catering operators are required to meet all requirements that apply to processing businesses and in Spain they were also of the opinion that this would be desirable (see Table 6.2 below).

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<sup>5</sup> The Regulation (EC) 889/2008 requires the use of beeswax from organic units in apiaries.

### 6.3.2 Adequacy of current exclusion of mass catering from the scope

#### Meeting the needs of the organic sector

##### *Findings from an analysis of provisions and other private or public initiatives*

Mass catering is regulated at a national level in six of the 13 case study countries (Austria, Denmark, Estonia, France Germany, and Slovenia), whilst private standards for mass catering exist in Italy (various), Germany (BIOLAND), Spain (CAAE), Czech Republic (Pro-Bio), the Netherlands (Stichting EKO-Keurmerk) and the United Kingdom (Soil Association). The French rules submit private mass caterers to control and certification, whereas public caterers are exempt. According to the Commission's own survey from 2011 (European Commission, 2012) seven Member States (Austria, Germany, Denmark, Estonia, Latvia, Lithuania and Slovenia) had introduced national rules on mass catering, while private standards exist in ten other Member States (Belgium, Czech Republic, Spain, Finland, Hungary, Ireland, Italy, the Netherlands, Sweden and the United Kingdom).

The mass catering sector requires some flexibility, since it is difficult to obtain all the organic ingredients required when producing a wide range of dishes. Various approaches have been adopted to overcome this. For example, under German law caterers can use organic indications in relation to one ingredient in a mixed menu (e.g. organic potatoes), one component (e.g. all vegetables) or organic dishes (100 % of agricultural ingredients have to be organic) (MKULNV, 2011). Some private standards also explicitly address the need for flexibility in their rules for organic mass catering. For example, under the German BIOLAND rules the caterer enters into a “*gastronomic partnership contract*” that obliges restaurants to use at least 70 % organic ingredients (with some flexibility to start with proportions), and for canteens an organic share of at least 30 % is required<sup>6</sup>. The Food for Life Catering Mark of the Soil Association for schools and other canteens distinguishes between a bronze, silver and gold award. For the gold award at least 15 % of the raw materials have to be certified organic.<sup>7</sup>

##### *Market data*

At present there are no data on the size of the organic market for mass catering in Europe, but data do exist in some Member States. The EU funded research project OrganicDataNetwork<sup>8</sup> carried out a survey in 2012 with the aim of collecting and collating national data. Table 6.1 presents catering data for those case study countries, where such information was reported for 2011. To give an estimate of the relative importance of catering, the table also shows the value of domestic retail sales (through shops and direct sales as is shown in Table 2.5, but not including

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<sup>6</sup> See <http://www.bioland.de/verarbeiter/gastronomiekonzept.html>.

<sup>7</sup> See <http://www.sacert.org/catering/standards/silverandgold>.

<sup>8</sup> See <http://www.organicdatanetwork.net>.

food consumption outside the house/catering). Estimated sector size in countries with national rules ranges from more than 10 % in Denmark to less than 1 % in Slovenia. The largest sector estimate was reported from Italy which has no national rules but several private standards, whereas the sector in the United Kingdom (with one private standard) is estimated to be worth less than 1 % of the total organic market.

**Table 6.1:** Estimates of catering sales values in 2011 in some Member States based on national sources

Country	Domestic organic sales excluding catering	Organic catering sales	Total organic sales including catering	Catering as % of total sales
	Mio. €	Mio. €	Mio. €	%
Austria	1 065	64	1 130	5.7
Czech Republic	59	5	63	7.5
Denmark	901	105	1 006	10.4
France	3 755	158	3 911	4.0
Germany	6 590	300	6 890	4.4
Italy	1 720	280	2 000	13.9
Netherlands	761	120	881	13.7
Slovenia	34	0	34	0.1
United Kingdom	1 903	18	1 921	0.9

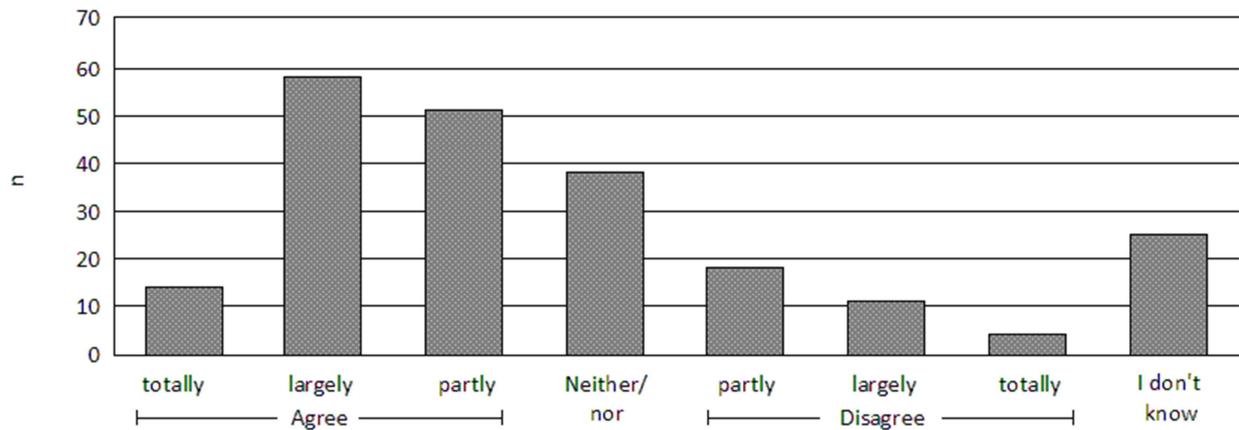
Source: OrganicDataNetwork Survey 2013 (unpublished).

### *Views of stakeholders*

Stakeholders' views regarding the adequacy of the exclusion of mass catering in meeting the needs of the organic sector were obtained through the web-based stakeholder survey and through personal interviews in the case study countries with people employed in the field of mass catering or public procurement using organic products and with control bodies and competent authorities.

One question in the stakeholder survey asked about the inclusion of mass catering, to which the respondents could express their level of agreement on a 7 point scale. The majority of the 265 respondents agreed with the statement in full, followed closely by those choosing not to answer this question (Figure 6.1). There was little variation between the responses from the different countries, except that all respondents from Denmark disagreed with the statement. Agreement was also less pronounced among respondents from national and competent authorities, where a higher proportion (25 % of a total of 36 responses compared with 9 % in the whole sample disagreed with the statement).

**Figure 6.1:** Views of stakeholders regarding the coverage of mass catering in the Regulation (n= 265)



Question: Do you agree with the following statement? Mass catering should be subject of the EU organic farming legislation.

Source: Own data from web-based stakeholder survey.

When asking about the size of the organic mass catering market in the case study countries, most interviewees described the market as small. In France, the Netherlands and the United Kingdom the respective sectors were described as significant and growing but variable between the different regions and in importance of commercial (restaurants) and public (canteens in schools and hospitals) catering.

16 interviewees working with organic food in mass catering were asked to consider whether the current exclusion of mass catering in the scope of the EU Regulation should be lifted. Seven were against, five were in favour and three were unsure. Table 6.2 summarises the main arguments for each country of those interviewees, as well as from control bodies and competent authorities, illustrating, where relevant, differing opinions among stakeholder groups.

**Table 6.2:** Summary of the main arguments of mass caterers in the case study countries regarding inclusion/exclusion of mass catering

<b>AT</b>	The national codex is sufficient for the limited size of the sector; there is limited supply of organic raw materials for catering (MC)
<b>BG</b>	Inclusion could provide clarity (if clear and simple), but also prevent development if too restrictive (MC)
<b>CZ</b>	Limited supply of organic food; might lead to increases in costs, but also limited recognition by government (MC) Should be left of private standards and CBs (CB)
<b>DK</b>	National rules are seen as sufficient as there is no international trade; EU rules could be less strict than national rules and thus undermine consumer confidence (CA, MC)
<b>DE</b>	National rules exist and are considered to be working well (Min), but inclusion in the EU rules would improve consumer protection (CA, PO, MC)
<b>EE</b>	National rules exist and catering is seen as important (CA) CBs are concerned about national rules being too restrictive and expect inclusion to provide more clarity
<b>ES</b>	Inclusion could promote the organic sector, but could also limit, if too restrictive (MC) One official believes that processing rules should apply, whereas another would like to see more clarification
<b>FR</b>	National rules exist, but only apply to public catering (Min, CA); existing rules are not adapted to restaurants and number of restaurants has decreased since the implementation (CB); differing views regarding inclusion; danger of slowing the development (MC, PO) but also potential to improve protection and avoid distortion between Member States (MC)
<b>IT</b>	There are some private schemes (CA) but complicated and time-consuming registration (CB); Inclusion is likely to slow the development and increase costs to operators (especially small ones) and consumers (MC); but could improve the recognition in green public procurement (MC)
<b>NL</b>	Existing private schemes are considered sufficient (CA, MC, Other)
<b>PL</b>	Not important, as there is no mass catering (CA)
<b>SI</b>	Inclusion could improve awareness about organic and avoid distortion between MS in tourism (CB)
<b>UK</b>	Existing private schemes are considered sufficient; concern regarding regulatory burden imposed on operators (CA, CB)

The following abbreviations are used to indicate different groups of stakeholders: competent authorities (CA), staff of ministries (Min), organic producer organisations (PO), control bodies (CB), mass caterers (MC), cosmetics & textiles companies (Cos, Tex), organic business groups and other operators such as retailers (other).

Source: Own data from national case studies.

The views expressed can be clustered in light of the development of the market and whether or not national legislation is present. In several countries with well-established markets and with national legislation (Austria, Denmark, France, Germany) or functioning private schemes (Netherlands, United Kingdom) interviewees expressed little desire for inclusion of mass catering in the EU Regulation. However, some interview partners in Italy and Germany were in favour of inclusion to enhance because of improved consumer protection and improved recognition as part of green public procurement (see also analysis on green public procurement below). Other interview partners in favour of the inclusion of mass catering in the Regulation came mainly from countries with less developed organic markets. Some participants in favour of inclusion emphasised the need for a clear and simple regulation that will not increase production costs.

The adequacy of national rules for mass catering were not part of this evaluation, but some comments from stakeholders indicate that some aspects are seen as problematic. For example, a control body in Estonia mentioned that *“the authorities require that mass caterers have to follow the same rules as processors”*, which implies that they are not exempt in the sense of the Regulation. Also, some stakeholders in France were of the view that the current French rules for restaurants are too restrictive, indicated by a slowing down in growth of the sector since the provisions came into force.

Most interviewees were of the opinion that there is no cross border trade of mass catering products in the EU, therefore that the absence of mass catering from the scope of the Regulation had no impact on competition.

On the other hand, several stakeholders put forward the argument that setting EU standards for mass catering could increase recognition of organic food in public procurement, by giving greater visibility and prominence to organic products.

#### *Other factors and instruments*

The European Commission’s Green Public Procurement (GPP) guidelines<sup>9</sup> address organic food under the heading of catering by suggesting the inclusion of a minimum percentage of organic food in procurement contracts for public canteens (European Commission, 2011). Other than this the guidelines do not provide further details or rules for organic catering, which would be, however, needed to implement them. It is, e.g., unclear how adherence to certain requirements can be verified and in which way references can be made to the term ‘organic’. Thus the

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<sup>9</sup> Green Public Procurement (GPP) is defined in the Commission Communication on public procurement for a better environment (COM (2008) 400) as *“a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured.”* The GPP guidelines are a voluntary instrument to encourage environmental criteria to be considered in public procurement and include food and catering as one of 10 priority sectors.

implementation of these EU guidelines is difficult in those Member States where no national rules for organic catering exist.

### **Meeting the needs of consumers**

#### *Views of stakeholders*

Assessment of the adequacy of the provisions in meeting the needs of consumer was based on the opinions of experts interviewed who are involved in mass catering in the case study countries. Improved protection of consumers from misleading claims, the prevention of fraud and loss of consumer confidence were important reasons given by those stakeholders who were of the view that mass catering should be included in the scope of the Regulation (see Table 6.2). There were also expectations that including mass catering would promote greater awareness among consumers and a consistency of quality. However, lack of consumer demand for organic mass catering was also one of the main reasons given by stakeholders for not including it in the scope of the Regulation.

### **6.3.3 Adequacy of exclusion of non-food products from the scope**

#### **Meeting the needs of the organic sector**

##### *Findings from an analysis of provisions and other private or public initiatives*

According to the information of interviewed industry experts, the most significant (organic) non-food product areas in terms of market size are cosmetics and textiles neither of which is included in the scope of Regulation (EC) 834/2007.

At EU level, all **cosmetics** are subject to Regulation (EC) 1223/2009 (EU Cosmetics Regulation) which aims to ensure that consumers' health is protected and that they are well informed, by monitoring the composition and labelling of products. It provides for the assessment of product safety and the prohibition of animal testing, and also regulates the use of some claims on cosmetic products. Natural/organic cosmetic products must comply with the requirement, but the Regulation does not cover organic or natural claims.

In the context of use of organic ingredients in cosmetics, the term 'organic' is frequently used in conjunction with the term 'natural' cosmetics. One of the case study countries (Austria) has national rules for natural and organic cosmetics. This legislation defines what constitutes natural and organic cosmetics and also outlines provisions related to ingredients, additives, processing (permitted physical and chemical treatments), minimum share of organic ingredients, labelling

and issues concerning transition period<sup>10</sup>. Provisions for organic cosmetics also exist in private reference standards of Pro-Bio (Czech Republic), Nature et progrès (France) and the Soil Association (United Kingdom).

Some standards use the 95 % minimum level of organic ingredients for an organic label, but apply this only to those ingredients that can potentially be obtained from organic agriculture and not to other components. This is problematic for products that contain only a very small proportion of possible organic ingredients. For example, in the case of a shampoo that typically contains only 5 % raw materials from agriculture; a 95 % threshold implies that a product containing only 4.75 % organic ingredients can be labelled as organic.

There are two international private initiatives (NATRUE and COSMOS) aiming to develop an international standard for natural and organic cosmetic. Both use three label categories: a basic label that requires only natural ingredients with a definition of what is meant by natural, a medium label with some organic ingredients and an organic label where 95 % of possible ingredients have to be organic. NATRUE is an initiative of several brand owners. It requires that only natural, some nature-identical and derived natural raw materials may be used and provides a definition of these terms. The natural materials including the starting materials for derived natural raw materials should preferably be of organic grade.<sup>11</sup> The COSMOS Standard has been developed by five organisations (BDIH in Germany, COSMEBIO and ECOCERT in France, ICEA in Italy, and Soil Association in the United Kingdom) that have formed an umbrella body to define common requirements and definitions for organic and/or natural cosmetics.<sup>12</sup>

In 2010, the Commission (DG SANCO) established a working group to examine claims currently used with respect to cosmetic products (including natural and organic claims) and to identify some categories for which the use of specific common criteria should apply.<sup>13</sup> Within this context the existence of a working group of the International Standards Organisation (ISO) is also important as it seeks to develop internationally accepted definitions for organically grown cosmetic ingredients.<sup>14</sup> Several European standard owners for organic cosmetics are represented in this group. The Commission concluded that duplication between the two initiatives should be avoided.

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<sup>10</sup> Natural substances are defined as substances of plant, mineral and some animal origin and their mixtures. Reaction products of these natural products shall be considered as chemically modified natural products (own translation from Bundesministerium für Gesundheit (2009)).

<sup>11</sup> See <http://www.natrue.org>.

<sup>12</sup> See <http://www.cosmos-standard.org>.

<sup>13</sup> [http://ec.europa.eu/consumers/sectors/cosmetics/files/pdf/organic\\_standard\\_en.pdf](http://ec.europa.eu/consumers/sectors/cosmetics/files/pdf/organic_standard_en.pdf).

<sup>14</sup> [http://www.iso.org/iso/home/store/catalogue\\_tc/catalogue\\_detail.htm?csnumber=62503](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=62503).

Organic **textiles** are not covered by any national organic regulations in the case study countries, but provisions exist in the private standards of the Soil Association (United Kingdom) and Naturland (Germany).

Since 2006, an international working group on Global Organic Textile Standard (GOTS) has gained more interests with 15 certification bodies working to the standard globally. In 2012, the number of GOTS-certified textile facilities globally reached 2 995 in 55 countries, a 10.4 % increase on the previous year (Soil Association, 2013). GOTS builds on the legal definition of organic produce in the EU and the USA and is modelled on IFOAM draft standards. GOTS allows for the certification of products containing a minimum of 70 % certified organic fibres ('made with organic') and a minimum 95 % organic fibres ('organic'). The standard covers the entire supply chain and incorporates social and environmental responsibility criteria. In 2011, the USDA National Organic Programme (NOP) formally recognised GOTS by allowing textile products produced in accordance with GOTS to be sold as organic in the USA but not refer to NOP certification or display the USDA organic seal (USDA, 2011).

A recent study of labelling options for textiles investigated various policy options paying particular attention to existing legislation (Matrix Insight, 2012). Organic labelling of textiles, or more precisely linking the use of the term 'organic' for natural fibres (e.g. cotton) to the Council Regulation (EC) 834/2007, was investigated. The rationale for considering these options referred to some evidence of increasing consumer interest in environmental labelling, the danger that misleading environmental claims can distort the market and affect consumer confidence in genuine labels. The study concluded that including textiles in the scope of the EU organic Regulation could have a modest positive impact in terms of avoiding misleading claims, but would require a significant cost for developing the standard and some effort for the majority of the industry to adapt labels. The report draws attention to the recent equivalency agreement between the EU and the US suggests that this may provide an opportunity for the EU to recognise organic textile and clothing products (Matrix Insight, 2012).

Apart from specific organic labels, operators are also able to use voluntary ecological labels such as the EU Ecolabel. This allows for 'organic cotton' to be displayed next to the Ecolabel where at least 95 % of the cotton is certified organic.

### *Market estimates*

According to one industry estimate (GfaW, undated), the market share of natural **cosmetics** is at present approximately 6.5 % (in 2011) of the total market for cosmetics in the EU. In addition there are another 7.8 % of products in the 'near natural' category, which restrict certain ingredients (e.g. parabenes) but do not fulfil the strict requirements of certified natural/organic cosmetic. There are no data on trade, but clear indication that it takes place.

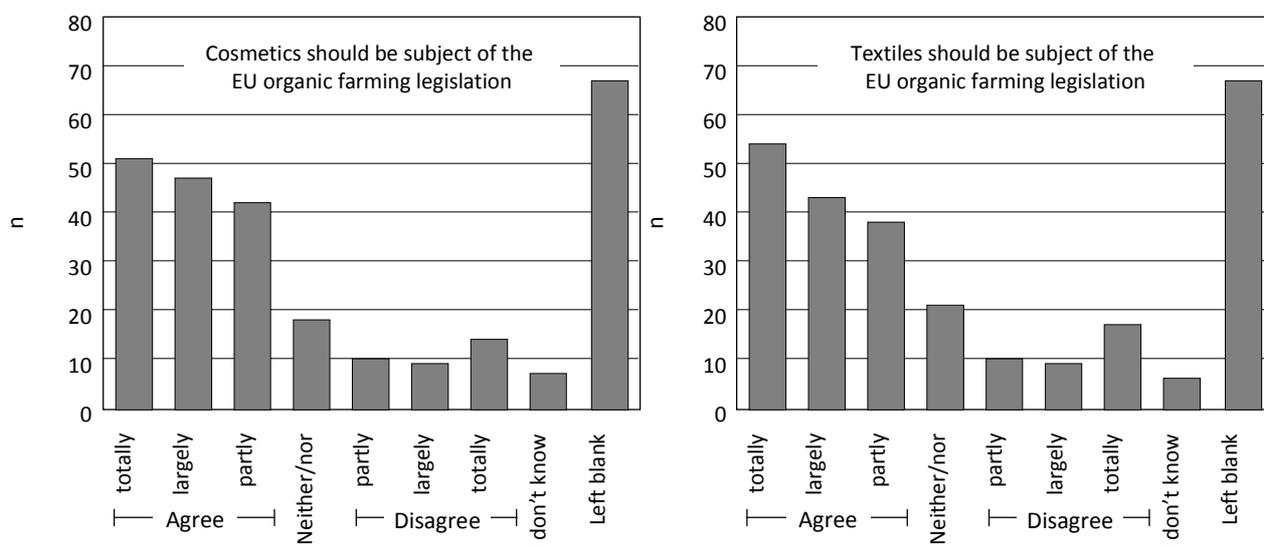
Data on the size of the market for organic **textiles** are not collected in all Member States, but the EU market for organic clothing and textiles was estimated to be worth approximately 883 million

Euro to 1 billion Euro in 2011 (Matrix Insight, 2012).<sup>15</sup> This figure was extrapolated from data on the organic textiles market in the United Kingdom. Organic cotton accounts for over 90 % of the market representing about 0.7 % of global cotton production. There is a global market for organic fibres (mainly cotton) and textiles.

### Views of stakeholders

In the stakeholder survey a majority of respondents were of the view that both cosmetics and textiles should be regulated at European level, but more than one third of respondents chose not to answer the question. Agreement was very strong among all operators (producers, processors and importers) and least strong among respondents from national and competent authorities. There was little variation in responses according to country.

**Figure 6.2:** Views of stakeholders regarding coverage of cosmetics and textiles in the Regulation (n= 265)



Source: Own data from web-based stakeholder survey.

The majority of stakeholders interviewed were also of the opinion that some provisions for the use of the term organic for non-food scopes (including textiles and cosmetics) should be made at European level. The main reasons given were ensuring fairer competition, improving transparency (including the use of common logo for all organic products as mentioned by French and Dutch textile companies). An official of the French Ministry was also concerned that existing private standards are not functioning effectively or are allowing products that contain a very low percentage of organic to make use of the term.

<sup>15</sup> Evidence provided also by Herbert Ladwig from GOTS during the hearing on EU organic policy and legal framework on 28 September 2012 in Brussels.

Furthermore, a major concern for stakeholders is 'greenwashing', i.e. use of unsubstantiated environmental claims which risk the integrity of the sector, distort the market and undermine consumer confidence in genuine claims. In contrast, in the view of some (for example a German stakeholder) extending the use of the term organic or biological to non-food items without clear provisions carries the risk that trust in the terms could be lost.

However in contrast to the web-based stakeholder survey, the interviews revealed that very few stakeholders were of the opinion that organic cosmetics and textiles should be regulated by inclusion in the EU Regulation on organic food. For both cosmetics and textiles one reason given was the fact that non-food scopes are outside the scope of agricultural legislation and both sectors should be rather regulated by the respective European authorities. For cosmetics, another important reason was the limited supply of ingredients in the European market (e.g. mentioned by an Austrian cosmetic company). Concerns were also voiced by two stakeholders (Denmark and United Kingdom) that inclusion in the Regulation could hinder or take resources away from the development of the rules for the agricultural sector. The Danish respondent was also concerned that the current regulatory systems would be too slow to respond to changing conditions in the market and that the inclusion of non-food scopes would create too much complexity. Interviewees from a UK organic producer organisation and control body suggested that recognition of and support for the organic sector's on-going attempts to harmonise private standards would be sufficient.

Industry experts in the field of cosmetics and textiles outlined that the current approach to the regulation of organic food cannot be transferred to non-food sectors. The most important task of any standard for natural/organic cosmetics is the evaluation of all the main ingredients resulting in a positive list. Unlike food products, where aiming for nearly 100 % organic is possible, the percentage of ingredients that can be organic in cosmetics and body-care products is relatively low (for example less than 5 % in a shampoo) and varies considerably between different product categories. Regulating cosmetics as part of the EU Regulation would therefore require a different standard than that which currently exists for food. It was also pointed out that there are diverging views in the sector of natural cosmetics as to what constitutes a valid organic claim.

Also for textiles, experts expressed the view that an organic standard for textile products (rather than textiles fibres) should not only aim to address the organic status of the raw materials, but also the processing and manufacturing stages of the supply chain, and specify processing and manufacturing technologies and ingredients (such as dyes) that are used in the final product. Unlike for cosmetics, several interview partners from textile companies were of the view that there is common understanding in the sector as to what constitutes a valid organic claim. Some pointed to a strong need to include fairness criteria in relation to labour in any organic textile standard, because of concerns about labour conditions in the textile sector.

Other products for which the interview partners would like to see the situation clarified is regarding the coverage of the Regulation and organic claims for non-food products closely

related to organic agriculture, such as wool, leather, medicinal plants, essential oils for use in cosmetics and pet food. Interview partners in France suggested that the approval process for inputs for organic agriculture should be removed from the control bodies.

### Meeting the needs of consumers

#### *Presence of non-food products labelled as organic*

In each case study country a small sample of stores was visited to observe the extent to which organic claims are being made on non-food items. A wide range of products was reported including many organic (or biological/ecological) cosmetic products with and without certification marks, several textile products, household cleaning agents and other products:

- Among the **cosmetics and body-care products** many had some reference to certification using the logos of or making reference to national or private organic logos (e.g. from AIAB, Balkanbiocert, BDIH, BioSuisse, Chart Cosmebio, Cosmetique Bio, Demeter, Ecocert, Ecocontrol, Eco-Garantie, ICEA, Natrue, NSF- ANSI, Organic Food Federation, Soil Association, USDA-Organic) as well as using own logos of some companies. Some but not all products list the percentage of organic raw material on the label. There were also a number of products using the term 'organic' in the name that did not mention organic in the list of ingredients or make any reference to certification.
- In the category of **textile products** using the term organic or equivalent, only two certification marks were reported, which are the German Naturland and the GOTS mark.
- In the category of **household cleaning products** a number of products carried the EU Ecolabel and an AIAB or ECOCERT logo.
- There was a wide variety of **other products** marketed with an organic association including cotton buds, nappies, mattresses, Christmas trees, fertilisers, stationery, cat litter, electric light bulbs and water. In the majority of cases the reasoning for the organic claim was not further specified.

This wide variety of products making organic claims confirms the view of stakeholders operating in the organic non-food sector that there is confusion around the use of the term organic. A recent ruling of the UK Advertising Standards Agency on the use of the term organic on a body care product refers to fact that *"a consumer presented with a product using the term organic prominently on the label would expect the product to be independently accredited or to use a high proportion of organic ingredients"*.<sup>16</sup>

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<sup>16</sup> <http://www.organicmonitor.com>.

### *Results of the consumer survey*

The responses to the web-based consumer survey indicate that there appears to be some unmet demand for organic textiles and cosmetics. Approximately 5 % of responses received from consumers indicated that they are not able to buy all the organic textiles and cosmetic products they want.

## 6.4 Judgement and conclusions

Based on the results presented in the section above, **it is concluded that the scope of the Regulation is mostly adequate to match the current needs of organic farming supply and distribution chains, but is not fully adequate to meet the needs of consumers of organic products**, taking the following into account:

- Lack of clarity exists mainly with regard to non-food products closely related to organic agriculture, such as wool, beeswax, some essential oils and herbs for medicinal use.
- In some Member States national and/or private provisions exist for organic mass catering. There is limited evidence of intra-community trade, so the absence of a uniform EU standard does not impact on the fairness of competition among operators in catering services. There is some support among stakeholders for the inclusion of mass catering under the scope of the Regulation to improve clarity for consumers and to increase potential for recognition of organic farming within green public procurement. However, inclusion could increase the regulatory burden on the sector and therefore has the potential to hinder rather than the support the development of this sector.
- Various non-food products (such as body care products and cosmetics, household cleaning products and textiles) using organic claims are found in retail outlets. This is likely to cause confusion for consumers and could undermine trust in the organic label for food products. However, the labelling requirement of a minimum of 95 % of organic ingredients that applies to organic food is not transferable to cosmetics and textiles. Private standards and international initiatives exist which are developing harmonised and accepted minimum criteria for the regulation of such products.

### **Detailed considerations**

Council Regulation (EC) 834/2007 on organic farming is limited to unprocessed and processed agricultural products used for food and feed, vegetative propagating materials and seeds, yeast (for food and feed) as well as products from aquaculture. Mass catering is explicitly excluded, whereas non-food products (such as cosmetic, textiles and some products closely related to organic agriculture) are not in Annex I of the EU Treaty. The evaluation question considers whether the current scope is adequate to meet the needs of operators and consumers of organic food.

The evaluation is based on stakeholder responses to the web-based survey, an analysis of national provisions from 13 national case study countries as well as other EU or private initiatives. No official statistical data on the development of the size of the respective sectors in the EU were available. The assessment of the sectors' needs therefore mainly relies on views of stakeholders, particularly of mass caterers and cosmetic/textile operators as well as other stakeholders. Some estimates of the size of respective sectors and observations about the presence of organic non-food items in some stores were also considered.

#### *Clarity of the scope*

According to the stakeholders' opinion the scope of the Regulation is sufficiently clear except the question how the organic status of agricultural non-food raw materials (products closely related to organic agriculture such as beeswax, essential oils, medicinal herbs, and sheep wool) that are produced according to the requirements of Regulation (EC) 834/2007 and the implementing rules can be communicated on the final product. The current situation with no clear guidance regarding labelling leads to confusion in the organic sector and disadvantages producers of such products that are closely related to organic agriculture.

Furthermore, although mass catering is clearly excluded, there is a risk that the exemption is interpreted differently with respect to what types of business are excluded. On the one hand, processing businesses that supply caterers (rather than providing catering themselves) could be excluded under 'similar food businesses'. On the other hand, some catering businesses are required in some Member States to meet the same requirements as processors thus contradicting the intention of the exemption.

Thus it is judged that the scope of the Regulation is sufficiently clear to different stakeholders except the question how producers of agricultural non-food raw materials can communicate organic status of their products. Furthermore, there are some concerns that the exclusion of mass-catering might be interpreted differently.

#### *Mass catering*

The results show that the exclusion of mass catering operations from the scope of the Regulation is mostly adequate to match the current needs of the organic farming supply and distribution chains, but not fully adequate in meeting the needs of organic consumers.

National or private mass catering standards exist in several Member States. They illustrate that the development of organic mass catering both in public canteens and in private restaurants requires some flexibility, due to the difficulty of obtaining all organic ingredients used in the preparation of a wide variety of dishes. Existing national or private standards take this into account by either allowing caterers to use organic indications in relation to only one ingredient (e.g. organic potatoes) or one component (e.g. all vegetables) in a mixed menu or by setting relative minimum percentages of organic ingredients that have to be used. One reason for the

exclusion of mass-catering from the scope of the Regulation is that rules could limit the flexibility that is required for this sector to develop.

National estimates indicate that the catering sector in both public and private canteens and restaurants accounts for between less than 1 % (Slovenia, United Kingdom) and up to more than 10 % (Denmark, Italy, Netherlands) of total organic sales in selected case study countries but there is no clear link between sector size and the presence of rules. At present, there is no evidence of cross border trade in procurement and catering services. The fact that different rules for mass catering apply in different Member States therefore does not contradict the aims of the organic Regulation of guaranteeing fair competition, but it is possible that the absence of common rules could have prevented such trade from developing. Because of limited intra-community trade, the existence of different national rules for mass catering does not necessarily undermine consumer confidence.

There was some support for inclusion of mass catering in the Regulation among stakeholders; important reasons mentioned are improved transparency for consumers in countries where there are no national rules and more clarity and greater visibility of organic products in green public procurement (GPP). GPP is a voluntary instrument developed by the European Commission to encourage environmental criteria to be considered in public procurement. The GPP Core criteria for catering refer explicitly to Regulation (EC) 834/2007 and state that a minimum percentage of food which must be organically produced may be specified. GPP guidelines do not provide further details about the potential implications for labelling or verification. The inclusion of mass catering in the scope of the Regulation could therefore support and encourage the use of organic ingredients in line with GPP guidelines. However, inclusion could potentially limit growth because it would restrict flexibility and the need for catering business to be certified represents a disincentive for business to engage.

#### *Non-food items (cosmetics, textiles)*

It is concluded that the exclusion of cosmetics and textiles from the scope of the Regulation meets the needs of the organic supply chains but does not fully meet the needs of consumers.

No official data on size of the market for organic cosmetics and textiles exist, but according to industry sources there has been growth particularly for cosmetics and textiles. This is particularly relevant when considering the aims of the Regulation in ensuring consumer confidence and protecting the interests of consumers. Many cosmetics, textiles, household cleaning products and some other non-food products using the terms 'organic, biological, ecological' are found in the market place, but not all of them are certified according to a recognised standard, despite a widespread expectation that this is required for organic products. Consumers are unlikely to know that the protection of the terms in Article 23 of the Regulation (EC) 834/2007 only refers to agricultural products. The use of the protected term in the labelling of non-food items is therefore creating consumer confusion. A more harmonised and universal approach and use of a common logo could improve recognition and trust among consumers.

However, cosmetics and textiles require regulations that consider the specific characteristics of these respective products and the labelling rule of <95 % of organic ingredient for organic products cannot be transferred as such. Developing new provision for such products would increase the level of complexity of Regulation (EC) 834/2007. In the case of cosmetics, the likely percentage of organic raw materials in the final product can be very low. The main task of any standard is to develop a positive list of all permitted ingredients, especially non-agricultural ones, to define what 'natural' means in this context and which raw materials from organic agriculture should be used. In the case of textiles, the standards need to cover the whole supply chain and the inclusion of fairness criteria is considered essential by most industry experts.

For both product categories, initiatives by the European Commission were identified, and in the case of cosmetics an ISO working group also exists which are aimed at defining valid organic claims for these sectors. These initiatives could achieve some of the objectives of the Regulation in relation to these scopes.



## Chapter 7

# Adequacy of the production rules

## 7.1 Introduction

### Evaluation Question 2

*To what extent have the organic production rules been adequate to achieve the global objectives of the Regulation and the general objectives of organic production, as laid down in the Regulation?*

*In answering this question the following aspects need to be examined in particular:*

- *General structure and scope of the organic production rules with respect to promoting a harmonised concept of organic production in the EU.*
- *Adequacy of production rules for plants, livestock, feed and processed food, including their consistency across the sectors covered.*
- *Adequacy and justification of exceptional production rules, particularly on the use of non-organic young poultry, the use of non-organic feed, the use of non-organic seeds and the role of the seed database.*
- *Adequacy and justification of the transitional measures concerning animal housing conditions.*
- *Adequacy of the general rule on prohibition of the use of GMOs to ensure the lowest possible adventitious presence of GMOs in organic products and, at the same time, to avoid undue constraints and additional burden on organic operators.*

Organic production is an integrated farm management system which aims to preserve natural resources, apply high animal welfare standards and produce high quality food. The underlying principles of organic production are made operational by a number of production rules, which provide the legal definition of organic farming in Europe. The production rules provide a basis for achieving the aims of organic agriculture and the global objectives of the Regulation of ensuring consumer confidence and fair competition. However, the extent to which the production rules contribute to these objectives is open to question. In this context, it is worth mentioning that some organic operators in the EU work to private standards which are stricter than the EU rules in certain areas, and while assessing the impact of the rules it is not always possible to clearly differentiate between these private standards and the EU rules.

After a short description of the approach, results are presented in relation to the structure and scope of the production rules, promoting a harmonised perception of the concept of organic farming, establishing a sustainable management system, meeting the consumer related aims of the Regulation, justification for exceptional and transitional production rules, adequacy and consequences of the GMO (genetically modified organism) prohibition, impact on fair competition and consistency of the rules across all sectors. The final section presents the judgement in response to the evaluation question.

## 7.2 Approach

The answer to Evaluation Question 2 is based on several judgement criteria which were deduced from the model of intervention logic and from the background of the evaluation question. Because of the extended number of production rules, sectors and Member States, the application of the Regulation is not described exhaustively, but examples are used to support the arguments. The main data sources and indicators used for the analysis involved an in depth look at the regulatory rules and implementation rules in the 13 case study countries. Consensus in the scientific literature, results from other relevant EU-funded research projects as well as stakeholder/expert opinions on the subject and the results of a consumer survey (3 000 respondents in six of case study countries) were also taken into consideration. In the following, the judgement criteria for the second evaluation question are shortly described:

(1) **The general structure and scope of organic production rules has (or has not) promoted a harmonised concept of organic production in the EU**

The general structure and scope of organic production rules can only promote a harmonised concept of organic production, if they are implemented uniformly in national law and if Member States are not applying a large number of additional rules not covered by the scope of the Regulation. This was explored based on an analysis of the provisions in the Regulations (EC) 834/2007 and (EC) 889/2008 and its implementation in national law.

A common understanding of organic farming across the EU can be facilitated by the objectives and principles of organic farming as laid down in Article 3 – 7. In order to evaluate whether this has been achieved, references to them in national regulations and private reference standards as well as the perception of stakeholders were used.

(2) **The production rules are (or are not) adequate to establish a sustainable management system of agriculture**

As outlined in Chapter 1, the definition of a sustainable management system in the Regulation does not provide a useable concept to evaluate the adequacy of the production rules. For this evaluation, the adequacy was assessed mainly based on the analysis of findings in relevant scientific literature (comparing organic with conventional farming and thus using conventional farming practices as a reference) and examples of implementation in the 13 case study countries.

(3) **The rules are (or are not) adequate for providing varied and high quality products and satisfying consumer demand for a variety of goods**

Similarly to the second criteria, the adequacy of the rules in providing varied and high quality products and satisfying consumer demand for a variety of goods produced by the use of processes that do not harm the environment, human, animal or plant health was analysed based on evidence in the scientific literature, stakeholder views on the implementation and responses to the consumer survey.

(4) **The exceptional rules for the use of non-organic seed, feed and young poultry as well as for transitional measures regarding animal housing are (or are not) justified adequately**

The aim of the exceptional rules is to allow the organic farming sector a transition towards harmonised provisions. Against this background, the evaluation of the adequacy of the justification of the exceptional rules considered the use of exceptions and the availability of organic supplies in the case study countries; and actions still needed or already taken to phase out exceptional rules. Where data were not available, expert judgement was used. A similar approach was used to evaluate the adequacy of the justification for the transitional measures regarding animal housing.

(5) **The rules are (or are not) adequate to exclude the use of GMOs and limit it to adventitious or technically unavoidable presence**

The adequacy of the rules to exclude the use of GMOs and limit it to adventitious (happening by chance rather than by design or as an integral part) or technically unavoidable presence was evaluated based on data of contamination cases in the case study countries, additional restrictions in private provision and other factors (including co-existence measures) and stakeholder views regarding the additional burden arising from those rules.

(6) **The production rules are (or are not) adequate to ensure a fair competition**

Fair competition requires a level playing field for organic operators. This could potentially be impaired a) due to different interpretations of the Regulation (because of lack of clarity or because of issues left to the discretion of the competent authority) and specific national/regional rules or b) due to the harmonised standard not allowing national/regional flexibility (albeit in line with the general concept of organic farming) in response to different climatic or geographic conditions. These aspects were analysed by exploring the impact of examples of distortions (alterations of fair competition) using expert estimates, as well as stakeholder opinions.

(7) **There is (or is not) consistency between the rules for different sectors**

The EU legislation provides a legal framework for different livestock and crop sectors. The consistency of the rules for the different sectors was judged based on documentary analysis of the Regulations (EC) 834/2007 and (EC) 889/2008 and stakeholder views.

## 7.3 Results

### 7.3.1 Promoting a harmonised concept of organic farming

In the following, the structure and scope of the production rules of the Regulation and its implementation in national law is explored. The subsequent section deals with the question of whether the objectives and principles of organic production as laid down in Article 3 – 7 have led to a common understanding of organic farming.

#### 7.3.1.1 Structure and scope of the production rules

##### *Findings from the analysis of provisions*

The legal framework for the production rules is set out by Council Regulation (EC) 834/2007 and Commission Regulation (EC) 889/2008 (see also Chapter 3). The Council Regulation states objectives and principles of organic agriculture (Article 3 and 4), and more specific principles (Article 5-7) and rules for the respective sectors (Article 8-22); details are contained in the Commission Regulation. The link between the main rules and more detailed provisions for implementation in the Commission Regulation is illustrated in Table 7.1.

**Table 7.1:** Link between the production rules in Regulation (EC) 834/2007 and related provisions in Regulation (EC) 889/2008

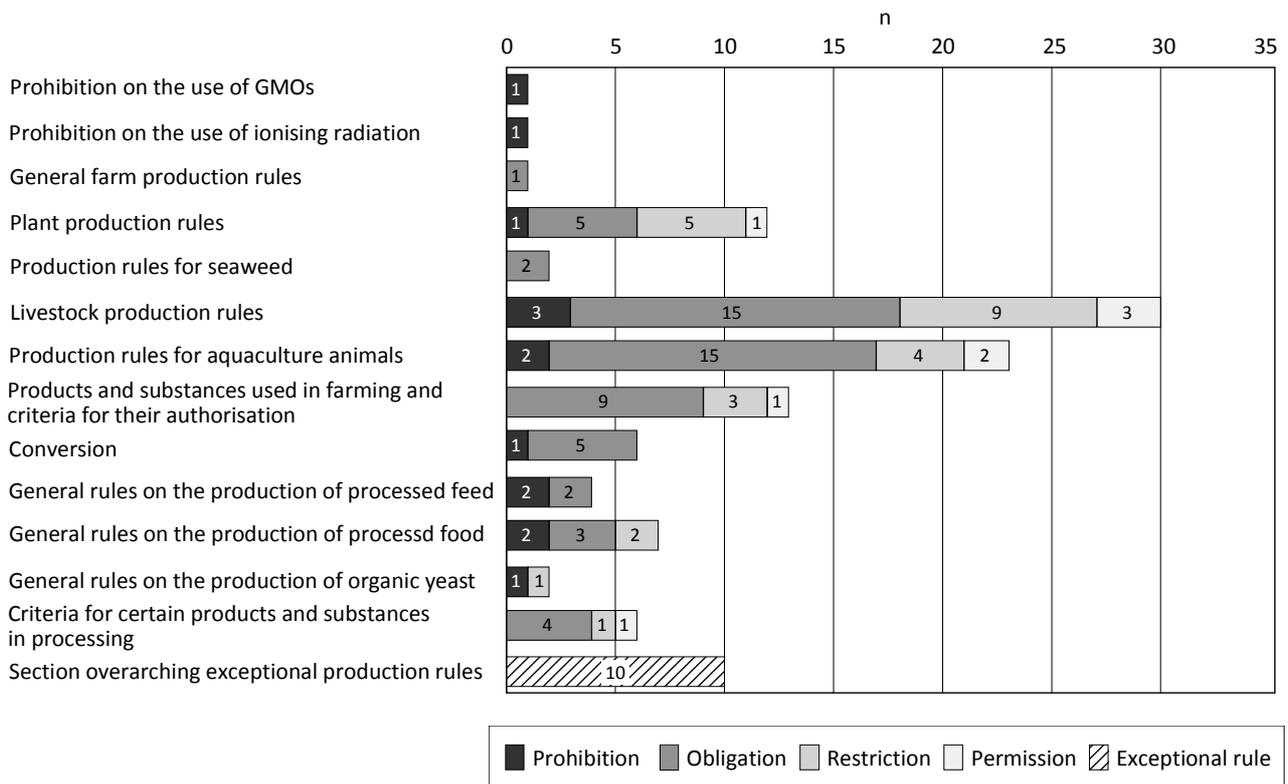
Council Regulation (EC) 834/2007		Commission Regulation (EC) 889/2008
Heading	Article No	Article No
Scope	1	1, 6(a), 7, 25, 59, 95(5)
General production rules	8-10	-
General farm production rules	11	Annex IV
Plant production rules	12	3-6, 48-56 (Seed database), Annex I,II, X
Production rules seaweed	13	6(a) - 6(e), 29(a), 36(a)
Livestock production rules	14	7-25, Annex III, IV, V, VII
Production rules for aquaculture animals	15	25(a)-(t), 38(a), Annex V, VI, VII
Products and substances used and criteria for their authorisation	16	3(1), 5 (1), 6(d)
Conversion	17	36-38, 38, 62
Production of processed feed	18	20-22, 26, 59-60, Annex V &VI
Production of processed food	19	26-29, 29(a) [wine], 30-35, Annex VIII, IX
General rules for production of organic yeast	20	27(a), Annex VIII
Criteria for inputs processing	21	22(g), 24(2), 25(m), 27 (1)(a), 27(a), 28, 29(c)
Flexibility	22	39-56

Source: Regulation (EC) 834/2007 and Regulation (EC) 889/2008.

The EU production rules cover agricultural products (food and feed), seeds and vegetative propagating materials, yeast (for food and feed) and products from aquaculture (Article 1 of Regulation (EC) 834/2007). This scope is further detailed in several articles of Regulation (EC) 889/2008: Articles 1 and 7 for livestock species; Article 6(a) for seaweed; Article 25(a) for aquaculture species; Article 59 for feed products and Article 95(5) for pet food.<sup>1</sup>

Sections of the production rules in Regulation (EC) 834/2007 vary in the number and type of rules (Figure 7.1). The livestock production rules are most detailed, followed by aquaculture. The Council Regulation also contains specific sections on seaweed production/collection, whereas wild collection of plants and mushroom production are only regulated in the Commission Regulation (EC) 889/2008 and not mentioned in the scope. The Council Regulation also contains specific provisions for the production of organic yeast but not for other microorganisms (e.g. algae).

**Figure 7.1:** Number and categorisation of production rules for different sectors in Regulation (EC) 834/2007



Source: Own presentation based on classification of rules in Regulation (EC) 834/2007.

<sup>1</sup> The situation regarding pet food is unclear, as this is not considered as feed in the sense of Regulation (EC) 834/2007, but is referred to in Regulation (EC) 899/2008 (Article 95(5)).

All Member States have implemented the existing EU legislation on organic farming in national law, with Bulgaria having done so very recently. In addition, some Member States apply their own rules for agricultural products not covered by the implementing rules (such as certain animal species, other aquatic plants, and micro-algae, e.g. spirulina). The following additional provisions were identified in national legislation in the 13 case study countries. Pet food is regulated at a national level in four countries (Austria, Denmark, France, and the Netherlands). Other provisions in several Member States refer to specific livestock species: rabbits (Austria, Czech Republic, Estonia, France, Italy, Slovenia); deer (Austria, Denmark, Slovenia); ostriches (France, Italy) and heliculture (production of snails for food) (France, Spain). Further species are only listed in one country: mouflon (Slovenia) and nutria/quail (Estonia).

### 7.3.1.2 Creating a common understanding of organic agriculture through the defined objective and principles of organic production

#### *Findings from the analysis of provisions*

In most case study countries, **national organic farming legislation** or **guidelines** refer in full to the EU Council Regulation. Specific reference to some, but not necessarily all aspects of the objectives and principles of the organic farming legislation were found in Austria, Denmark, Spain, France, the Netherlands, Poland, and in the United Kingdom implementation guidelines. Principles in **private reference standards** reflect the specific traditions from which the standard develops. For example, the standards of Bio-Austria (Austria) refer to the living, healthy soil as the precondition for healthy plants, animals and human food (humans) as the central point of all rules. Similarly, Bioland (Germany) standards emphasise the importance of a closed organic system. Several private standards also cover additional areas to the Regulation, for example Bioland and Naturland (Germany), Demeter (in several countries), AIAB (Italy), Nature et Progrès and the Soil Association (United Kingdom) refer to social objectives and principles and CAAE (Spain) to rural development goals. Bioland (Germany) and Bio-Austria (Austria) refer to the Animal Needs Index (ANI), which they required to be used to monitor and assess animal health and welfare. The standards of Nature et Progrès (France) favour local production and emphasise that economic, social and environmental aspects are important.

#### *Views of stakeholders*

When asked about a common understanding of organic agriculture, the majority of interviewed stakeholders (across all case study countries and affiliations) in the first instance agreed that there is a common understanding of the objectives and principles in Europe, and that stating them as part of the Regulation is an important way to create this common understanding. However, many answered 'yes, but...', adding several examples of different interpretations of the rules in different EU Member States and by different control bodies (e.g. regarding crop protection agents, fertilisers, limits and thresholds for pesticides/fungicides, grazing requirements, breeds for pigs and poultry and additives in food processing). Interviewees across

all sectors commented on a lack of detail in the Regulation with regard to environmental impact and animal welfare, and felt that the objectives and principles apply mainly to primary production but not to the whole supply chain (e.g. processing, distribution, retail). Stakeholders also commented on the absence of criteria for social and economic sustainability as well as on contradictions between statements in the objectives and principles and the actual rules; e.g. animal welfare aims contrasting with routinely carried out practices of mutilation such as dehorning or tail docking.

Despite general agreement with the overall statement as discussed above, opinions on a common understanding vary in different sectors and Member States. Interviewees in Denmark felt that a common understanding exists for organic milk production but less so in other sectors like organic poultry or pigs. In the case of egg production, interviewees in France and Austria refer to a regional or North-South divide, with regard to free-range access and housing systems. A majority of stakeholders involved in processing felt that a common understanding exists, but some saw the Regulation as weak in sustainability issues like water and energy use; whereas others found the limitations on input-use too strict. There was greater agreement that a common understanding has been achieved in Denmark, Germany and the Czech Republic, whereas stakeholder opinions in France, Italy, Spain, and the Netherlands tended to be more divided; in France and Spain a consistent confusion among consumers regarding organic products was mentioned.

Too wide margins for interpretation were repeatedly emphasised in most countries, especially so in France, Spain, Italy, Denmark, Estonia, Austria and the United Kingdom. Some differences between types of respondents were found. Organisations that work more directly with the Regulation, such as competent authorities and control bodies share the view that a common understanding has been achieved. They confirmed the role of objectives and principles for creating a common understanding of organic farming. Responses indicate however that control bodies are uncertain whether they are legally enforceable or not. In contrast to competent authorities and control bodies, the majority of business groups (e.g. producers, traders, and retailers) do not agree that a common understanding has been achieved.

### **7.3.2 Establishing a sustainable management system of agriculture**

This section presents the results related to the adequacy of production rules to achieve the objectives of organic production to establish a sustainable management system of agriculture. Article 3 of Regulation (EC) 834/2007 specifies that this should be achieved by:

- respecting nature's systems and cycles and sustains and enhances the health of soil, water, plants and animals and the balance between them;
- contributing to a high level of biological diversity;

- making responsible use of energy and the natural resources, such as water, soil, organic matter and air; and
- respecting high animal welfare standards and in particular meets animals' species-specific behavioural needs.

**Table 7.2:** Production rules and organic objectives and principles

Production rules Article numbers refer to Council Regulation (EC) 834/2007 [A] and Commission Regulation (EC) 889/2008 [B]	Respect natures systems/ cycles	Contribute to bio- diversity	Make responsible use of natural resources			
			Energy	Water	Soil	Air & climate
<b>Prohibitions [A: 4 (a) iii and (c)]</b>						
No mineral nitrogen fertilisers [A: 12.1 (e)]	✓	✓	✓	✓	✓	✓
No herbicides, only authorised products can be used [A: 12 (h), B: Annex II]	✓	✓	✓	✓	✓	✓
No landless livestock production [B: 16]	✓		✓			✓
No hydroponic production [B: 4]	✓			✓	✓	
No use of GMOs [A: 9]	✓					
<b>Strict control of external inputs [A: 4 (b)], minimisation of the use of non-renewable resources [A: 5 (b)] and recycling of wastes and by-products [A: 5 (c)]</b>						
Only permitted fertilisers : low-soluble mineral fertiliser [A: 4 (b) iii] and soil conditioners when need proven [B: 3, Annex I]	✓	✓			✓	
Only authorised plant protection products when established threat [A: 12.1 (h), B: Annex II]	✓	✓			✓	✓
Feed primarily from holding or same region (with exceptions) [A: 14.1 (d)]	✓		✓			
Stocking density and use of livestock manure restricted to maximum of 170 kg N/ha and year [B: 3 & 15.1]	✓	✓	✓	✓	✓	✓
<b>Obligations to use good husbandry practises and prevention [A: 4 (a) iv and 5)</b>						
Multiannual crop rotation including legumes and other green manures [A: 12.1 (b)]	✓	✓	✓	✓	✓	
Tillage and cultivation practices that maintains organic matter, and protects soil [A: 12.1 (a)]	✓	✓	✓	✓	✓	
Maintain crop health through prevention (natural enemies, the choice of species and varieties, crop rotation) cultivation techniques and thermal processes [A: 12.1 (g)]	✓	✓	✓		✓	
Number of livestock limited to minimise overgrazing, poaching, soil erosion or pollution [A: 14.1 (b) iv]	✓	✓		✓	✓	✓
<b>Preference for inputs from organic origin (Art 4b with exceptions (Art 4d))</b>						
Manage entire holding organically (with exceptions) [A: 11]	✓	✓	✓	✓	✓	✓
Only organic seed (with exceptions) [A: 12.1]	✓					
Only organic feed (with 5 % exceptional rule for monogastrics) [A: 14 (d) ii]	✓					

Source: Own analysis based on the Regulations (EC) 834/2007 and (EC) 889/2008 and scientific literature.

A number of rules from the Council Regulation (EC) 834/2007 and the Commission Regulation (EC) 889/2008 have possible (direct and indirect) positive impacts in relation to several of these objectives. These rules are listed in Table 7.2. Detailed evidence regarding the effectiveness of the production rules, as reported in the scientific literature and by stakeholders, is provided in the following sections.

### 7.3.2.1 Respecting nature's systems and cycles

#### *Findings from the analysis of provisions*

Organic farming management relies as much as possible on natural processes and cycles. Thus, respecting both is a primary element of organic farming<sup>2</sup> and is reflected in a number of production rules. There are however three specific issues, raised in the case studies and widely discussed in the Member States, which are not evenly or consistently implemented in the different Member States, and as a result are limiting the positive impact of the Regulation on promoting the respect for nature's systems and cycles. These are:

- **Significant gap in the 'link to the land (land-based livestock)' rule:** the share of feed that must come from the farm itself is set at a minimum of at least 60 % for herbivores and 20 % for pigs and poultry (Article 19 of Regulation (EC) 889/2008). In cases where this is not possible, the Regulation requires the feed to be produced "*in co-operation with other organic farms primarily in the same region*". This is widely interpreted as meaning that 40 % and 80 % of the feed stuff respectively can come from anywhere. In particular, the interpretation of the word 'region' varies from being defined as NUTS 2 to EU, or even world level depending on the Member State.<sup>3</sup> In the cases where the definition is EU/world, there is effectively no link to the land at all of the feed stuff. Therefore the Regulation does not prevent organic livestock from developing independently from crop production, even if this is not the case on most farms. Quantitative data on the number of landless organic farms or the current share

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<sup>2</sup> According to Article 5 of Regulation (EC) 834/2007 organic farming shall be based – in addition to the overall principles – among others on the following specific principles:

- a) the maintenance and enhancement of soil life and natural soil fertility, soil stability and soil biodiversity preventing and combating soil compaction and soil erosion, and the nourishing of plants primarily through the soil ecosystem;
- b) the minimisation of the use of non-renewable resources and of farm inputs;
- c) the recycling of wastes and by-products of plant and animal origin as input in plant and livestock production;
- d) taking account of the local or regional ecological balance when taking production decisions;
- e) the maintenance of animal health by encouraging the natural immunological defence of the animal, as well as the selection of appropriate breeds and husbandry practices;
- f) the maintenance of plant health by preventative measures, such as the choice of appropriate species and varieties resistant to pests and diseases, appropriate crop rotations, mechanical and physical methods and the protection of natural enemies of pests;
- g) the practice of site-adapted and land-related livestock production.

<sup>3</sup> **NUTS 2:** France, Italy; **Whole country:** Slovenia, Poland, Estonia, Denmark; **Other:** Czech Republic, Germany; **EU/world:** Austria, Netherlands, Spain, Bulgaria, the United Kingdom.

of feedstuff produced at farm level is not available to assess the actual impact of the interpretation of this rule.

- **Authorisation of crop cultivation in substrate** (e.g. peat, compost, various peat alternatives and their mixtures): In certain countries crop production in substrate (e.g. in raised/demarcated beds) without direct connection to the soil is permitted.<sup>4</sup> This can be considered as not respecting nature's systems because it allows intensive production in greenhouses (for example, the use of soluble, organic fertilisers through irrigation).
- **No common definition or minimum requirements regarding crop rotation:** There is a lack of any specific criteria with which the crop rotation should comply, apart from stating that it should be multi-annual and should include legumes (Article 12(1)). Therefore the actual practices depend on the farmers' individual choice (based on agronomic and economic constraints and aims) and the interpretation of control bodies. In extreme cases, this can lead to very intensive rotations, such as soya/soya/wheat as seen in Southern France; or monocultures of vegetables, such as tomatoes as a main crop every year in greenhouse production. A few private standards have additional requirements: 20 % legumes in arable crop rotations as main crops to maintain a stable humus-content (Naturland, Germany or Bio Austria, Austria).

### *Scientific evidence*

Bound to strict rules regarding nutrient cycling and restricted use of input, organic agriculture guides farmers to establish agro-ecosystem management and other progressive management practices, and thus implements a system approach to farming (Lampkin, 1990, Niggli et al., 2008). This system approach can induce synergetic environmental effects. Indeed, several authors found that the pest control measures used in organic farming significantly support the provision of ecosystem services (Crowder et al., 2010; Krauss et al., 2011; Zehnder et al., 2007) including pollination (Holzschuh et al., 2008). The promotion of high nature value elements on farms like hedgerows, beetle banks and habitats for other beneficial insects in grass or wildflower strips along field margins becomes ecologically and agronomically much more attractive in combination with a ban on pesticides (Niggli et al., 2008).

### **7.3.2.2 Contributing to high levels of biological diversity**

#### *Findings from the analysis of provisions*

The Regulation aims to contribute to high levels of biodiversity (Article 3(a)) but does not elaborate further in the form of a specific set of rules. However, Article 12 of Regulation (EC)

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<sup>4</sup> Denmark (as long as the substrates are comparable to organic soil and premixed substrate contain only peat, clay, stone meal, lime, organic soil or organic produced manure), Sweden (minimum volumes of substrates per plant), Italy and Spain.

834/2007 additionally mentions that organic production shall use cultivation practices that enhance soil biodiversity. Although such practices are not clearly defined, the Regulation provides a list of rules that may indirectly protect or contribute to high levels of biological diversity (see Table 7.2).

### *Scientific evidence*

There is an abundance of scientific evidence on the positive impact of organic production on biodiversity. Many studies have concluded that holdings using fewer inputs play a very important role in preserving biodiversity (The Soil Association, 2000; Bengtsson et al., 2005; Hole et al., 2005, Smith et al., 2011). This is especially the case on organic holdings that combine cultivation of a wide variety of crops, complexity of landscapes and reduced environmental disruption. Bengtsson et al. (2005) analysed 63 studies and concluded that the species diversity is on average 30 % higher on organic than on conventional land. Of the studies analysed by Bengtsson, 84 % found a positive impact of organic farming on the species richness, whereas 16 % did not. Fuller et al. (2005) showed that organic fields can support 68-105 % more plant species, and 74-153 % greater abundance, compared with conventional fields. Roschewitz et al. (2005) concluded that, as organic systems are characterised by diverse seed banks, organic fields could be viewed as self-sufficient ecosystems for plants, therefore not relying on immigration from surrounding habitats to maintain species pools.

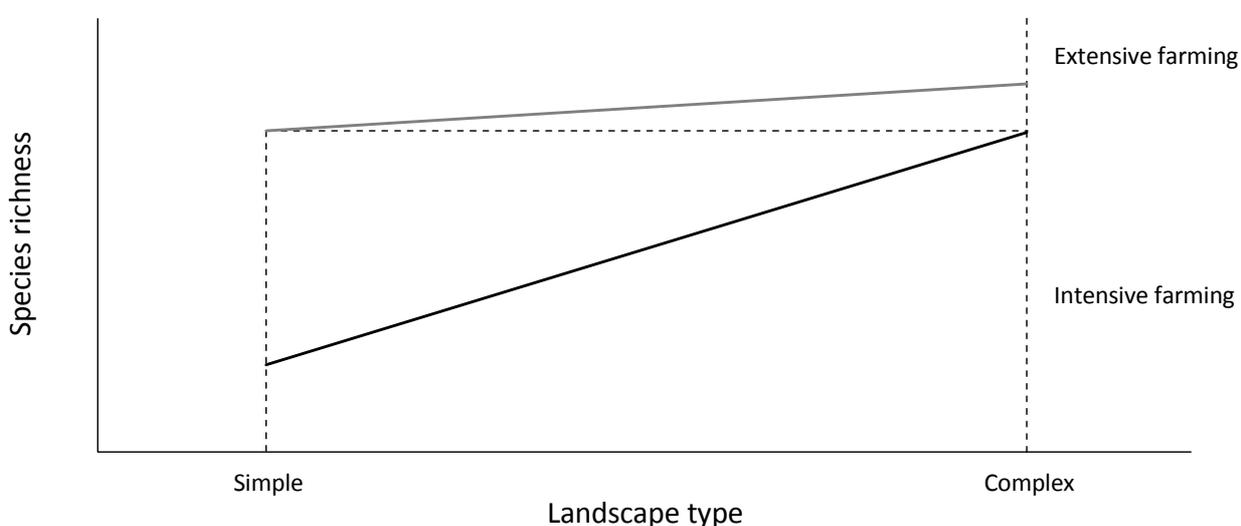
Looking in more detail, organic farming practices are beneficial for some species of birds. Kragten et al. (2008a, 2008b) found the home range density of skylarks and vulnerable lapwings on organic farms to be three times that on conventional farms. Gabriel et al. (2010) recorded higher overall bird diversity on conventional farms, but generalist species and members of the crow family were found in higher densities on organic farms. On organic arable land, the floral diversity (Gabriel et al., 2006; Gabriel et al., 2007) and the diversity of predatory insects (Pfiffner und Luka, 2003) is higher than on conventional arable land. Boutin et al. (2008) identified higher species richness in semi-natural habitats on organic farms compared with conventional farms. The differences in the biodiversity performance between organic and conventional farming systems are more pronounced on arable land than on grassland (Niggli et al., 2008). There is evidence that organic farms can extend their biodiversity benefits beyond the farm boundary into surrounding landscapes and farms (e.g. Gabriel et al., 2010; Hodgson et al., 2010; Rundlöf et al., 2008). The species richness is, however, largely dependent on landscape type (Tscharrntke et al., 2005) (see figure below). Whereas in simple landscapes (and mainly in arable cropping) the differences in species richness are mostly significant, in more complex landscapes, in particular when non-organic low-input farming systems are compared with more intensive organic farming systems, only few or no significant differences are found (Gomiero et al., 2011). Similar conclusions were reached in the recently finished EU-funded research project 'Bio-Bio'.<sup>5</sup>

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<sup>5</sup> See website: <http://www.biobio-indicator.org/scientific-publications.php>.

The prevalent high biodiversity generally found on organic farms significantly supports ecosystem services such as natural pest control (Crowder et al., 2010; Krauss et al., 2011; Zehnder et al., 2007) or pollination (Holzschuh et al., 2008). Ulber et al. (2009) observe that the increased plant diversity on organic farms arose from the complexity of the system including crop rotation, absence of herbicides and other synthetic pesticides. Concerning landscape diversity, organic farming may perform better because of more diverse crop rotations (Norton et al., 2009) and higher implementation rates of structural elements such as hedges and fruit trees (Schader et al., 2009). However, landscape effects are very farm and site specific. Therefore, no general trend can be determined (Steiner, 2006).

**Figure 7.2:** Compensation of local land-use intensity by landscape complexity



Source: Tscharnkte et al. (2005).

The positive impacts of organic production on biodiversity assessed in the scientific studies (e.g. Bengtsson et al., 2005; Fuller et al., 2005; Hole et al., 2005; Smith et al., 2011a; Schader et al., 2012) derive from:

- directly related aspects from the Regulation: ban of synthetic mineral fertilisers, herbicides and chemical pesticides, use of organic fertilisation, lower stocking density, more diverse rotation; and
- general organic production practices partly required in private production standards or national regulations in non-EU countries: use of cover crops, use of legumes, less tillage, higher presence of semi-natural habitats in total UAA such as hedges, trees or grass strip corridors.

#### *Views of stakeholders*

Many interviewed stakeholders stated that they thought that organic farming generally contributes to a high level of biodiversity, but saw the lack of detail regarding the rules related to

biodiversity as a major shortcoming in the production rules, for example in relation to habitat management or species richness. Producer organisations and environmental NGOs for example argued that farmers, who would like to enhance biodiversity on their land through certain strategies or methods, cannot find any measures or instructions in the Regulation that would directly increase species richness (e.g. regulations regarding habitat management). Stakeholders from environmental NGOs and ministries for the environment also argue that the protection of biodiversity needs to be tied directly into the system of organic agriculture, and clear instructions and measures, as well as suggestions for impact monitoring indicators need to be included in the rules.

### 7.3.2.3 Making responsible use of energy and natural resources

#### Energy

##### *Findings from the analysis of provisions*

The Regulation does not provide explicit rules regarding the responsible use of energy. However, several rules have some possible direct or indirect impacts; particularly limiting the use of chemically synthesised inputs (e.g. N fertiliser) has a significant impact on energy consumption (see Table 7.2). Yet the Regulation does not include any direct provision on the use of fossil energy, transport, packaging, heating, energy saving measures, etc.

##### *Scientific evidence*

The energy use in agriculture essentially consists of direct consumption of fossil energy (e.g. fuel and oil) as well as indirect energy consumption resulting from the production of synthetic fertilisers and pesticides transport of imported feedstuffs and from investment goods such as buildings. Because of the very limited use of synthetic mineral fertilisers (in particular the ban on chemically synthesised nitrogen fertilisers) and pesticides (no use of chemically synthesised pesticides except pheromones and a few products for insect traps), several studies have shown that the energy consumption is lower in organic than in conventional farming (ITC-FiBL, 2007; Stolze et al., 2000; Lampkin, 2007). This is a positive side effect that can thus be attributed to the Regulation. Thomassen et al. (2008) found that the energy efficiency of organic milk production was significantly higher compared to conventional production. They concluded that the use of concentrate feed in particular is a major driver of energy inefficiency and its reduction has the potential for reducing energy use. Nemecek et al. (2005) demonstrated, on the basis of long-term field experiment data, a lower energy use per ha and per product unit overall in organic systems for all major crops in Switzerland. However, for certain crops (e.g. potatoes broccoli, lettuce), organic farming can sometimes offset the reduced usage of man-made chemical inputs by increased mechanical labour, increasing the amount of fuel used compared to conventional farming (Venkat, 2012; Williams et al., 2006; Pimentel et al., 1983). For potatoes, a slightly higher energy use was calculated per ton of organic potatoes (Nemecek et al., 2005). Williams et al. (2006) found higher energy use per kilogram of product within organic tomato production as a

result of reduced yields but similar levels of fossil-fuel inputs. Some other studies have shown that the positive impacts of organic farming resulting from the non-use of synthetic nitrogen/pesticides may be mitigated and might even be reversed, depending on the specific practices and crops involved (De Backer et al., 2009; Azeez and Hewlett, 2008; Gomiero et al., 2011). Therefore, for most crops the energy use, both land related or product-unit related is generally lower, with some exceptions like potatoes or tomatoes, where disease pressure in organic farming is high and organic yields relatively low. While milk and beef production is more efficient on organic farms, as a result of greater energy efficiency in forage production through the use of grass-clover leys, organic poultry production has been shown to have a slightly lower energy efficiency due to higher feed conversion ratios (Schader et al., 2012; Leinonen et al., 2012a, Leinonen et al., 2012b).

### *Views of stakeholders*

Answers to the web-based stakeholder survey refer to the fact that there are no requirements on responsible energy use and resource saving, such as the use of less packaging, waste management or energy efficient management of crop production in greenhouses. Some processors also mentioned the need to include and implement environmental (sustainability) management systems, better adapted to the organic food industry. This need is also reflected in the German research report by Beck et al. (2012). Stakeholders (across all categories) would like to see instructions and measures on the responsible use of energy in organic agriculture along the whole production chain, to improve the coherence of organic production.

### **Water (quality and quantity)**

#### *Findings from the analysis of provisions*

Regarding water quality and limiting pollution, there are several direct and indirect effects in organic agriculture resulting from specifications in the rules (Table 7.2). Regarding water use, the Regulation does not provide any direct requirements except for aquaculture, but organic production uses potentially less water because of individual choices and cultivation practices.

#### *Scientific evidence*

Thanks to the strict limitation of chemically synthesised inputs in plant production, organic farming significantly helps reduce residues of plant protection products and chemical fertilisers in water, thus improving **water quality** (Mahé and Portet, 2012). Rotations including legumes and green manures, the use of farmyard manure as fertiliser and the limitation of stocking densities and total amount of livestock manure reduce the input and availability of rapidly soluble nitrogen, and therefore reduce leaching of nitrates. Several studies show that nitrogen leaching can be reduced by 40–64 % through organic farming (e.g. Edwards et al., 1990; Younie and Watson, 1992; Eltun, 1995; Condrón et al., 2000; Goulding, 2000; Haas et al., 2001; Kirchmann and Bergström, 2001; Mäder et al., 2002; Stopes et al., 2002; Auerswald et al., 2003; Pacini et al., 2003; Shepherd et al., 2003; Osterburg and Runge, 2007). Based on a statistical comparison of 12

studies, Mondelaers et al. (2009) conclude that the nitrate leaching rate is on average 9kg/ha in organic production versus 21 kg/ha in conventional agriculture. Important differences are noted among the studies due to differences in soil, regions, fertilisation practices and measurement. In contrast to the results mentioned above, in some comparative crop rotation experiments nitrate leaching has been reported at the same levels in organic and conventional rotations (Korsaeth and Eltun, 2000), especially if calculated per kilogram of harvest (Mondelaers et al., 2009). Looking at the impact per kg output, Nemecek et al. (2005) found higher eutrophication impacts per output for some organic crops compared to conventional. In some places, these higher nutrient loads on arable land are attributed to the greater use of organic fertilisers in the organic system, because the life cycle assessments used by Nemecek et al. (2005) assume relatively high fertilisation rates for organic farms. Taking the data by Nemecek et al. (2005) and projecting them at sector level, using statistical data and an economic model, Schader (2009) found on average 35 % lower eutrophication rates on organic farms per hectare. The following facts underline the lower eutrophication potential of organic farming found in literature (Schader et al., 2012):

- Organic farming systems have lower nutrient application levels, which reduces the absolute quantity of nutrient loads that can be emitted from the system due to the ban of mineral nitrogen fertilisers, lower stocking rates and restrictions on the use of manure;
- The quantity of directly available nitrogen is much lower in organically managed soils;
- Because nutrients cannot be imported easily into the systems, the opportunity cost of nitrogen losses is higher for organic farms than for conventional farms (Stolze et al., 2000). This implies a need for more efficient nutrient management in organic systems, although this does not eliminate losses. In addition, nitrate leaching can be high at the point of transition from the fertility building phase of the rotation to the cropping phase.

In animal husbandry, outdoor production of pigs and poultry (not specifically organic but with access to pasture) increases the risk of nitrate losses, if excrements are concentrated in certain sectors and vegetation cover is allowed to deteriorate (Eriksen et al., 2002, 2006; Degré et al., 2007; Salomon et al., 2007; Halberg et al., 2010). Also for organic systems the report of the Expert Group for Technical Advice on Organic Production (EGTOP) on poultry pointed out that the minimum outside area for laying hens of 4 m<sup>2</sup> can sometimes lead to a pressure of nitrogen that exceeds 170 kg/ha/year (EGTOP, 2012). For herbivores, the maximum stocking density (related to the limit of 170 kg N/ha) is being implemented at the farm level, but higher stocking rates may occur on specific fields.

There could be a positive impact of organic production practices in relation to **water use**, partly related to production rules. For example, Stanhill (1990) and Lotter (2003) found that organic crops show higher ability to cope with drought than conventional ones, mainly because organic farming practices commonly increase and stabilise soil organic matter. More recently, a French study comparing 151 organic holdings to 281 conventional ones (Caplat, 2006) revealed that only 8 % of the organic areas were irrigated, whereas 33 % of conventional holdings used irrigation.

### *View of stakeholders*

A few stakeholders (primarily processors) mentioned that the issue of water-use and quality should be regulated in the Regulation, whereas the majority of interviewees did not mention this issue.

## **Soil and organic matter**

### *Findings from the analysis of provisions*

There are certain sets of rules which have a direct, positive impact on soil and its organic matter content (Table 7.2 above). In particular, these include good soil management practices and mandatory rotations including legumes and other green manure crops, and organic fertilisation practices using only products listed in Annex I (especially manure and compost), which contribute to a high level of organic matter.

### *Scientific evidence*

Organic agriculture encompasses a number of different activities within the system approach, which aim at increasing the organic matter content in the soil. Most important amongst these is the ban on mineral fertilisers, which necessitates meeting the nutrient demand of the crops with organic fertilisers (Mäder et al., 2002). Also, crop rotations that include short-term clover grass leys support the development of fertile soils (Pimentel et al., 2005). Extended crop rotations, incorporating grass-clover and forage legumes, the application of organic fertiliser (e.g. slurries and manure) and avoiding bare soils are all practices that have been shown to have the potential to prevent soil carbon losses and build soil carbon stocks (Freibauer et al., 2004; Smith et al., 2007; Lal, 2008; Smith et al., 2008; Diacono and Montemurro, 2011). These practices, although desirable, are not commonly found in modern agricultural systems, whereas they are a core element of organic production systems (Gattinger, 2012).

There is also clear scientific evidence that soils under organic management have higher biological activity, both in terms of species and general biomass. Results from the Swiss long-term trial show that organic soils contains 20 to 30 % more microbial biomass, 30 to 40 % more earthworms, 90 % more spiders (with high diversity) and 40 % more mycorrhizae (Mäder et al., 2002; Pfiffner and Luka, 2007, Fließbach et al., 2007). Moreover, the content of organic matter improves the soil characteristics. Tuomisto et al. (2012) found in their meta-analysis, a 7 % higher soil organic matter content on organic farms compared to conventional farms. Organic soils thus show improved water retention properties and allow the crops to cope better with drought. Investigation of five plots in Rutzendorf (Weinviertel Lower Austria) differing in soil quality as well as in fertilising methods (cover crops, compost, dung, conventional fertiliser), revealed a significant increase of saturated hydraulic conductivity in organic tilled soils compared to conventional tilled soils. Best effects were obtained with compost, followed by dung and green manure/cover crops (Loner, 2009). The positive effects of organic farming practices on soil structure results in beneficial effects on soil erosion (Siegrist et al., 1998; Shepherd et al., 2002).

Gattinger et al. (2012) carried out a meta-analysis of 74 pairwise comparisons of organic and non-organic farming systems, finding significantly higher soil organic carbon concentrations in soils under organic management.

### *Views of stakeholders*

Regarding the protection and management of the soil, the views diverged slightly in different countries. Most interviewees across all affiliations and Member States, but particularly in the United Kingdom and Estonia, stated that soil protection and soil fertility management are at the core of organic production systems.

## **Air quality and greenhouse gas (GHG) emissions**

### *Findings from the analysis of provisions*

There is no direct provision regarding the prevention of air pollution in the Regulation. However, some rules stated in the Regulation can have indirect effects on GHG emissions, e.g. the restrictive use of synthetic chemical inputs and on direct gaseous emissions from pesticides (see Table 7.2).

### *Scientific evidence*

Air contamination risk by pesticide spray is minimal in organic farming due to the ban of synthetic pesticides (Stolze et al., 2000, Schader et al., 2012). Nevertheless, the application of powdered and fluid substances permitted by organic standards may cause a short-time impairment of air (Stolze et al., 2000).

The objectives of organic production in Article 3 of the Regulation (EC) 834/2007 only refer to the responsible use of air but do not directly mention the impact on climate. Because of the specific mentioning of climate change in the context of the Common Agricultural Policy (CAP) the following section also summarises studies that have investigated the greenhouse gas emissions in relation to organic agriculture.

Due to lower stocking rates, per hectare, organic farming generally performs better with respect to GHG emissions than conventional farming (Schader et al, 2012). Hörtenhuber et al. (2010, 2011) showed that, when considering deforestation due to growing feed concentrates for imports and including the effects of carbon sequestration, the carbon footprints per unit of product may be in favour of organic production for Austrian dairy systems. When considering the impact per unit of product, some studies have highlighted that increasing milk yield, through feeding increased amounts of concentrates can decrease greenhouse gas (GHG) emissions per kg of milk produced (Lovett et al., 2005; Lovett et al., 2006; Garwes, 2009; Zehetmeier et al., 2012). As milk production is estimated to be 20 % lower on organic dairy farms, it is assumed that methane emissions per kg milk will be higher (e.g. Piorr and Werner (1998) in Stolze et al. (2000)). However, Lampkin (2007) highlights that average yield per cow on organic dairy farms is typically

only about 10 % lower than conventional, and there is no significant difference in the meat output per animal, so this effect may be outweighed by other farm or sector level considerations, such as stocking rates and reliance on bought in feeds from off farm. Increased milk yields can also lead to a decrease in animal fertility and health leading to an increase in the overall replacement rate. Increases in herd size, due to a greater number of replacements/young stock on the farm, would result in greater emissions overall (Novak and Fiorelli, 2009). Others have suggested that increasing the roughage content of the diet will result in an increase in methane emissions under organic management (de Boer, 2003), but Cederberg and Mattson (2000) found that the nitrous oxide emissions associated with synthetic fertiliser manufacture more than offsets the greater amounts of methane released by organic dairy cattle.

In addition, organic farms try to maintain a closed production system as far as possible. Assessments of greenhouse gas emissions within beef and dairy production by Schader (2009) and Haas et al. (2001) found that this approach manifests through a reliance on home grown sources of feed for livestock. Lower emissions associated with concentrate feed have also been reported in comparisons of organic and conventional dairy production in Sweden, Denmark and the Netherlands (Cederberg and Mattsson, 2000; Jørgensen et al., 2005; Thomassen et al., 2008). Within an assessment of the environmental impacts of a 1996 'baseline' and a number of 100 % organic conversion scenarios in Denmark, Dalgaard et al. (2001) also found that domestically produced, organic grass/clover has less impact than conventional forage, due to a lack of fertiliser application, with the increased efficiency contributing to lower energy use, and associated emissions, per livestock unit.

A recent literature review also compared the total Global Warming Potential (GWP) of organic products, finding no significant differences overall between the greenhouse gas emissions resulting from the production of conventional and organic products (Knudsen et al., 2011).

Organic systems also avoid the N<sub>2</sub>O emissions associated with mineral nitrogen fertiliser, as the main source of N is biological nitrogen fixation, within the fertility building ley period of the crop rotation. Despite this, there are only a few studies available which compare N<sub>2</sub>O-emissions from organic and conventional farming systems. Chirinda et al. (2010) found no differences in N<sub>2</sub>O-emissions between farming systems. Flessa et al. (2002) and Sehy (2003) found lower N<sub>2</sub>O-emissions in organic farming systems per ha, and calculated N<sub>2</sub>O-emissions per output weight to be equal to Swiss non-organic farming systems. A Life Cycle Assessment by Nemecek et al. (2005) showed lower N<sub>2</sub>O-emissions in organic farming systems for both area and product output (36 or 18 % respectively) than conventional. Gattinger et al. (2010) conclude that organic farming systems have a lower N<sub>2</sub>O-emission potential than conventional farming systems, because in general, there is a linear relationship between N-Input und N<sub>2</sub>O release and in organic farming systems N-supply is up to 50 % lower than conventional. In summary, data uncertainty concerning N<sub>2</sub>O emissions from different fertilisers and from the soil does not allow general conclusions to be drawn on the impact of organic farming.

Since the performance of organic agriculture regarding CO<sub>2</sub> emissions is highly correlated to energy use, the same arguments apply as for the discussion of energy use in the section above. Unlike the energy use though, net emissions of CO<sub>2</sub> (i.e. gross emissions subtracted by the sequestration rate) need to be taken into account. There are indications that organic farming performs better regarding carbon sequestration due to the incorporation of fertility building grass-clover leys and the use of livestock manures within diverse crop rotations (Olesen et al., 2006; Niggli et al., 2009, Smith et al., 2011b). Several long-term trials from the United States, Germany, and Switzerland (Mäder et al., 2002) show that organic farming systems are able to sequester more carbon from the atmosphere than the best performing conventional counterparts. A meta-analysis of 74 studies conducted by Gattinger et al. (2012) confirms higher soil organic carbon concentrations and stocks in top soils under organic farming management compared to conventional. Flessa et al. (2012) argues however that differences in the sequestration potential need to be interpreted with caution, since they depend very much on the conventional management system. A particularly positive effect can be expected if conventional stockless systems are compared, while differences are rather small between organic and conventional farms both using farm manure as an important N-input.

There have been few direct comparisons of methane generation between organic and conventional production (Lampkin, 2007) although Stolze et al. (2000) point out that 80 % of organic farms will have ruminants, compared to 60 % of conventional farms. This could lead to higher CH<sub>4</sub> emissions from organic production overall, although the potential effect is reduced as the stocking density is generally lower in organic systems. The specifications within the Regulations for at least 60 % of the dry matter in daily rations of herbivores to consist of roughage, fresh or dried fodder, or silage has led some authors to conclude that a conversion to organic agriculture will result in higher levels of methane being emitted (de Boer, 2003). Although not specifically about organic farms, a study by DairyCo (2012) found that within a sample of 415 farms in England, Scotland and Wales, increased concentrate feed rates were associated with a higher carbon footprint per litre of milk, questioning these assumptions. Reliance on high cereal diets results in severe difficulties relating to health and longevity of herbivores, which are by their physiology more suited to diets high in roughage (Zollitsch et al., 2004). A high cereal diet would also result in milk and meat produced with concentrates grown on arable land with high inputs of nitrogen fertiliser (Niggli et al., 2009) and directly contributes to land-use change and deforestation overseas from the production of imported feed such as soya and maize (El-Hage Scialabba and Müller-Lindenlauf, 2010).

#### **7.3.2.4 Respecting high animal welfare standards, in particular meeting animals' species-specific behavioural needs**

##### *Findings from the analysis of provisions*

The Regulation provides very detailed rules in terms of animal health care, feeding and housing (Article 14 of Council Regulation (EC) 834/2007 and Article 7 to 25 of Regulation (EC) 889/2008).

Particularly relevant are specifications of housing design and indoor stocking rates (Article 14(e) with detailed implementing rules in Article 10 to 12 of Regulation (EC) 889/2008). These state that at least half of floor area should be solid floor (no slats), and ban the use of flat decks or cages for piglets and of cages for poultry. Some transitional and exceptional rules existing in Regulation (EC) 889/2008 are also directly linked to animal welfare, such as the allowing of tethering for small holdings. The exceptional rule requires regular exercise, access to bedded areas, good management and additional control visits, but it is not clear to what extent the control visits take the animal welfare outcomes into account. For exceptions related to housing conditions and stocking densities, farmers have to present a plan to the competent authority and control body showing how they will ensure compliance after this period of transition (until the end of 2013).

### *Scientific evidence*

In the EU-funded research project EconWelfare, organic rules were compared with general animal welfare standards and private non-organic welfare standards for farm animals. The project concluded that animal welfare is already on a high level compared with the requirements of the general EU legislation (Ferrari et al., 2010). Schmid and Knutti (2009) compared the main added requirements of EU organic production rules with other welfare standards, and found differences related to the prohibition of certain housing systems (e.g. fully slatted floors for cattle) and improvements in existing ones (e.g. access to bedding). To develop organic standards to become more adequate to the highest welfare standards, Schmid and Knutti suggested to provide more indoor space for all species of animals and to include measures for transport and slaughter, which are almost entirely missing at present (ibid).

Focussing only on organic production rules and their impact on animal health and welfare, Rahmann and Godinho (2012) emphasised that some practices in organic animal husbandry are considered to demonstrate inadequate respect for animal welfare. Some of these practices are directly authorised in the Regulation (mainly under transitional or exceptional rules), such as the temporary tethering of cows. Other examples include the use of conventional breeds that are not robust enough and not adapted to organic farming conditions (e.g. hybrid poultry bred for intensive systems), high mortality rates of piglets, meat quality problems due to non-appropriate feeding, killing of male chicks in poultry flocks due to the lack of multi-purpose lines, large poultry flocks leading to difficulties in ensuring sufficient and adequate outdoor runs, short life expectancy of organic dairy cows in some countries, and high reliance of the milk production on concentrate feeds (cereal and soya) instead of having a strong roughage basis.

Hovi et al. (2003) carried out a detailed assessment of animal welfare in organic farming in the United Kingdom under the previous regulation, but some findings are still relevant. The report concluded that standards can have both positive and negative impact on welfare; training and advice and health planning appear to be the most promising way to promote welfare and there is a need to ensure consistent enforcement of existing standards through certification.

Some other studies investigating health and welfare on different types of farms used a range of indicators. For example, Kilbride et al. (2012) concluded that enterprises participating in organic or farm assurance inspections were more likely to comply with welfare legislation in animal health inspections and that such membership could be included in the risk-based selection of farms for inspection. In contrast, in a study of 40 organic paired with 40 non-organic farms for housing type and herd size, Langford et al. (2008) found no significant differences in building dimensions and in other aspects of cow housing and health between conventional and organic. Referring to the same study of 80 paired dairy farms, Rutherford et al. (2008) found lameness to be less prevalent on organic farms and Haskell et al. (2009) found no difference in somatic cell counts of dairy cows. Similarly, Fall et al. (2009) and Müller et al. (2010) found no difference in udder health in paired farm studies in Sweden and Germany respectively. Ermakov (2012) found no indication of a better health status of organic turkeys, based on a comparison meat inspection data of organic and conventional carcasses in one German slaughter house between 2004 and 2009. No other studies that directly compare health or welfare for other species could be identified.

#### *View of stakeholders*

Generally, interviewed stakeholders think that the production rules allow the achievement of animal welfare in organic livestock production through the mandatory access to open-air areas, the use of organic feed and the rules concerning maximum stocking density. At the same time, they recommend to develop specific provisions to strengthen the animal husbandry guidelines (choice of species, animal flock size, minimum time spent on pasture, transport and slaughter conditions). Stakeholders from Austria and Germany commented on the absence of an appropriate animal welfare assessment system. Many interviewees considered the authorisation of cattle dehorning and tethering as non-compliant with animal welfare standards. Regarding the use of non-organic feed, views vary significantly. Many interview partners were of the opinion that the animal welfare assurance is one of the reasons for consumers to buy organic products, and commented on the fact that there is now less of a distinction between organic and conventional production due to the increasing animal welfare requirements in conventional systems in recent years.

### **7.3.3 Producing products of high quality and responding to consumer demand**

This section presents the results related to the objectives of organic production aimed at *“producing products of high quality”* and *“producing a wide variety of products in response to consumer demand for foods and products produced by the use of processes that do not harm the environment, human health, plant health or animal health and welfare”* (Article 3(b) and 3(c)) as well as related to the global objective of *“ensuring consumers’ confidence and protection of consumers’ interests”* (Article 1).

To answer the question as to whether the rules are adequate to produce products of high quality and in response to consumer demand, plant and livestock production rules, the processing rules of the Regulation and the implementation in Member States are considered. Relevant external factors are highlighted and examples from the case studies supporting the arguments are made.

### 7.3.3.1 Producing products of high quality

#### *Analysis of provisions*

The production rules prohibit the use of chemical pesticides (Article 12(1)) and limit allopathic treatment for animals (Article 14(e)) but do not specify maximum thresholds for the residue content in organic products. The number of permitted inputs in food processing<sup>6</sup> is considerably lower than for conventional agriculture. Obligations to use certain practices include the use of slow growing strains of livestock, open-air access, and feed requirements appropriate to the livestock species.<sup>7</sup>

#### *Scientific evidence*

An EU-funded study on quality and safety of organic and low input foods (QLIF, 2009) showed with regard to **food safety** that organic production methods resulted in lower levels of nutritionally undesirable compounds such as heavy metals, mycotoxins, pesticide residues and glycol-alkaloids in a range of crops and milk. A Dutch literature review on food quality, safety and health impact of organic production (Van der Vijver et al., 2009) comes to similar conclusions but expresses some reservations about livestock products.<sup>8</sup> Thus, the food safety of crop-based products is improved mainly thanks to the prohibition of chemical pesticides and the non-use of mineral fertilisers. For animal-based products, the obligation to use roughage in the diet and limitation on allopathic treatment are likely to have a positive effect; however, for monogastrics the obligation to give access to pasture (free-range) and the restrictions on the use of allopathic treatment require good management abilities on the part of the holder (e.g. Vaarst et al., 2008).

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<sup>6</sup> Annex VIII of Regulation (EC) 889/2008 with Section A: Food additives including carriers and Section B: Processing aids and other products which may be used for processing.

<sup>7</sup> E.g. appropriate breeds shall be chosen (Article 14(1)(c)(iv) of Regulation (EC) 344/2007; in the choice of breeds or strains, account shall be taken of the capacity of animals to adapt to local conditions, their vitality and their resistance to disease (Article 8 of Regulation (EC) 889/2008); animals must have permanent access to open air (Article 14(1)(b)(iii) of Regulation (EC) 834/2007), prohibition of landless livestock production (Article 16 of Regulation (EC) 889/2008), use of certain products and substances in feed (Article 22 of Regulation (EC) 889/2008).

<sup>8</sup> The literature review leads the author to conclude that a number of well-conducted studies show clear evidence of the following: in the plant sector, organic products contain less rather than more fungal toxins, the nitrate content of organic crops is generally lower than for conventional crops (occasionally some result show the opposite), there are a limited number of comparative studies showing that conventional products contain more pesticides residues than organic; regarding animal production, there are clear indications that eggs from free-range hens contain more dioxins, that the prevalence of antibiotic resistant bacteria in organic pigs and chickens is lower than with conventional breed animals and that the prevalence of *Campylobacter* is higher in organic broilers.

For several potential food safety risk factors not only direct restrictions in the EU organic rules but also indirect measures can play a potential role (Schmid, 2002; AFFSA, 2003). A recent systematic review concluded that organic food consumption may reduce exposure to pesticide residues and antibiotic resistant bacteria (Smith-Spangler et al., 2012).

There is very little evidence of an impact of organic practices on the **nutritional value** of products and even less regarding health. According to a study conducted in 2003 by the French Food Agency (AFSSA, 2003) the fact that organic crops are often more exposed to environmental stress (due to a usually higher pest and disease pressure) would slightly increase the content of the following micronutrients: iron, magnesium, vitamin C and antioxidants (these molecules intervene in the defence system of plants). According to Raiffaud (2010), promoting grazing for ruminants improves the flavour and the nutritional composition of products like milk or cheese, because of the abundance and the varieties of wildflower meadows. A comparison of conventional and organic dairy products found better nutritional quality of organic milk (Palupi et al., 2012)<sup>9</sup>, probably related to a difference in feeding regime (the higher level of fresh forage encouraged by the Regulation). Similarly, the meta-analysis of results related to organic milk production (Kahl et al., 2011) shows that organic dairy products contain significantly higher levels of protein or total omega-3 fatty acid. The systematic reviews of Dangour et al. (2009) and of Smith-Spangler et al (2012) concluded that there is no strong evidence of the higher nutritional value of organic products compared to conventional ones, but Smith-Spangler et al. pointed to the limitations of such analysis in terms of the number of studies and their heterogeneous nature. In contrast, Brandt et al. (2011) concluded that the content of secondary metabolites is approximately 12 % higher in organic produce resulting from the different fertility management system between both systems. Some studies (QLIF, 2009; van der Vijver et al., 2009) concluded that it was premature to draw conclusions in the field of health.

According to Raiffaud (2010), the numerous scientific studies on the impact of organic practices on the **taste of products** have not shown significant differences to conventional ones. Various production parameters (e.g. varieties and species used, the duration of rearing or the crop conditions) may influence the flavour, making rigorous comparison more difficult. In the EU-funded research project ECROPOLIS, a comparative analysis of relevant sensory related requirements in regulations and standards for mainly processed organic products was made using an impact matrix (Schmid, 2009). The empirical verification of product qualities through consumers and sensory laboratory testing showed significant standards-related impacts for oil and salami, but no impact for apples, biscuits and tomato sauce. These effects were related to processing rules, such as the use of additives (non-use of nitrates/nitrites for meat products) and

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<sup>9</sup> Significantly higher amounts of protein, ALA, n-3, CLA9, VA, EPA and DPA in organic dairy products than in conventional products, as well as a higher ratio of n-3 to n-6 (approximately twofold) and n-9-desaturase index, indicate that the organic dairy product may have a premium nutritional quality.

restrictions on extraction methods and heat treatment of plant oils that are found in some private standards but not in the EU Regulation for organic production (Espig et al., 2011).

### 7.3.3.2 Producing a variety of organic food in response to consumer demand

#### *Results of the consumer survey*

In the survey of 3 000 consumers in 6 countries, carried out as part of this evaluation, consumers were asked to indicate the degree of their personal agreement to a list of statements regarding organic food on a scale from 1.<sup>10</sup> The majority of consumers agreed with the statement that most organic products meet their expectations regarding high quality, and many believe that organic production does protect the environment. As a further indication of whether the variety of products meets the demand, consumers were asked whether they are able to buy all the products they want in organic quality. As shown in Figure 7.3, only about 20 % of questioned consumers agree with this statement, nearly half of them (48 %) stated that, at present, they cannot buy all the organic products they would like.

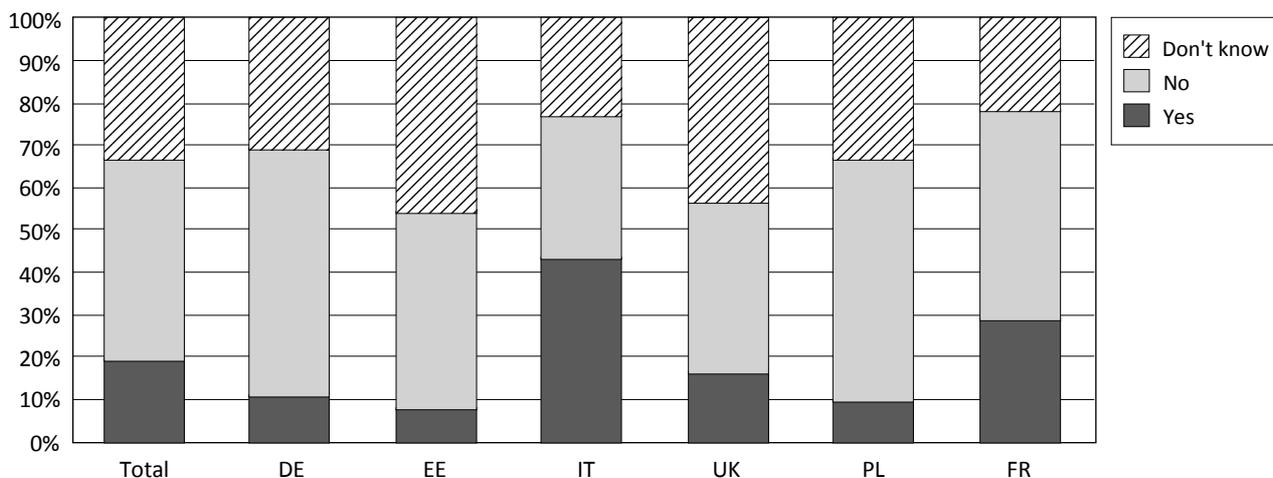
A further question aimed to determine which organic products consumers most feel are lacking. The results show that many see the greatest gaps in the supply of fresh fruit, vegetables, salad and meat (fresh and processed), but also milk and dairy products, bread and fresh fish are not perceived to be available in sufficient quantities.

#### *Views of stakeholders*

The majority of the interviewed stakeholders shared the opinion that the production rules are adequate to satisfy consumer demand. It is likely that stakeholders involved in production (such as farmers' organisations, farm advisors and control bodies) will have answered this question considering the feasibility of producing specific products under the rules rather than considering the availability for consumers. Regarding processing, more than half of them (in particular from competent authorities, ministries and producer organisations) were certain that the processing rules of the Regulation enable the production of a broad range of products. The other half of respondents thinks that consumers have different expectations in relation to quality and packaging and want fewer additives. Some processors would like to have more additives allowed, so they can produce a wider range of products (e.g. they cited specific flavour restrictions for yoghurts or the restricted list of stabilisers for melted cheese as limiting what they could produce). Others questioned whether all food products should be available as organic in the first place and were not convinced that high quality or good taste can be guaranteed by rules.

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<sup>10</sup> For further details of the consumer survey see Chapter 1 and 10.

**Figure 7.3:** Views of consumers regarding the availability of organic products

Question: Are all the products you would like to buy available in organic quality?

Source: Own data from consumer survey.

### 7.3.3.3 Ensuring consumer confidence and protecting consumer interests

#### Views of stakeholders

With regard to assessing the adequacy of production rules to contribute to the global objectives of ensuring consumer confidence and protecting consumer interests, mainly the views of stakeholders are considered. The issue will be explored in more detail in response to Evaluation Question 5 in Chapter 10, where further results of the consumer survey are presented. Across all countries and sectors, stakeholders share the opinion that the production rules (as well the respective labelling rules) are strict, clear, detailed and sufficiently integrated to ensure consumer confidence and protect consumer interests. Especially when compared with the alternatives (e.g. integrated or conventional agriculture, regional labels) the organic production system is seen as the most clearly defined and the most strictly controlled sector. The lists of restricted ingredients and additives are considered to help ensure consumer confidence. One of the main expectations is that inputs and the number of additives are very restricted (at present only 50 processing additives are permitted compared with 320 additives for conventional food processing) with some private standards having reduced the number further.

### 7.3.4 Justification for exceptional and transitional rules

This section evaluates the three main exceptional measures providing temporary authorisation to use non-organic inputs (young poultry, feed and seeds) and the transitional rules for animal housing. In order to assess the justification for non-organic input use, the following aspects were considered: a) current availability of organic farm inputs; b) reasons for undersupply; c) actions

taken (or needing to be taken) to develop an appropriate supply; d) evolution of the supply in the past years; e) implications of the exceptional rule, considering the likely impact on developing supplies, and where appropriate on achieving the objectives of organic farming and on consumer confidence. Where quantitative evidence was available it is presented, along with the analysis of provisions, experts' points of view and literature.

### 7.3.4.1 Regulatory justification of exceptional rules

#### *Findings from the analysis of provisions*

Exceptional rules intend to provide flexibility, enabling adaptation of the production rules to specific climatic, geographical and structural constraints or stages of development (Article 22 of Regulation (EC) 834/2007 and Chapter 6 of Regulation (EC) 889/2008). One important area for exceptions are several rules arising from the principle “*restricting the use of external inputs to inputs from organic production*” (Article 4(b) of Regulation (EC) 834/2007). Exceptions can be granted where they are necessary to ensure access to inputs which are not available in an organic form on the market (Article 22). This also states that they should be kept to a minimum and where appropriate limited in time.

Exceptions can be granted by the competent authority of the Member States if inputs are not available in an organic form on the market in the short or medium term (or during catastrophic circumstances where temporary measures are necessary to protect organic production).

#### *Views of stakeholders*

The stakeholders agreed to a large extent that the exceptional rules are adequate, provided that they are transitional and of a temporary nature. This was particularly stressed by stakeholders from Austria, Estonia, Spain, Italy and Poland. The main arguments supporting the exceptional rules underline the need to address the insufficient supply of organic inputs.

### 7.3.4.2 Exceptional rules for using non-organic young poultry

#### *Findings from the analysis of provisions*

Article 42 of Regulation (EC) 889/2008 provides that a) non-organic young poultry up to 3 days old can be introduced when constituting or reconstituting a flock and b) until 31 December 2014 (initially 31 December 2011), non-organic<sup>11</sup> reared pullets for egg production of not more than 18 weeks may be brought into an organic livestock unit, when organically reared pullets are not

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<sup>11</sup> Among producers these pullets are often referred to as part-organic, because the article states that the organic feeding and disease prevention rules must be complied with by the pullet rearing enterprise.

available in sufficient numbers. There are currently no specific EU rules for the production of organic chicks or for the rearing of organic pullets.

#### *Findings from the analysis of other publications and information*

Current availability of organic pullets: Out of the 13 countries studied, exceptions provided by Article 42 apply in all Member States under various conditions, except for Denmark, which has set up national rules for the production of organic young poultry. Here, farmers must be supplied with organic young poultry for laying hens as well as for broiler production. The supply in young organic poultry is thus adequate in Denmark. Also in Germany the use of non-organic poultry is forbidden, but producers can use non-organic eggs for hatching without derogations. Here, some regions like North Rhine-Westphalia are starting to implement stricter rules; for example that from 1<sup>st</sup> March 2013 mixed flocks (organic and non-organic chicks) have to be formed, and unavailability-declarations have to be issued by suppliers. In many other Member States, the production of broilers or laying hens relies on the use of non-organic chicks, fed with organic food since the age of one day. Experts from Austria, Denmark, France and the Netherlands reported that there was no need for exceptional rules for young poultry, while experts from the Czech Republic, Estonia, Italy, Poland and Slovenia stressed that there is no or only a limited supply of organic young poultry in their countries.

Causes of the undersupply of organic young poultry: The lack of an EU standard regulating young organic poultry production constrains the development of the sector, as countries are reluctant to develop national standards on their own to avoid potential disadvantages for their producers. This is referred to in Recital (3) of Commission Regulation (EC) 505/2012 of 14 June 2012, *“the development of harmonised organic production rules for young poultry at Union level is complex; the viewpoints on technical requirements vary widely between the parties concerned.”* As a result, Recital 3 states that *“in order to allow more time to develop detailed rules for the production of organic pullets, the exceptional rule for using non-organic pullets should be prolonged.”*

Actions to develop the supply of organic chicks and pullets have been taken in Denmark, mainly to satisfy issues of organic principle (animal welfare). The Ministerial Order N°1112 of 21 November 2008 of production and marketing of organic pullets sets provisions related to marketing conditions, feeding, welfare demands (physical production demands), prohibitions on trimming of beaks and the use of allopathic veterinary medicinal products and treatments. According to Danish operators and experts interviewed, the provision enforcing the use of organic pullets led to the development of an appropriate production of organic pullets. In France and the United Kingdom producers tend to support the introduction of EU standards for rearing organic pullets, but wish to maintain exceptions on using non-organic chicks for the time being. In France, producers appreciate the great diversity of breeding species that the exceptional rule allows them. When interviewed, the operators also highlighted that introducing organic chicks from organic breeding stocks will a) raise the price of organic pullets (see further below) and b) bring strong technical and sanitary constraints in breeding stock management, particularly

because of the mandatory open-air access areas.<sup>12</sup> A team of researchers<sup>13</sup>, establishing the actions needed to allow organic young poultry supply to develop, mainly recommend:

- The introduction of specific requirements in the Regulation covering the following areas:
  - Standards for the keeping of organic parent flocks and organic hatcheries suitable for use in the organic table bird production system from day old;
  - Standards for the keeping of young poultry for the purpose of egg production.
- The management of a database for organic young poultry and hatching eggs, similar to that which already exists for seeds, to make the supply situation in the EU transparent and the use of organic poultry and organic hatching eggs easier.

Implications of the exceptional rule for using non-organic pullets: The existence of these exceptional rules (one of them with no end date, the other extended recently) has an adverse effect on the development of the organic supply. In case study countries, authorities and/or operators agreed that a 100 % organic supply would be possible if there were no market perturbation such as that caused by the exceptional rule. To postpone the ending date hampers the development of supplies and is seen as being unfair by experts for sectors that have started to adapt to the end of the exception. In Denmark, the use of conventional young poultry has been prohibited for many years which fostered the development of a market for young organic poultry. Differences in supply, whether it is from (non-)organic chicks or part-organic pullets, leads to important differences in costs. In the United Kingdom, experts estimate full organic rearing of pullets to be approximately 40 % more expensive than part-organic pullets and in France the price of organic chicks is estimated to be twice as high as of conventional day-olds.<sup>14</sup>

### 7.3.4.3 Exceptional rules for using non-organic feed

#### *Findings from the analysis of provisions*

For the feeding of pigs and poultry, Article 43 of Regulation (EC) 889/2008 with reference to Article 22(2)(b) of Regulation (EC) 834/2007 authorises the use of a maximum percentage of non-organic high protein feed when organic quality high protein feed is not available.<sup>15</sup> Initially, the

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<sup>12</sup> This point would not affect northern countries that require access to open-air areas only if weather conditions permit.

<sup>13</sup> See BÖLW (2012) for details.

<sup>14</sup> Example of costs of production difference in the United Kingdom (exchange rate EUR/ GBP = 1.19):

- Costs of organic chicks for broilers: GBP 0.70/per bird (0.83 EUR) whereas non-organic chicks likely at GBP 0.40/per bird (0.47 EUR)
- Fully organic reared pullets for layers (using non-organic chicks): GBP 6.00 to 6.95/ per bird (7.12 to 8.25 EUR) whereas part-reared (free range using only organic feed): GBP 4.40 to 4.70 (5.22 to 5.58 EUR).

ITAVI (2010) compared in France the price of conventional chicks of slow growing strains of 29.61 EUR for 100 heads to the price of organic chicks of intermediary growing strains of 65 EUR for 100 head.

<sup>15</sup> This rule does not apply to herbivores.

exception was in force between 2009 and 2010. In 2012, the 5 % rate was extended until the end of 2014.

### *Findings from the analysis of other publications and information*

Current availability of organic high protein feed: Typical feeds with high protein content for monogastrics are usually various soya products, corn gluten or potato protein; containing specific amino acids such as lysine and methionine. It is not possible to estimate the availability of organically sourced protein feed in the EU, official data on feedstuff demand and availability do not exist. The ICOPP project (Improved contribution of local feed to support 100 % organic feed supply to pigs and poultry - CORE Organic II funded) will assess available feed resources and the current demand in selected Member States. A survey on feed resources is now in progress in 12 countries, making use of national information to provide best estimates. A report is due at the end of the project in October 2014.<sup>16</sup>

Interviewed experts declared that these types of protein crops are not available in sufficient quantities from organic sources at EU level, and that the majority of pig and poultry farmers rely on the exceptions of the 5 % non-organic high protein feed rule. Insufficient supply of organic feed was specifically mentioned by experts from Austria, Czech Republic, Germany, Denmark, Estonia, France<sup>17</sup> and Slovenia. They are concerned about the threat represented by imports of organic feedstuff from third countries (mostly China and India); with little guarantee on control and large carbon footprints. The recent cases of melamine contamination in organic soya imported from China and fake organic soya traded from Italy have had an impact on the demand for locally produced protein feedstuffs, which the market is unable to meet.

Causes of the systematic use of the 5 % of non-organic protein exceptional rule: Interviewed experts stated that a 100 % diet from available organic feedstuff could hardly meet animal requirements (mostly with high performance breeds), and supplementation with non-organic high protein feed (as well as amino acids) is a necessity to reach a balanced supply of methionine and lysine for the high performance standards. Natural amino-acids are provided by corn gluten or potato protein incorporated in the 5 % of non-organic authorised ingredients, and by increasing the share of soya in feed. The obligation of 100 % organic feed would force farmers to find new sources of natural amino-acids, since corn gluten or potato protein are not available organically (EGTOP, 2011). A number of potential high protein feed sources (rapeseed, peas and beans but also micro-algae) could be developed as alternatives, but some require further research. As part of the EU-funded EEC (organic) 2092/91 Revision Project, Sundrum et al. (2005)

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<sup>16</sup> The report will present estimates of organic stock numbers of all animals (including herbivores) and of organic production of concentrated feedstuffs including protein, broken down by crop/type in 12 countries as well as balancing calculations and tentative conclusions.

<sup>17</sup> For example in France, according to expert estimates, the need for organic soya for animal feed is around 55 000 tons, and national production is 5 000 tons, which means that 90 % of organic soya for feed is imported (mainly from third countries).

carried out a meta-analysis of the available literature to evaluate whether restrictions in protein supply can be compensated for by other measures that are more in line with organic objectives and principles. The report concluded that due to the restricted availability of feedstuffs with a high content of limiting amino acids, growth rates and protein accretion of organic pigs and poultry are clearly lower in organic compared to conventional production. However, it claimed that there is sound scientific proof that both poultry and pigs can compensate to a high degree for imbalanced feed rations without the onset of specific health and welfare problems, with the exception of the animal's first weeks of life. Strains with a high genetic yield capacity seem to be more sensitive to suboptimal feed rations than slow growing strains or robust breeds. There also are numerous studies that describe the undesirable side effects of breeding for high protein accretion, especially in poultry production, making the lower intensity of feeding potentially an asset of organic production and suggesting that organic production of pigs and poultry needs to be protected from unwanted intensification through feed ingredients (Sundrum et al., 2005). It is worthwhile noting that the ICOPP project will determine new approaches of ration formulation.

Implications of the exceptional rule for using non-organic high protein feed: In the current situation, the financial implications of the phasing-out of this exceptional rule would represent an increase of the total feeding costs<sup>18</sup> to reach the required level of 100 % organic feed, because of the higher price for organic protein feed.<sup>19</sup> Another impact would come from the change of the feeding content. Since some high value protein feedstuffs (e.g. potatoes protein, maize gluten, soya meal) used to balance rations are not (or not fully) available from organic sources, farmers will increase the overall protein content when increasing the share of organic raw materials to achieve a diet that provides adequate amounts of the limiting amino acids.

Consumers perceive organic husbandry as a production method based on natural/healthy feed (e.g. Zanoli et al. 2004). They are not aware of the details of production standards and might expect livestock used for organic meat to have been fed 100 % organic feed. However, it can be assumed that they would prefer local feed sources, if asked to choose between imported organic and local conventional feedstuff. A preference for local food is often seen in consumer surveys. Also the organic principles for farming oblige to farmers to practice land-related livestock production and the feeding rule also express a preference for feed from the farm or region.

As an immediate and transitional measure, the use of synthetic amino acids for organic monogastric feed production is discussed in some Member States (for example Germany). The argument is made that in this case animal needs and species-specific feeding should have higher priority than the principles to use 100 % organic inputs. However, some representatives of the

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<sup>18</sup> According to United Kingdom expert interviewed, to move from 95 % to 100 % will cost producer + GBP 15/t in increased feed cost and +3p/doz in production cost.

<sup>19</sup> This assumption does not take into account potential adjustments (adaptation of breeds, authorization of synthetic amino-acids, etc.).

organic farming movement, e.g. in Germany, strongly dismissed this suggestion as not being in line with organic principles and stated that instead the search for alternative solutions needs to be intensified. Promising alternatives are already developed: methods to produce methionine via enzymatic fermentation based on organic raw materials, or the use of insect larvae or algae as a protein source for feed (method in development). These new techniques are considered by interviewed experts as very promising, but not ready for a broad practical use yet.

#### 7.3.4.4 Exceptional rules for using non-organic seed

##### *Findings from the analysis of provisions*

Article 45 of Regulation (EC) 889/2008 authorises the use of non-treated, non-organic seeds and vegetative propagation materials when organic ones are not available on the market (Article 22 of Regulation (EC) 834/2007). This provision is supported through the establishment of a seed database in each Member State, listing the varieties for which organic seeds or seed potatoes are available (Article 48 of Regulation (EC) 889/2008). It allows the competent authority to grant individual exceptions to farmer requests to use non-organic seeds with adequate justification.<sup>20</sup> The Commission Regulation also provides for an Annex (Annex X of Regulation (EC) 889/2008) to register species for which organic seeds are available in sufficient quantities and for a significant number of varieties. However, this Annex remains empty.

Further, the Regulation lacks a **definition of organic seed** in general. Except the exclusion of GMOs, it does not specifically identify which breeding techniques are suitable for organic production. Controversial breeding methods are heavily discussed in the sector and several national standards take clearer stands on which techniques are allowed for organic plant breeding than the EU Regulation. The main critical issue is the use of CMS-hybrids (cytoplasmic male sterility) in organic agriculture; a method that uses cell fusion techniques to combine species that under normal conditions cannot be crossbred. Most stakeholders argue that this breeding method is little different from genetic engineering and should not be allowed for organic seed production. In Germany for example, private standards forbid the use of CMS-hybrids: Demeter since 2005, Naturland since 2008 and Bioland since 2009 (Organic Market Info, 2013).

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<sup>20</sup> The Regulation provides for 4 possible justifications:

- a) No variety of the species is registered in the database;
- b) No supplier is able to deliver the seed or seed potatoes before sowing or planting in situations where the user has ordered the seed or seed potatoes in reasonable time;
- c) The variety is not registered in the database and the user is able to demonstrate that none of the registered alternatives of the same species are appropriate and that the authorization therefore is significant for his production;
- d) It is justified for use in research, test in small-scale field trials or for variety conservation purposes agreed by the competent authority of the Member State.

*Findings from the analysis of other publications and information*

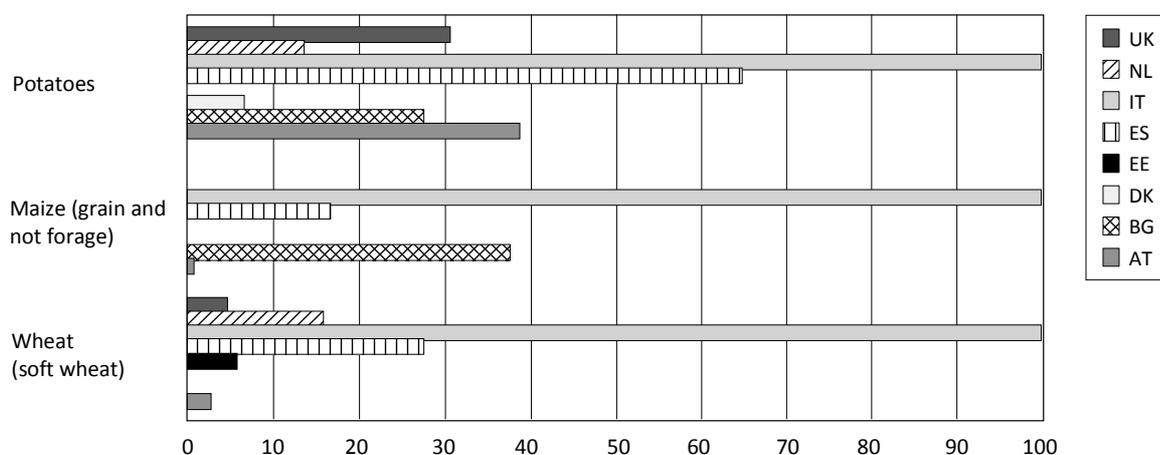
Current availability of organic seeds and propagation material: The organic seed market is growing, but levels of supply vary between Member States and crops. In Austria, Germany, Denmark and France the organic seed supply is reaching satisfactory levels overall, according to interviews with authorities and professionals (see also Figure 7.4), exceptions for seeds were reported to be necessary in Bulgaria (although farmers usually use their own seeds), the Czech Republic, Spain, Italy, Poland and the United Kingdom. The sectors that mostly rely on exception requests are fruit and vegetable producers, as they use a wide range of species and varieties. To assess the degree of use of the exceptional rule system, the share of the organic area grown with conventional non-treated seeds (exceptional seeds) has been compared with total organic area, for three different crops in eight Member States. The data are presented as an index, the highest proportion for each crop being given an index of 100.

Among the countries observed, supply of organic varieties of wheat, maize and potatoes seems to be limited in Italy (the highest rate of use of non-organic seeds). This might also be the case in Denmark and Estonia, where the use of species or varieties classified in Category 3 with general exception (see definition of categories below) means that there is no record-keeping of non-organic seeds used. This may lead, in turn, to farmers favouring cheaper non-organic seeds, even when adequate organic supply is available for specific varieties. However, very high levels of organic supply for soft wheat have been achieved in Austria and the United Kingdom. For maize, the share of organic areas cultivated from organic seed is close to 100 % in the Netherlands, Austria and Spain. Organic supply for seed potatoes is adequate in Austria, Bulgaria, Denmark, the Netherlands and the United Kingdom (index below 30 %).<sup>21</sup>

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<sup>21</sup> Stakeholders in the United Kingdom mentioned that supply of organic seed potatoes has fallen dramatically in the last two years, because one major supplier withdrew from the organic market.

**Figure 7.4:** Share of area grown with exceptional rule non-organic seeds of total organic area, 2011 (ha)



Note: The index is calculated from the quantitative data registered in the statutory annual report of 2011 for each Member State (Article 54 of Regulation (EC) 889/2008). The amount of non-treated conventional seeds granted through derogations were converted in areas, using the following seeding rate - soft wheat (kg/ha): 175; grain maize (kg/ha): 30; potatoes (kg/ha): 2000. (This does not cover all the non-organic seeds use, because some non-treated seed can be used without requiring derogation when there is permanent derogation: In Denmark, general derogations are granted on soft wheat and grain maize species, whereas in Estonia, general derogations are granted on soft wheat and potatoes varieties). Then the corresponding area were divided by the total organic area, and indexed so that the max rate was equalled to 100. In United Kingdom, data concerning maize are not available but organic maize cultivation is very limited.

Source: Own calculation.

The system of national seed databases encourages the use of the available organic seed supply nationally by making it easier to find information about availability. The management of the exceptional rule system is done on Member State level based on three categories: 1) where organic seed availability for species/varieties is sufficient, exceptions are no longer granted; 2) species or varieties with partial availability of organic seed, so exceptions apply and 3) species or varieties where there is no organic seed available, so a general authorisation to use non-organic material is given. Table 7.3 provides an overview of the level of use of the database in selected EU Member States.

Of the twelve countries studied<sup>22</sup>, only France and the Netherlands developed a list of species for which organic seed supply is sufficient in quantity and diversity (Category 1).<sup>23</sup> The majority of countries operate a regime where exceptions have to be justified for each species on a case by case basis (see category 2 in Table 7.3). Requested exceptions vary significantly and can reach up to 4 000 varieties of around 600 species (United Kingdom). The third category, a list of species and varieties under permanent exception, is active in six Member States.

<sup>22</sup> Data from Czech Republic could not be analysed.

<sup>23</sup> No conventional seeds can be used by the operators for these crops, except for exceptional cases under appropriate justifications (e.g. specific use such as pop-corn).

Causes for undersupply: The reasons for the low level of organic seed use are twofold:

- According to ITAB (French Organic Farming Technical Institute) very few producers are compliant with organic breeding principles. To further develop organic seed supply and quality, research studies are launched by multi-actor partnerships ITAB and ECO-PB (European Consortium for Organic Plant Breeding) and are addressed in some research projects (e.g. SOLIBAM).<sup>24</sup>
- Organic seeds are more expensive than non-treated conventional ones, which is an adverse incentive at individual and collective level to use or develop organic seed production. Odefey et al. (2011) compared the production costs of some organic enterprises with conventional in five countries. Based on FADN data, they showed that seeds represent an important share of variable production costs in organic crop production (from 21 % in Sweden to 35 % in France for wheat; from 18 % in Germany to 25 % in Sweden for potatoes). Indeed, the average costs for organic seeds are higher than for conventional seeds (two to four times higher in Sweden and Germany for wheat; two to five times higher in Sweden and Austria for potatoes). As a result, the potential to use non-treated conventional seeds under the exceptional rule leads to financial advantages.

Reporting of the 6<sup>th</sup> ECO-PB meeting on Organic Seed Regulation in 2011 Döring et al. (2012) suggested several ways to reduce farmers' disincentive of paying higher prices for organic seeds:

- compare conventional non-treated seed price with organic seed price and put the price difference in a fund to develop organic seed supply for certain crops (e.g. potatoes) in smaller countries;
- compensate farmers through their membership to organic farmer associations or by government subsidies;
- make traders pay a premium for crops produced from organic seeds (seen as the most feasible solution).

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<sup>24</sup> <http://www.solibam.eu/>.

**Table 7.3:** Management of the non-organic seed exceptional rule in 2011 in EU Member States where case studies were carried out

<b>Category 1</b> Out of derogation		<b>Category 2</b> Number of species and varieties concerned by derogation	<b>Category 3</b> General authorization to use non organic material
AT	None	55 sp. 522 var.	13 sp.
BG	None	56 sp. 152 var.	None
DE	None	124 sp. 173 var.	180 sp.
DK		546 sp. 99 var.	~ 170 sp.
EE	None	17 sp. 84 var. (incl. 28 tomato var.)	All species not available in the database
ES	None	70 sp.	yes <sup>c</sup>
FR	YES (~13 sp.) <sup>a</sup>	3 000 var., belonging to 149 sp. are registered in the data base Alert screen: var. that will soon be included in Category 1 <sup>b</sup>	8 sp. and 7 var. of vegetables 15 sp. and 3 var. of field crop
NL	YES (>70 sp.)	159 sp. >1064 var.	Arable: 8 sp. Vegetable: 9 sp. Covered: 5 sp.
PL	None	201 sp. 1 629 var. As long as organic seed material is available, no derogation is granted	None
SI	None	Ca. 99 sp. Ca. 346 var. Var. database prepared by the Ministry	None
UK	None	Ca. 598 sp. Ca. 4 000 var.	None

var. = varieties, sp. = species

a) Exceptional cases of derogation for these species have been granted.

b) In 2010: carotte nantaise, chicorée frisée, oignon jaune hybride, triticale.

c) The national report does not mention category 3 as such but states that, in Spain there is no offer of organic seed for many species, including : maíz, chickpeas, lentils, bitter vetch, canola, garlic, asparagus.

Source: Own data from on case studies and annual national reports.

Implications of the exceptional rules for using non-organic seeds: Generally, exceptions have increased over the past years. The overview (Table 7.4) shows that there is only a limited number of cases where the quantity of seed under the exceptional rule has decreased with regard to the respective organic area: for potatoes in Italy, for wheat and spelt in Denmark and for carrots in Italy and the Netherlands (of the thirteen Member States considered, complete data was only available for Denmark, Spain, Italy, the Netherlands, Poland and the United Kingdom).<sup>25</sup> The diversity of the varieties managed through the databases has increased in most cases. This data and the previous information on the use of the seed management database, shows generally an extensive and increasing use of the exceptional rule system at EU level. Accordingly, Annex X of the Regulation has remained empty, showing the limited progress made towards supply of organic seeds and propagating material at EU level.

**Table 7.4:** Analysis of the evolution of the exceptions granted (volume and diversity) compared to the development of organic areas between 2007 and 2011<sup>26</sup>

		Den- mark	Spain	Italy	Nether- lands	Poland	UK
<b>Potatoes</b>	Organic area	38%	n. a.	-8%	9%	56%	-30%
	Seeds under exception (quantity)	1523%	118%	-95%	217%	284%	-29%
	Diversity (Number of varieties effected by the exceptions)	88%	26%	33%	132%	85%	13%
	Organic area	52%	n. a.	-13%	-26%	n. a.	-11%
<b>Wheat &amp; Spelt</b>	Seeds under exception (quantity)	-79%	733%	14%	-75%	834%	120%
	Diversity (Number of varieties effected by the exceptions)	-71%	6%	-9%	100%	8%	-5%
	Organic area	41%	n. a.	-25%	50%	n. a.	n. a.
<b>Carrots</b>	Seeds under exception (quantity)	113%	174%	-95%	44%	21%	-92%
	Diversity (Number of varieties effected by the exception)	-13%	0%	n. a.	23%	100%	-2%

2007 data is the average 2006-2007, and the 2011 data is the average of 2010 and 2011 (except for DK where only the 2006 data were available).

Calculation is based on Eurostat data for organic areas (except for Germany, based on data of FiBL-AMI surveys) and national seeds reports. When registered in seed units, the derogations were changed into kg using the following coefficient: potatoes (0.05); wheat and spelt (0.000045) and carrot (0.0000012). Then, the rate of change was calculated : [(average of 2011 and 2010) - (average of 2006-07)] / (average of 2006-07).

Source: Own calculation based on national reports and Eurostat.

<sup>25</sup> Decreased in greater proportion than the area or increased in smaller proportion.

<sup>26</sup> Sufficient data allowing the analysis of both a) exceptions granted and b) organic areas for the selected species (potatoes, wheat and spelt, carrots) were available only in 5 countries. One of the limiting criteria was the different units used to specify the volume of exceptions, which prevented a clear view of the total amount granted.

Mandatory use of organic seeds would reduce the risk of contamination with pesticides and GMOs from using conventional seeds and propagation material. However, organic principles also require the use of locally adapted varieties, of which seeds are less likely to be available in organic quality. Allowing the use of non-organic seeds can thus be seen as a necessity for the sector to develop, even though it impedes or slows down the development of organic seed production.

Database management: The interviewed experts see the seed database as such as a good tool to manage the exceptional rules for seeds. Yet the use differs among Member States. Some countries (e.g. Italy, Estonia, Slovenia) do not use it as an interactive tool and the information available is in certain cases limited to a list of species established once a year; the use of the three categories is uneven; the reporting format is not harmonised, all of which limits the analysis of the valuable data gathered annually at national level.

### 7.3.4.5 Transitional measures concerning animal housing

#### *Findings from the analysis of provisions*

Transitional measures were designed to allow progressive adaptation to the production rules required by the EU organic specifications. Regarding animal housing conditions (stocking density, Article 95(2)) and cattle tethering in buildings existing before August 2000 (Article 9(1)), transitional measures were intended to end on 31 December 2010, but have been extended in a significant number of Member States until the 31 December 2013.<sup>27</sup> The transitional measure concerning tethering of animals still applies in ten of the thirteen studied countries (Austria, Bulgaria, Czech Republic, Germany, Denmark, Estonia, France, the Netherlands, Poland and Slovenia); and the measure regarding stocking density in nine of the thirteen studied Member States (as above but not in Slovenia). In countries which have extended these measures operators had a thirteen year transition period from 2000 to 2013. Given the cost of a building and the depreciation period, which is generally twenty years, the thirteen year transition period provided by the Regulation<sup>28</sup> does not cover all buildings requiring renewal according to the requirements. To support the transition, specific aid is offered under rural development programmes, which enables farmers to invest in new buildings corresponding to the standards. However, this aid is offered/implemented with specific provisions for organic farming only in very few countries (e.g. Austria, parts of Germany).<sup>29</sup>

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<sup>27</sup> There also is a permanent exception rule related to structural constraints, the tethering exemption for small holders in Article 39 of Regulation (EC) 889/2008.

<sup>28</sup> Buildings that were built just before the rules were introduced in 2000 will 13 years old at the end of 2013.

<sup>29</sup> See information about Measure 121: Modernisation of agricultural holdings in Sanders et al. (2011).

### *View of stakeholders*

Most interviewees think that transitional measures concerning animal housing are adequate. Without a transition period there would have been the risk that a large number of farmers quit organic farming. Furthermore, it has helped to maintain supply on the market. However, when asked whether the transitional rules should continue or stop after 2013, views differ. On one hand, some interview partners in Germany, Estonia, Italy and the Netherlands think that tethering is not in line with the current Regulation's principles and that the sector has had sufficient time to adapt and reorganise. On the other hand, some interviewees suggested that tethering of cattle, when done in conditions that respect animal welfare (regular exercise provided, access to outdoor pasture, spacious stables with sufficient bedding, etc.), could be allowed permanently (Czech Republic, Poland, Netherlands).

## **7.3.5 Implementation of the rule on prohibition of GMO and consequences**

This section addresses the adequacy of the rule that prohibits of the use of GMOs to ensure their lowest possible adventitious presence in organic products and, at the same time, to avoid undue constraints and additional burden on organic operators.

### **7.3.5.1 Threshold levels for and reported cases of GMO contamination**

#### *Findings from the analysis of provisions*

According to Article 4 of Regulation (EC) 834/2007 Genetically Modified Organisms (GMOs) and products produced from or by GMOs are incompatible with the concept of organic production and consumers' perception of organic products. They should therefore not be used in organic farming or in the processing of organic products. The provisions aim for lowest possible presence of GMOs in organic products. The existing labelling thresholds represent ceilings which are exclusively linked to the adventitious and technically unavoidable presence of GMOs (Recitals 9 and 10 and Article 9 of Regulation (EC) 834/2007).<sup>30</sup>

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<sup>30</sup> GMOs and products produced from or by GMOs shall not be used as food, feed, processing aids, plant protection products, fertilisers, soil conditioners, seeds, vegetative propagating material, micro-organisms and animals in organic production. For the purpose of the prohibition referred to in paragraph 1 concerning GMOs or products produced from GMOs for food and feed, operators may rely on the labels accompanying a product or any other accompanying document, affixed or provided pursuant to Directive 2001/18/EC, Regulation (EC) 1829/2003 or Regulation (EC) 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms. Operators may assume that no GMOs or products produced from GMOs have been used in the manufacture of purchased food and feed products when the latter are not labelled, or accompanied by a document, pursuant to those Regulations, unless they have obtained other information indicating that labelling of the products in question is not in conformity with those Regulations (Article 9 of Regulation 834/2007).

Most case study countries do not have **additional national implementation rules**; however, a few countries and regions have set additional restrictions in their national regulations or directives. Examples are Catalonia in Spain, where given the extended distribution of GM crops (particularly GM maize for animal feeding) the control authority (CCPAE) does no longer accept non-organic maize and soya. In France, the principle of non-dilution is followed where the threshold of 0.9 % applies for each ingredient taken separately. For example, if a product containing 0.5 % maize gluten, which contains more than 0.9 % GM maize, then these ingredients have to be labelled as GMO.<sup>31</sup> In the United Kingdom, it is the shared interpretation of control bodies and the competent authority not to permit any inputs that have tested positive for GMOs, even if the result is below the threshold of 0.9 %.

Only very few **private standards in the case study countries have additional GMO-related restrictions**. Bio-Austria (Austria) tolerates mixed feed with GMO contamination up to a threshold of maximal 0.1 %. Certified mixed feedstuffs have to be listed separately in the infoXgen database and can only be produced with 100 % organic compound feed plants. In France the private standard of Biocoherence requires a threshold maximal 0.1 %, but only a few organic cereals, oil- and protein-rich crop processors are involved in this standard. Also the French umbrella organisation FNAB aims for a specific label for organic products with a threshold of 0.1 % in order to assure consumers that the products are indeed GMO-free.

#### *Findings from the analysis of cases of GMO contamination of organic products*

In order to verify if the general rule prohibiting the use of GMOs is adequate to ensure the lowest possible adventitious presence in organic products, cases of GMO contamination in the case study countries, which led to the loss of the organic status of products (between 2011 and 2012), were investigated. In most of the countries, no GMO contamination of organic products was reported. The following cases were reported by competent authorities or control bodies: In Spain, one case of contaminated maize in 2011 and two cases in 2012; in Italy one case of contaminated feed in 2011 and four cases in 2012; in Poland one case of fishmeal mixed with soya meal. Available statistics (e.g. from AGES about GMO-contamination of soya in Austria<sup>32</sup>) reveal that cases of GMO contamination of more than 0.9 % in organic products are extremely rare and mainly concern extra-EU imports. This is due to the shortfall in organic proteins for animal feed on the EU market (especially soya for monogastrics), that leads to imports of high protein content raw materials. These imports increase the risk of GMO contamination (lack of traceability, limited organic supply and high prices leading to fraud). In the opinion of some stakeholders (mainly producers), the production rules should therefore ensure the development of plant-based protein production in the EU (e.g. peas, faba beans and other legumes as well as clover and alfalfa) to avoid the GMO contamination risk of extra-EU imports of soya.

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<sup>31</sup> According to the French guideline 2012 of the Regulations (EC) 834/2007 and (EC) 889/2008.

<sup>32</sup> See: <http://www.ages.at/ages/ernaehrungssicherheit/schwerpunktaktionen/untersuchung-von-gvo-in-lebensmitteln-soja>.

### *Scientific evidence*

In the scientific literature only a few figures could be found for Europe, regarding the additional costs a further lowering of the threshold would raise. In a Canadian study by Huygen et al. (2003) the costs of lowering thresholds from 1 % to 0.1 % for export GM wheat doubled, depending on the type of segregation and transport system in the supply chain. In Europe these costs might differ strongly between countries and type of products. Regarding seeds, Then & Stolze (2006) estimated the costs for lowering GMO thresholds and showed that the current safety margin of 0.9 % for the labelling of adventitious or technically unavoidable presence of GM components in food and feed leads to significant investments and higher annual costs for organic food production in Europe. Total yearly co-existence costs for EU food and feed processors in the case study countries range from about 50 000 EUR to 880 000 EUR. Lower thresholds like 0.1 % for adventitious presence of GM seed in non-GM batches are likely to increase these costs and the associated constraints on farmers, processors, traders and retailers. No further targeted studies are available identifying exact costs and measures necessary to establish seed purity at low ('zero') thresholds. Such detailed and targeted studies would be a basic condition for the EU decision making process.

### *Views of stakeholders*

The large majority of the stakeholders were of the opinion that the prohibition of GMOs in organic food and farming is a basic principle and is necessary for the consumer perception of organic products. Only two stakeholders wanted the position of GMOs to be discussed, revised and considered in organic production (processors in Germany and Denmark). Also there is a general agreement of the large majority of stakeholders that the limit of 0.9 % for labelling is sufficient. A few stakeholders, however, think that there should be a zero GMO tolerance for seeds and feed (in Spain, France and Slovenia).

Looking at the feedback of a few industry stakeholders in countries with lower thresholds (Italy, France and Spain), opinions varied if such a measure would reduce the likelihood of product contamination, or only increase the costs for the farmer/processor. Some retailers saw it as risky to require a 0 % GMO content. They argued that, if under such a regime cases of contamination would be found, consumer confidence towards the products might decrease and the whole organic sector might be considered as 'not reliable'.

The competent authority as well as some producers and processors in the United Kingdom and Spain mentioned some difficulties with the interpretation of the 0.9 % GMO threshold. Some control bodies and competent authorities see this as an acceptable threshold for organic food, whereas others do not accept GMO contamination in organic food above 0.1 %, and decertify these products (one certifier in the United Kingdom). The EOCC guide (European Organic Certifiers Council, representing 28 of the 250 EU control bodies) also suggests to harmonise the practices and processes in case of contamination > 0.1 %.

### 7.3.5.2 Other factors

#### Coexistence legislation

##### *Findings from the analysis of provisions*

Coexistence aims to achieve a sufficient segregation between GM and non-GM crops, including organic production in compliance with the legal obligation for labelling defined in the legislation. In 2003, the Commission had issued guidelines to allow the co-existence of GM and non-GM crops through buffer zones (GMO-free) (European Commission, 2003). In 2010 the EU co-existence guidelines were adapted and published (European Commission, 2010). The current situation can be summarised as follows: Co-existence is regulated by individual countries and vary widely in size (e.g. from 15 metres in Sweden, 150-300 metres in Germany for maize, to 800 metres in Luxembourg (Davison, 2010)). The guidance also provides the possibility to designate GMO-free zones, effectively allowing EU Member States to ban the cultivation of GM crops in their territory without invoking the safeguard clause.<sup>33</sup> However these rules are introduced and implemented in a patchwork fashion in the European Union.<sup>34</sup> Austria (with regional variations), Denmark and the Netherlands have introduced and implemented coexistence legislation for GMOs, including specific guidance for organic production; whereas Bulgaria, Czech Republic, Germany (with regional variations) and Estonia, have coexistence legislation but without specific rules for organic production. The other case study countries (Spain, Italy, Poland, Slovenia and the United Kingdom) have not introduced such legislation.

##### *Scientific evidence*

Winter et al. (2011) question the effectiveness of GM-coexistence measures in Germany, as risk mitigation measures are not separated from coexistence measures in the legislation. They argue that the measures aim at solving the conflicts between the individual landowners and thus fail to recognise the systemic character of the conflict between agricultural systems. The systemic conflict can, according to the authors, better be solved by non-binding landscape planning or a legally binding land-use plan, yet to be developed. Binding agricultural planning should therefore be introduced, e.g. establishing GMO-free zones. Such measures are considered compatible with constitutional guarantees and with EU law.

##### *Views of stakeholders*

There are diverging opinions if national coexistence legislation is helpful in protecting organic farming from GMO contamination. The main problems mentioned are:

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<sup>33</sup> The safeguard clause allows Member States under certain circumstances to provisionally restrict or prohibit the use and/or sale of that GMO as or in a product on its territory (Directive 2001/18/EC (see Article 23)).

<sup>34</sup> <http://www.gmo-safety.eu/coexistence/449.european-patchwork.html> (10 May 2013).

- Often coexistence legislation operates on the national level of Member States or administrative regions, which leads to strong variations of implementation;
- Only a few regions have a strict legislation, e.g. the 'genetic engineering precaution law' in Austria;
- Criteria for a safe distance between organic and GM crops are variable and highly difficult to establish.

In Slovenia and Austria, different stakeholders argue for the establishment of GMO-free zones with specific GMO-free labelling. There are also debates at national levels and in the European Parliament, e.g. on GMO-free labelling of food products or GMO-free regions.<sup>35,36</sup> Several national operators in different countries mentioned that they are still missing guidelines concerning the coexistence rules for both producers and processors, whereas in countries like Denmark or Austria such guidelines for GM and non-GM producers exist (e.g. distance rules between fields or rules on shared use of machinery and transport equipment).

### Availability of critical ingredients

#### *Findings from the review of relevant publications*

An Austrian study investigated the feasibility of GMO-free labelling (AGES, 2006). In the case of Vitamins B2, B12 and C (ascorbic acid) the production is already mainly GMO-based, but it is claimed that after ultrafiltration, no traces of GMOs are found in the final product. Furthermore, inspections at the place of production (Asia, China) can rarely be done, making the verification of the information on the certificates problematic. Another study about vitamin producers in China showed similar results (Bioconnect, 2008). Based on these studies as well as additional information provided by the database of infoXgene<sup>37</sup>, the current situation can be described as follows:

- Vitamin B2: There is only one provider listed in the infoXgen-database and this provider does not guarantee GMO-free supply since February 2010.
- Vitamin B12: the European producer (France) uses GMO and the Chinese producers do not provide relevant information;
- Vitamin C (ascorbic acid): There is no information from Chinese producers. One European producer delivers from chemical synthesis, the other from GMO-production, but the

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<sup>35</sup> See: <http://www.greens-efa.eu/gmo-free-labelling-of-food-products-8459.html>.

<sup>36</sup> See: <http://www.gmo-free-regions.org>.

<sup>37</sup> InfoXgen is an association that was founded in 2001 by several organic inspection bodies from Austria, Germany and Switzerland. The association aims to provide information about the production of food without the use of genetically modified organisms. For this purpose, an online public database has been established.  
See: <http://www.infoxgen.com/en/>.

information could not be verified. Thus the availability of GMO-free production cannot be supposed as secure;

- Vitamin E: Three producers gave the information to produce from chemical synthesis without GMO. One producer gave the information to produce from extraction of GMO raw material.

In view of the current situation, the Austrian public agency AGES (2012) concluded that, since February 2010, Vitamin B2 from GMO-free production is no longer available.

#### *Views of stakeholders*

Stakeholders (mainly producers, processors and certifiers) in several case study countries (Austria, Germany, Denmark, France, Poland, Slovenia and the United Kingdom) raised concerns, mainly about the availability of Vitamin B2 and B12 for feed, and in particular with regard to the reliability of the GMO-free vendor declaration. In some countries (Austria, Germany) the products with 'proved specification' (meaning: with GMO-free-declaration) are listed in the infoXgen database of specified, authorised production means for the use in organic farming and processing. Several stakeholders (mostly certifiers in Italy, Slovenia and Poland) mentioned that a big problem is the reliability of the GMO-free vendor declaration provided by the producers of ingredients. The declarations differ substantially in the formulation, and it is not defined in the EU Regulation what they should include. Special efforts might be needed now to initiate GMO-free production of these ingredients in Europe (e.g. through an SME-supported research and development project).

Furthermore, a major issue for many different supply-chain actors in the majority of countries is also the availability of GMO-free and organic protein feed.

### **7.3.5.3 Constraints and additional burden on organic operators through the prohibition of GMOs**

#### *Scientific evidence*

In the scientific literature only a few figures could be found on what additional costs coexistence implies for organic producers and other supply chain actors. In the US, a fast-growing market for organic food and higher use of GM-varieties of several major crops exist simultaneously. Coexistence between those differentiated products relies on interventions, such as physical distancing and product segregation.

The costs and feasibility of coexistence along the supply chain were investigated in the EU-funded project Co-Extra. Coleno (2008) found the following strategies for segregation in various region of France: defining GM and non-GM silos and production zones which resulted in 70 % increase in transportation costs; specifying the timing of GM and non-GM crops delivery at silos and/or using local management rules at each stage of the supply chain (both cost-neutral).

Because organic products already have to be segregated from conventional crops, it is difficult to assess the additional costs coming from the coexistence situation. Many companies were found to use a prevention threshold which is lower than the labelling threshold (generally 0.1 %) which was found to be easy to implement, as long as the GM pressure is very weak. The Co-Extra project found that all Member States of the EU that have legally defined GMO-free products are using the threshold of 0.1 %.

Greene and Smith (2010) point out in a study about coexistence in the USA that the costs required to support the coexistence in all markets are carried disproportionately by producers and consumers of organic food.

Data to assess the costs for a lower threshold in organic production are incomplete. The purity and availability of non-GM seeds is crucial to keep organic farming GMO free. Lower thresholds of 0.1 % for adventitious presence of GM seed in non-GM batches are likely to increase these costs and the associated constraints on farmers, food and feed processors, traders and retailers (Then and Stolze, 2009). Segregation of GM and organic products results in additional costs but might also generate consumer choice and thus creation of niche markets for non-GM labelled products.

#### *Views of stakeholders*

For the large majority of stakeholders it is clear that the prohibition of the use of GMOs leads to constraints and additional burdens on organic operators. Only a minority of stakeholders mentioned no additional burden. The burden for producers is lower in countries like Italy or France, where the cultivation of GMOs is not allowed. Here the burden concerns mainly processors of feed (soya and maize). The main problems are higher costs and difficulties related to the availability of specific ingredients free from GMOs. With regard to GMO contamination risks in food processing, a clear majority of respondents (mainly from the industry) consider this prohibition as a strong burden. Higher costs are mentioned in particular for feed processors and seed companies for expensive threshing and separating seeds or in processing feed. However, there seem to be differences between countries due to different implementation. Stakeholders argued that it is difficult for organic operators to bear the costs of GMO contamination, while they are the only operators to guarantee GMO-free products. Operators that are trying to implement internal management procedures to safeguard against contamination feel penalised by an increase in costs. One middle size processor in Germany explained: *“Protecting organic products from genetically modified impurities costs me one worker plus 40 000 EUR each year”*.

A number of other problems were mentioned by the interviewed stakeholders:

- Higher costs for analysis, administrative work and control as well as costs for separation in processing and logistics, particularly for feed (soya, linseed and maize); which increases costs for organic feed (processors and farmer organisations in several countries).

- Several stakeholders mentioned that the organic production rules alone cannot guarantee the full exclusion of GMOs. The responsibility should lie on GMO growers/processors using GMO ingredients, and not on the organic sector: ‘the polluter pays principle’.
- In Estonia, stakeholders (producers, processors) reported that feed manufacturers cannot have organic and conventional production at the same time, because the contamination risk is high. This requirement for full separation implies that organic feed processing is not economically viable, and as a consequence there are no organic compound feed processors in Estonia.
- Producers and processors in several countries stated that farmers/operators that can prove that they have done everything they can to guard against possible contamination, should not be penalised for accidental presence of GMOs under the limit of 0.9 %.
- Doubts were raised, whether sufficient control, supervision and accurate analysis is really useful if the presence is technically avoidable (which is also hard to define) or adventitious (Czech Republic, Italy, Slovenia).
- Also the risk of contamination through the use of manure from GMO farms was mentioned.
- It was mentioned that the EU Regulation is not strict enough regarding the provision of evidence on inputs produced from, or with GMOs. Currently, the GMO-free vendor declaration is sufficient, but it is rarely possible for the control body to estimate the reliability of the declaration or of the company issuing it.

### 7.3.6 Impact of the production rules on fair competition

Ensuring fair competition is one global objectives of the Regulation (Article 1 Regulation (EC) 834/2007). A key question is to what extent this is possible for two main reasons: a) implementing rules differ between Member States Rules, and b) rules are harmonised at EU level but different geographic, climatic and economic conditions could lead to different costs of production. In this section, both aspects are addressed. Where quantitative evidence could be gathered, it is presented below; where not, proxies and theoretical reasoning are used to judge whether the distortion is likely to be significant. The assessment of the contribution of the control system and the import rules to fair competition is covered in Chapters 8 and 9.

#### 7.3.6.1 Cases of different interpretation of the Regulation

##### *Findings from the analysis of provisions and other information*

Some of the rules laid down in Regulation (EC) 834/2007 and 889/2008 are not precisely defined and leave room for different interpretation through the enforcing bodies. The following areas with room for interpretation, possibly leading to unfair competition, were identified:

- **Greenhouse production** (substrate and CO<sub>2</sub>): The Regulation does not provide any specific requirements or relevant production rules regarding greenhouse crops. As a result, there are different applications in the EU, mostly for a) the cultivation in a **substrate**, which is authorised in some Member States for the cultivation of all plants<sup>38</sup> (Denmark, Italy, Poland, Slovenia), and in other Member States limited to plants grown and sold in pots, mostly for ornamental plants, herbs and aromatic plants (Austria, France, the Netherlands and the United Kingdom); and b) for **fertilisation practices** (such as fertigation (see Section 7.3.3.1) or the use of CO<sub>2</sub> enrichment to enhance photosynthesis<sup>39</sup>). A definitive judgement on this issue is not possible due to lack of data. It can be assumed however, that these differences have an impact on yields and production costs (fertilisation) and therewith on competition. In this context also the use of energy (see Section 7.3.2.3) which is at present not regulated, is most likely having an impact.
- **Definition of region in relation to the origin of feed materials:** Feed is an important production cost, which suffers from high volatility in price and insufficient production, particularly protein crops. Regulation (EC) 834/2007 states that with regard to feed, the rule is to “*primarily obtain feed for livestock from the holding where the animals are kept, or from other organic holdings in the same region*” but does not define ‘region’. Article 19(2) of Regulation (EC) 889/2008 specifies thresholds for home or regionally produced feedstuff for monogastrics at 20 % and for herbivores at 60 %. The potential distortion of competition from differences in the interpretation of the term ‘region’ thus only applies to the 20 % of feed for monogastrics. Depending on the price difference between sources (local, EU Member States or third countries), the definition of ‘region’ can significantly impact feed prices, working against growers from areas where the rule is more strictly applied<sup>40</sup>. However, at present organic producers of monogastrics animals in the EU have no restrictions regarding the origin of the other 80 %. If it is assumed that the price difference between local and internationally sourced feed (including transport) is around 15 % (Magdelaine and Riffard, 2010), and that feed makes up 60 % of the variable production costs (Nayet, 2012), then the difference between local and international supply would be only approximately 2 % of the total variable costs. For herbivores, the impact can be more important since it concerns 60 % of the feedstuff, but a majority of their diet consists of forage, which usually comes from the farm or region and is not commonly transported over long distances. Therefore, particularly for herbivores but also for monogastrics, the impact of different definitions of ‘region’ solely on fair competition is limited.

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<sup>38</sup> With possible varied condition on the quality or the quantity of the substrate.

<sup>39</sup> The use of CO<sub>2</sub> as fertiliser is authorised in most countries (for example the United Kingdom, Denmark, Italy, the Netherlands, Lithuania, Sweden, Latvia, Portugal – even though it is not always used) and forbidden in only a few (France, Poland). CO<sub>2</sub> is not included in the list of authorized fertilizers, soil conditioners and nutrients in Annex I to Regulation (EC) 889/2008.

<sup>40</sup> In the case study countries the following definitions of region were used: NUTS 2 (France, Italy); whole country (Slovenia, Poland, Estonia, Denmark); other (Czech Republic, Germany); EU/world (Austria, Netherlands, Spain, Bulgaria, the United Kingdom).

- **Housing conditions for poultry** (Article 10 and Article 12 Regulation (EC) 889/2008): For laying hens, the indoor maximum density is 6 animals per m<sup>2</sup>, but the application of this maximum density in multilevel systems varies in the case study countries. Multilevel/-tier systems are forbidden in Spain and not used in France, but widely applied in Austria, Germany, and the Netherlands which influences production costs. Intra-EU trade data on organic poultry are not available. Magdelaine and Riffard (2010) compared a French system (ground level 6 animals/m<sup>2</sup>) with a Dutch one using multilevel systems (9 or 15 animals/m<sup>2</sup>). The difference found in production costs was mainly due to the difference in cost of feedstuff and not the investment costs. However, the investment costs in the multilevel systems can be much lower than the ground level system. According to Magdelaine and Riffard (2010) housing costs represent just 5 % of the total production costs. The potential distortion of competition related to the housing conditions is therefore likely to be low, but organic egg production is characterised by relatively low profit margins and the need to tightly control costs of production.
- **Definition of ‘factory farming’ for the use of non-organic fertilisers** (Article 3 Regulation (EC) 889/2008): The Regulation states, where the nutritional needs of plants cannot be met by good cultivation practices and crop rotation, farmyard manure<sup>41</sup> may be used, as long as it is not sourced from ‘factory farming origin’. Yet, factory farming is not defined and therefore different interpretations exist throughout the EU, either on national or control body level. Factory farming is often defined as land-less livestock production (Czech Republic, Denmark, Estonia, France, Italy and Poland); by a maximum stocking rate (e.g. Austria: 2 livestock units (LU)/ha; Germany 2.5 LU/ha; Czech Republic: 3 LU/ha) or by a total number of livestock units (max. 150 LU in the Czech Republic). These definitions also consider other criteria such as the dependence on external inputs or the lack of respect for the basic principles of animal welfare to qualify for ‘factory farming’. Other Member States prefer to give positive lists of what is authorised as non-organic manure (Bulgaria and the Netherlands) or a combination of both (e.g. France). A wide consensus exists to favour manure from extensive farming, yet the rule is applied in such varied ways that access to fertiliser material differs depending on the Member States and this could potentially lead to unfair competition (yet quantitative analysis is not possible).

### 7.3.6.2 Issues left to the discretion of national competent authorities

#### *Findings from the analysis of provisions and other information*

The Regulation provides a list of issues to be implemented according to the principle of subsidiarity: EU Member States can define their own criteria with regard to their national context

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<sup>41</sup> Farmyard manure, dried farmyard manure and dehydrated poultry manure, composted animal excrements, including poultry manure and composted farmyard manure included and liquid animal excrements (Annex I Reg. (EC) 889/2008).

and priorities. Whereas it is sometimes necessary to leave room to adapt the rules to their climatic, geographic and/or social conditions, the rules mentioned in this section are examples of potential distortions of the competition within the EU. The following areas were identified:

- **Definition of slow growing strains and minimum slaughter age:** The Regulation states that broilers should either a) not be slaughtered before the age of 81 days, or b) belong to slow growing strains; and here EU Member States have the responsibility to define slow growing strains. In the countries where poultry product case studies were conducted, the definitions are a mixture of specified strains and/or maximum daily weight growth, ranging from 35 g/day (e.g. in France, Denmark) to 45g/day (e.g. in Poland and the United Kingdom). In Czech Republic, Bulgaria and Spain, the definition is set exclusively through a list of slow growing strains and Estonia applies only the 81 days rule. These varied definitions induce differences in production costs: for example, a 3 kg chicken grown at 35 g/day is slaughtered approximately at the age of 86 days; grown at 45 g/day, it is already slaughtered at 66 days. As there is no access to trade data for organic broilers, it just can only be assumed that a different definition potentially creates unfair market conditions.
- **Time during which poultry runs must be left empty between batches** (EC 889/2008 Article 23(5)): Member States were expected to define the minimum time during which poultry runs must be left empty for vegetation to recover/regrow. The times implemented vary significantly: 14 days (Bulgaria), 28 days (Austria, Poland), 40 days (Spain, Italy), 56 days (France), 60 days (in Denmark, the United Kingdom or the Netherlands for laying hens).<sup>42</sup> As a result, the required open-air areas may vary significantly to satisfy the rule and ensure continuous production, therefore potentially creating distortion in competition. This has been particularly reported in the case of Denmark, which implemented a rather strict rule (60 days) compared to other countries.
- **The use of conventional seeds:** Flexibility under Article 45(1)(b) of Regulation (EC) 889/2008 allows Member States to authorise the use of non-organic seeds. Yet, the national implementation of the seed-database system appears to be uneven according to the Member States (see Section 7.3.4.4 above). Authorisations for the use of non-organic seeds mean a financial benefit for the respective farmer. Deleuran (2011) states that a major obstacle for an increased use of organic seeds is the higher price compared to conventionally produced and non-treated seeds. However, the importance of this price difference seems to be dependent on the crop species and seed sourcing decisions also depend on the size of the farm: in several countries (e.g. United Kingdom, France) smaller producers usually use a higher percentage of organic seeds than larger ones. A thorough analysis of seed costs (organic and non-treated conventional) in the different Member States would be necessary to assess whether the impact of the seed market on competition is significant. Producers in countries with low availability are likely to have a competitive advantage.

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<sup>42</sup> In other countries there are no specifications: Germany, Estonia, Czech Republic, and Slovenia.

### 7.3.6.3 Issues arising from national regulations applying to general agriculture

#### *Findings from the analysis of provisions and other information*

Like all farmers, organic farmers are subject to their national legal system, which in some countries may increase the level of constraints and possibly costs of production for organic producers. The main issue causing distortion of competition in this area is the access to pesticides. The EU Regulation provides a positive list of authorised plant protection products.<sup>43</sup> The use of these products depends on national market authorisation schemes, which are not harmonised and cause some significant differences. For example, the United Kingdom has accepted most of the products listed in the Annex, whereas in France, Denmark and Poland a wide range of products is not authorised (e.g. Pyrethrins, extracted from 'Chrysanthemum cinerariaefolium' are not permitted in Denmark and Poland). Even without taking climatic differences into account, this impacts production conditions and productivity of horticultural producers in the different Member States.

### 7.3.6.4 Issues arising because of lack of flexibility to respond to different regional conditions

Fair competition could potentially also be impaired due to the harmonized standard not allowing national/regional flexibility to respond to different climatic or geographic conditions that exist throughout EU.

#### *Views of stakeholders*

Stakeholders in Austria, Denmark, France, Germany, the Netherlands and in Spain were concerned that setting a level playing field with common rules is difficult, because the conditions vary between different Member States. Beside general concerns, the following examples were mentioned in the case studies countries, but due to a lack of additional information no further exploration of the potential distortion was possible:

- **Thresholds for the application of plant protection products:** The thresholds set for the application of the authorized plant protection products of sulphur and copper (in Annex II of Regulation (EC) 889/2008) do not allow farmers to respond adequately in areas that have a high disease pressure for fungal diseases. This was mentioned by an organic producer organisation in Austria in relation to the use of sulphur for wine growers and by a farm advisor

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<sup>43</sup> To be used if plants cannot be adequately protected from pests and diseases by the use of adequate varieties, rotation and cultivation techniques (Annex II of Regulation (EC) 889/2008).

(of the organic farming department of a federal chamber of agriculture) in Germany in relation to use of copper for potato growers.

- **Regional differences in how mandatory outdoor access for poultry is implemented:** The representative of an organic egg business group in France and the control body of a federal state in Spain were concerned that the climatic conditions in the North allow poultry producers not to have to offer mandatory outdoor access for poultry and thus also not have to struggle with the build-up of disease pressure in the outdoor run.
- **Climatic conditions in the South:** The competent authority of a federal state in Spain was particularly concerned that the constraints they face in producing forage because high temperature and shortage of water are not sufficiently recognized.

### 7.3.7 Consistency of the production rules across sectors

Evaluation Question 2 asks to consider also the consistency of provision across the sectors for which rule have been developed. Previous sections of this report have illustrated differences in the implementation of the rules with respect to crops and livestock production. This section looks at the provisions and highlights additional examples mentioned by stakeholders.

#### *Findings from the analysis of provisions*

Table 7.5 shows the number of exceptional rules foreseen in Article 22 of Regulation (EC) 834/2007 that are at present implemented according to Regulation (EC) 889/2008 and compares the numbers between different sectors. It shows that a higher number of rules are in force for livestock as for crop production, whereas two exceptions foreseen (Use of food and feed additives produced by GMOs or required by other EC law) are not implemented.

**Table 7.5:** Number of exceptional rules that are in use for specific sectors based on Regulation (EC) 834/2007 and (EC) 889/2008

Exceptional rules in Regulation (EC) 834/2007 and Regulation (EC) 889/2008 used for specific sectors	Whole farm	Crops	Livestock	Processing
Climatic, geographical or structural constrains (Article 22 (2)a)	1	1	2	
Non-availability of organic farm inputs (Article 22 (2)b)		1	3	
Access to ingredients of non-agricultural origin (Article 22 (2)c)				1
Specific management in organic livestock (Article 22 (2)d)			1	
Use of specific processing substances (Article 22 (2)e)				1
Catastrophic circumstances (Article 22 (2)f)	1		3	
Use of food and feed additives produced by GMOs (Article 22 (2)g)				
Use of feed and feed additives required by other EC law (Article 22 (2)h)				
<b>Total</b>	<b>2</b>	<b>2</b>	<b>9</b>	<b>2</b>

Source: Own allocation of exceptional rules to specific sectors.

Some inconsistencies were found regarding the level of detail in which specific production sectors are regulated, particularly the livestock rules, which are more detailed and prescriptive compared to the crop production rules (see also Figure 7.1). Whereas severe restrictions are in place regarding the use of inputs for disease control in crop production, the livestock sector has a comparably long list of allowed inputs if they are considered justified to avoid any suffering of the animal. Whilst there are restrictions for the use of inputs in farming, the processing rules do not contain much detail regarding how to ensure that the quality of raw materials is preserved throughout the whole supply chain. Since the main focus of the general principles of organic agriculture is aimed at farming, food processing may not be sufficiently addressed.

A further potential inconsistency is the fact that food products can be labelled as organic if 95 % of the ingredients are organic, whereas for feed products 100 % organic is the stated aim (with exceptions until 2014 in place).

There is also inconsistency in access to market because of the conversion rules. Second-year in-conversion products from arable and forage production can be used as organic animal feed, whereas in orchard production a three-year conversion period applies and there is no possibility to sell in-conversion products on the organic market.

## 7.4 Judgement and conclusions

Based on the results presented in the section above, **it is concluded that the production rules are generally adequate in terms of achieving the global objectives of the Regulation and the objectives of organic production**, as laid down in Council Regulation (EC) 834/2007, taking the following into account:

- There is sound scientific evidence that the Regulation has established a framework which guides farmers to adopt practices supporting the aims of organic agriculture of contributing to higher levels of biodiversity, increased soil fertility and minimizing water and air pollution. Some of these effects can be directly linked to the rules laid down in the Regulation, and some are derived from stricter national and private standards of certain Member States.
- However, the production rules do not fully limit the intensification of some production sectors, such as housing conditions for poultry (despite the existence of detailed rules) or greenhouse production (with no common implementing rules at EU level). Also, some objectives stated in the Regulation addressing the whole sector (e.g. responsible use of natural resources) and some terms (e.g. 'sustainable development', 'respect for nature's systems and cycles', 'sustainable use', 'region' or 'factory farming' in relation to input use), which could have a potential impact on intensification, are not further defined.
- The production rules form a good basis for producing products of high quality and satisfying consumer demand for a variety of food products.

- The system of exceptional rules, established to allow regional differences in climate, stage of sector development and specific husbandry practices to be taken into account, seems to be not fully adequate. A definitive judgement is difficult because of a lack of reliable data on the availability of organic supplies, but for some sectors the present system appears to hinder rather than support development and increased use of organic supplies.
- The GMO provisions are adequate to ensure the lowest possible adventitious presence of GMOs in organic products. Very few cases of contamination were reported over the past years. However, stakeholders are concerned about the constraints and additional burdens if the labelling thresholds were to be lowered further (mainly due to higher costs for separating and analysis). There are concerns about future availability of GMO-free ingredients (in particular some enzymes and vitamins B2, B12 and ascorbic acid), as well as the reliability of GMO-free vendor declarations.
- The common framework of production rules appears to provide generally a good basis for fair competition among producers. The analysis of provisions and other information indicates however for some areas (such as definition of 'region' in relation to feed use or 'factory farming' for manure use) the absence of precise definitions has a potential negative impact on fair competition, but the lack of data does not allow firm conclusions to be drawn. Further market analysis and the collection of comparative data of costs of production in different Member States would be necessary to carry out an objective assessment.

### **Detailed considerations**

Organic production is an integrated farm management system which aims to contribute to high levels of biodiversity, preserve natural resources (energy, soil, water, climate and air), respect high animal welfare standards and produce high quality food in response to consumer demand. The underlying principles of organic production are operationalized by production rules which provide the legal definition of organic farming in the EU. This evaluation question examines whether the production rules are adequate to achieve the objectives of organic agriculture, as well as to ensure fair competition among producers and consumer confidence.

The judgement is based on several criteria which were deduced from the model of intervention logic and the background of the evaluation question. The most frequently used indicators were the provisions in the Regulations (EC) 834/2007 and 889/2008, specific provisions in the national rules and selected private standards in 13 case study countries, consensus in scientific literature and results from relevant EU projects, as well as responses to the consumer survey and stakeholder/expert opinions on the subject.

#### *General structure and scope of the production rules for farming and processing of food and feed*

The general structure and scope of the production rules has mainly generated a harmonised concept of organic production in the EU.

The scope of the production rules is covered in different articles of both Regulations (EC) 834/2007 and 889/2008. The rules cover agricultural products (food and feed), vegetative propagating materials and seeds, yeast (for food and feed) and products from aquaculture (Article 1 of Regulation (EC) 834/2007). All Member States have implemented the existing EU legislation on organic farming in national law. For agricultural products not covered by the implementing rules (such as additional animal species, other aquatic plants or micro-algae) Member States are free to apply their own rules, but the number of additional provisions identified in the case study countries is limited. Thus, a basic precondition for promoting a harmonised concept of organic production is fulfilled.

Stakeholders who work more closely with the Regulation (e.g. control bodies or competent authorities) feel that stating objectives and principles in the Council Regulation has contributed to creating a common understanding of the core concept of organic farming, but this opinion is less widespread among producers or organic business groups (e.g. traders or retailers). Some of the private standards state additional aims and objectives of organic farming, for example related to social and economic sustainability, which are at present not part of the Regulation, indicating that there are differing expectations as to what organic farming can and should deliver. Some control bodies are uncertain as to whether objectives and principles are legally binding. Producers, traders or retailers have no direct contact with the EU Regulation, and rely on the interpretation of the rules through their control bodies and farmers' associations. This indicates that objectives and principles are not communicated directly to all involved parties. There is no guidance for operators in areas where different interpretation is possible.

The objectives of organic farming stated in the Regulation use some terms that are not very well defined and therefore challenging to operationalize in control procedures. Such terms include 'sustainable development', 'respect for nature's systems and cycles', 'sustainable use' and 'product quality'. In some cases, the lack of precise definitions creates challenges for a harmonised implementation of the organic principles in the translation into rules. Also lack of specific provisions for the management of natural resources (water, air or energy) implies that the producers' individual choices are crucial in ensuring that the objectives of the Regulation are met.

#### *Establishing a sustainable management system of agriculture*

The production rules are adequate to establish a sustainable management system of agriculture. It is worth noting that organic practices are also influenced by national and private standards in force (which might be stricter in some areas than the EU Regulation); an isolated analysis of the EU Regulation alone is not always possible.

The EU Regulation and national organic legislation have established a framework that guides producers to establish an agro-ecosystem management that induces synergetic environmental effects, but rules that have particular impact on each of the stated objectives are in several places and their link to the objectives is not always clearly evident.

The Regulation thus has contributed to its objective of **respecting nature's systems and cycles**. However, differences in interpretation of some unclear provisions can lead to variable application, hindering the full potential of the impact of the Regulation. For example, the Regulation does not guarantee the link between livestock production and the land, by requiring only a limited part of the feed to be produced on the farm itself or in the same region (where 'region' ranges from NUTS 2 to EU-level in the different countries). This enables organic livestock production to develop independently from crop production. Other examples of issues lacking clarity/definition are sustainable crop rotations (which ensure diversity over time and thus maintain soil fertility, humus content and reduce pest, disease and weed pressure), the authorisation of growing plants in substrate, without direct connection to the soil or defining substrate requirements. Examples of very intensive rotations (e.g. soya/soya/wheat) or monocultures of vegetables (tomatoes as main crop every year in greenhouse production) being certified were reported in the case studies.

There is sound scientific evidence that organic production practices have a positive impact on **biodiversity**. Some can be directly related to rules (e.g. ban of synthetic N fertilisers, herbicides, strict limitation on other fertilisers and crop protection products, use of multi-annual crop rotations including legumes, limited stocking density) whereas others are the result of frequently used production practices or stricter private standards (e.g. shallow tillage, higher presence of hedges, trees or grass strip corridors, higher prevalence of spring sown crops). Together they significantly contribute to increases in the abundance of plant, bird and predatory insect species. Further improvements could be made by providing further guidance as to what biodiversity attributes are aimed at and which practices have a positive impact on reaching higher levels of biodiversity or addressing rare and endangered species.

Several studies have shown that the prohibition of some and strict limitation of other, chemically synthesised inputs and the incentive to use forage rather than concentrated feed for livestock have a direct impact on the **use of energy**. However, there are no further rules that directly address the sustainable use of energy (e.g. for greenhouse production, processing, packaging or transport). Scientific literature also shows that the restrictions applied by the production rules have some positive impact on limiting **water and air pollution** (like decreasing nitrogen leaching, eutrophication and CO<sub>2</sub> emissions) which derive from rules restricting the use of synthetic inputs and requiring good management practices. Furthermore, there are no rules directly addressing **water use** except for aquaculture. The objectives or the rules do not directly address climate change, but the literature reveals potentials with regard to lower greenhouse gas emissions per hectare and higher organic carbon concentrations. The obligation to use organic fertilisers and manure contributes directly to **soil health and quality**, even though the amount of legumes to be used and the diversity of the rotation are not further specified. The review of scientific literature reveals further that individual management decisions at farm level influence the impact of the rotation and the use of machines (e.g. cultivation for weed control) on soil structure.

The review of scientific literature reveals that **animal welfare** on organic farms is already on a high level compared to requirements of the general EU legislation. However, some provisions of the Regulation are discussed critically in the literature and among stakeholders, such as the stocking densities in houses which are less restrictive than some private standards, a requirement for more animal-specific feeding requirements, and the need for specific transport and slaughtering rules. Some tools for monitoring welfare outcomes for self-evaluations of farmers, as well as part of control visits and introducing minimum requirements have been proposed in the literature and by stakeholders to improve animal welfare conditions on organic farms. The analysis identified some areas where greater clarity or guidance on how the objectives are to be translated into operational rules would increase the coherence of organic production practices with the principles: land-based livestock production, crop rotation, biodiversity and animal welfare, greenhouse production, energy use, water management and social aspects. This might also allow for a more consistent application of the rules across all Member States.

#### *Producing products of high quality in response to consumer demand*

The production rules are adequate for providing varied and high quality products and satisfying consumer demand for a variety of goods. Regarding **food safety**, the rules restricting the use of pesticides and synthetic fertilisers result in lower residues in organic products and contribute directly to this objective. There is no strong scientific evidence of an impact of organic practices on the **nutritional** and **organoleptic value** of products. Nevertheless, a clear majority of consumers in six countries surveyed and stakeholders in the 13 case study countries share the opinion that the production rules contribute to delivering products of high quality and in response to consumer demand. Nevertheless, nearly half of the consumers surveyed stated that at present they can buy many, but not all, the products they would like in organic quality.

#### *Justification for exceptional and transitional rules*

The justification for exceptional and transitional rules is not fully adequate. The Regulation justifies the use of exceptional rules on the use of non-organic inputs (young poultry, feed and seeds) with a need to address problems of limited supply of organic inputs. Such rules should be time limited. They could be justified if there is no negative impact on the development of organic supplies, if they do not disadvantage some producers or go against consumers' expectations. Because of lack of data on these issues, the impact of the exceptional rules could not be assessed in sufficient detail to come to a well-founded judgement. The following judgement is therefore largely based on expert and stakeholder views in the case study countries, and data from the national seed databases. All exceptional rules for the use of non-organic inputs contradict the principle of preference for organic inputs (Article 4(b)), and there is no evidence that the present system has helped to develop the organic supplies. However, removing exceptions would potentially contradict the objectives of organic production to use adapted local varieties if such varieties are only available in conventional quality.

Apart from Denmark, the exceptional rule for the use of **non-organic young poultry** (currently not time limited), and for the use of 18 week-old **part-organic pullets** for egg production (due to

expire 31 December 2014) are both extensively used in the case study countries; only Denmark has already abandoned this option. Elsewhere the sector uses non-organic chicks and relies on pullets (for layers) that have been fed with organic feed since the first day of life. The level of undersupply and progress made over the past years could not be assessed because of a lack of data. According to stakeholders, the existence of the exceptional rule itself and the lack of an EU standard for pullet-rearing hamper the development of organic supplies for organic pullets.

There is not sufficient data available on the scale of use of **non-organic feed** in organic agriculture or the availability of organic supply to carry out a quantitative analysis of the extent of use of this rule. There is a general consensus among many organic producer organisations, processors and traders, that organic protein crop production (at EU level) is insufficient to meet the demand; and that most monogastrics-breeders make use of the exceptional rule that allows 5 % of the feed to come from conventional high protein crops or industrial by-products (such as potato or maize protein). Transition to 100 % organic diets would require the development of organic supply chains at EU level. If this is not the case, it is likely to lead to increased reliance on extra EU-imports in the short and medium term, which would contradict the aim of local sourcing of feed. Alternative protein supplies are already being developed: methods to produce methionine via enzymatic fermentation based on organic raw materials, or the use of insect larvae or algae as protein source for feed. These new techniques seem to be very promising, but they are not ready for broad practical use yet.

The exceptional rule for **non-organic seeds** remains necessary to provide varieties adapted to the local conditions as required by the crop production rules, even in Member States (e.g. Austria, Germany, Denmark, France) where the organic seed supply is reaching overall satisfactory levels (in particular, but not only, for fruit and vegetables and forage production with many different species and varieties). The current system did not lead to significant improvements in the supply of organic seeds at EU level. France and Denmark made significant efforts to push organic seed use forward and were able to develop (for some species) an organic supply that meets national needs. In order to increase the use of organic seeds, financial incentives (or constraints) in favour of organic seed production and use could play an important role. The seed database and the national reports appear to be useful tools to manage the exceptional rule system, but have some shortcomings mainly in relation to a lack of regular updates of lists of available species and varieties. Additionally, further guidance could be provided on organic seed production, and organic plant breeding methods/techniques could be described which are suitable for organic production and are in line with the objectives and principles.

Interviewed stakeholders have contrasting views and only little scientific evidence has been found on whether certain livestock rules such as tethering are in coherence with the animal welfare objective of organic husbandry systems. Thus, the evaluation results do not provide a robust basis for firm judgement of the adequacy of the **transitional measures** concerning animal housing. As far as the length of the transition period is concerned, this period is judged to be adequate taking into account a 20-year depreciation period and the fact that organic farmers

were able to apply for investment grants for reconstructions of livestock housings under rural development programmes.

### *Impact of the GMO provisions*

The rules are adequate to exclude the use of GMOs and limit it to adventitious or technically unavoidable presence. The analysis of the consequences of the prohibition of GMOs in the 13 case study countries showed that very few cases of contamination with GMOs were reported in 2011 and 2012. There is some evidence in the literature that lower thresholds, as implemented, e.g. in Austria and France, would lead to higher costs and difficulties related to the availability of specific GMO-free ingredients. GM-co-existence rules and requirements play an important role in protecting organic products from possible contamination with GMOs. Mainly due to subsidiarity issues, there is however strong variation in implementation regarding GM coexistence rules and requirements at national/regional level. Some countries have not implemented these rules (like Poland, Slovenia, the United Kingdom), whereas for example Austria and Denmark have elaborated genetic engineering precaution laws and guidelines for operators. Because of the global increase of GM crops, it is likely that more sectors will be faced with the challenge of an increased risk of GMO-contamination. This will lead to increasing costs to further realise the 'prevention-strategy' which is currently adopted by most companies of the (organic) food industry in the EU even if very few (or no) GM crops are cultivated in the EU. In general, the rules were seen by many stakeholders as adequate, but a significant number of stakeholders express concerns regarding additional burdens arising from higher costs for analysis and control, separation in processing and logistics, seed production and handling, as well as concerns about the availability of certain critical ingredients (additives, enzymes and vitamins).

### *Impact of the production rules on fair competition*

The production rules are mostly adequate to ensure fair competition by providing a broad and solid common ground of harmonised rules that apply to all producers. Distortion of competition may however occur if different implementations of the Regulation affect production costs, giving competitive advantages to operators in some countries. These arise from a) the lack of detail in the rules (e.g. no rules for greenhouse production); b) lack of definition of certain terms at EU level (e.g. 'region' in the origin of feed, stocking densities in housing for poultry, use of non-organic manure from factory farming); c) issues that are left to the discretion of EU Member States (e.g. definition of slow-growing strains of poultry) and d) issues arising from national rules, namely licensing of plant protection agents. Impact is probably limited in some cases, but due to the lack of production cost and market data, assessing the actual level of potential distortion was not possible. The same applies also to the question whether setting a level playing field with common rules sufficiently respects different climatic or geographic conditions without negatively affecting the fair competition among organic farmers. If sufficient data were available, it would be relevant to also consider the cumulative impact of the whole regulatory framework (e.g. for vegetables: greenhouse production rules, seed availability, fertilisation and pesticide regulations); this could be more significant when accumulated, even if the impact of each individual rule appears to be limited.

The most prominent example of distortion because of differences in the general legal framework for agriculture impacting on organic producers is access to plant protection products. This varies between countries because the marketing of these products is managed through national market authorisation schemes that are not harmonised at EU level. Significant discrepancies have been identified at a national level in several countries. Some have not authorised the use of many pesticides which are allowed in the annex of Regulation (EC) 889/2008 (e.g. copper salts, pyrethrins, neem extracts). This has a significant impact on the production conditions in the different Member States, particularly in horticulture and fruit/wine production.

#### *Consistency of the rules across the different sectors*

The rules are largely consistent across the different sectors, but some inconsistencies were found in the Regulation regarding the level of detail in which specific production sectors are addressed, with the livestock rules being much more detailed compared to the crop production rules. Crop production also has severe restrictions regarding the use of inputs for plant protection (disease control). For livestock, the desire to avoid any suffering of the animal has resulted in several treatments being permitted. The stated principles of organic production are mainly aimed at farming. The processing principles and rules contain very limited detail to ensure that the quality of raw materials is preserved throughout the supply chain, or that responsible use is made of natural resources (such as energy). Further, the Regulation does not fully succeed in limiting the intensity of some specialist production systems, such as poultry or greenhouse production. Different labelling requirements exist for organic food products (<95 % for food) but aiming for 100 % for organic feed.

## Chapter 8

# Adequacy of the overall control system

### 8.1 Introduction

#### **Evaluation Question 3**

*To what extent has the overall control system of organic farming, from the Commission, through Member States competent authorities, control authorities, control bodies to accreditation bodies, been adequate to achieve the global objectives of the regulation?*

*In answering this question the following aspects needs to be examined in more detail:*

- *Supervisory role of the Commission over the Member States control systems;*
- *Supervisory role of the Member States over control bodies;*
- *Exchange of information between the Commission and the Member States, and within the Member States;*
- *Adequacy of the annual inspection requirement and application of risk based assessment for the nature and frequency of controls of organic operators;*
- *Adequacy of distribution of responsibilities among the main actors involved in the control system, including application of the accreditation system;*
- *Adequacy and justification of the exemptions from the control system, notable regarding the retail sector and their application by the Member States.*

In order to ensure that consumers' confidence in organic products is justified, and thus that organic farmers, processors and importers comply with the rules of organic farming, an effective control inspection system has to be in place in all Member States. For this reason, specific rules of the overall control system were laid down in Council Regulation (EC) 834/2007 (Article 27 to 31). As described in Chapter 3, the overall control system consists of two elements: a) the actual control of organic operators carried out by private accredited control bodies or designated public control authorities and b) the public surveillance system, which encompasses the entire EU framework of activities of national competent authorities and accreditation bodies to supervise and monitor the organic control system at the level of the control bodies.

Against this background the aim of Evaluation Question 3 is to understand whether the instruments provided by Council Regulation (EC) 834/2007, targeted at the organic control system, are adequate for achieving the global objectives of the Regulation, i.e. for ensuring the

effective functioning of the internal market, guaranteeing fair competition, ensuring consumer confidence and protecting consumer interests. More specifically the aim is to explore whether the organic control system is adequate to ensure organic operators' compliance with the organic rules so that the entire organic sector can function. If the overall control system is not effective in ensuring full compliance with the rules in all Member States a) fair competition among organic farmers within the EU and b) consumers' confidence in organic products is not guaranteed.

This chapter is organised as follows: First of all the judgement criteria, the respective indicators used and the information basis to answer the evaluation question are described. Subsequently, the results from the different evaluation tools and thus the empirical basis for answering the evaluation question are presented. Finally, the judgment and conclusion are presented.

## 8.2 Approach

Setting up a control system entails putting in place processes and procedures to monitor and verify that the requirements laid down in the EU legislation on organic farming are fulfilled by organic operators in all Member States at all stages of production, processing, import and distribution and that they work in practise as intended. This involves, first of all, that the procedures foreseen in a control system are adequate and thus reasonably sufficient to allow for such verification and monitoring. Secondly, from the perspective of the European Union to ensure fair competition and consumer confidence, the control procedures should be implemented consistently and effectively to ensure comparable results across all Member States. Thus, 'adequacy' addresses in this context whether the procedures and processes of the control system are reasonably sufficient without being abundant, while 'effectiveness' means whether the procedures and processes of the control system are suitable to produce the desired outcome. Therefore, Evaluation Question 3 was answered on the basis of two underlying judgement criteria:

### (1) **The control system is (or is not) adequate to ensure organic operators' compliance with the organic production rules**

The prerequisite for a functioning control system that guarantees both fair competition and consumer confidence is that the procedures implemented are adequate and effective to ensure organic operators' compliance with the organic production rules. Against this background the following aspects were analysed:

- the adequacy of the annual inspection requirements;
- the adequacy of the additional risk-based inspections of organic operators;
- the adequacy and justification of Article 28(2) of Council Regulation (EC) 834/2007, which allows Member States to exempt operators that sell products directly to the final consumer or user from the control system.

The information basis for this judgement criterion builds on interviews with national competent authorities and control bodies from 13 Member States, the web-based stakeholder survey<sup>1</sup>, re-analysis of data from the EU-funded research project CERTCOST<sup>2</sup> and the review of scientific literature and public documents.

**(2) The procedures of the control system as described in Article 27-31 of Council Regulation (EC) 834/2007 are (or are not) effectively implemented in Member States**

To ensure fair competition for organic operators on the one hand and to guarantee consumers' trust on the other, in each Member State the control system needs to be consistently and effectively implemented. Therefore, the following aspects were analysed:

- the level of harmonization/consistency in the Member State's procedures for setting-up national control systems and the differences in the control procedures;
- the adequacy of distribution of responsibilities among the main actors involved in the control system, including application of the accreditation system;
- the public surveillance system in place supervising the functioning and quality of the organic control system;
- the exchange of information between the Commission and the Member States, and within the Member States;
- consumers' trust in the procedures of the organic control system and in the actors of the organic sector.

The information basis used to analyse the effectiveness of procedures of the control system consists of documentary analyses (cross-country comparison) of the control procedures implemented and interviews with national competent authorities and control bodies from 13 Member States, the case study results from the 'Gatto con gli stivali' fraud case, the review of relevant public documents and scientific literature, the consumer survey, and the web-based stakeholder survey.

The evaluation question examines the adequacy and effectiveness of the control system primarily on the basis of experiences of actors involved in the overall control system. Possible limitations through stakeholder biases were minimised by involving all stakeholder groups of the organic control system (see also House, 2003).

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<sup>1</sup> The survey was responded by 265 European stakeholders mainly from Germany, Italy, the United Kingdom, Austria, the Czech Republic, Belgium, France and the Netherlands. More details about the web-based survey are given in Chapter 1.2.

<sup>2</sup> The CERTCOST-project was carried out under the EU's Seventh Framework Programme for Research. The overall objective of the project has been to provide recommendations to improve the organic food certification systems in Europe in terms of efficiency, transparency, and cost effectiveness. The reason for this has been the need for a strengthened competitiveness of the European organic food sector by means of reducing incidence of non-compliance and thereby increases consumers' trust.

## 8.3 Results

### 8.3.1 Adequacy of the control system to ensure compliance

#### Adequacy of the annual inspection requirements

##### *Findings from the analysis of provisions*

Article 27(3) of Council Regulation (EC) 834/2007 specifies that all organic operators shall be subject to a verification of compliance at least once a year (exemptions are possible for wholesalers dealing only with packaged products and operators selling to the final consumer or user as described in Article 28(2)). Control authorities or control bodies shall carry out at least once a year a physical inspection of all operators (Article 65(1) of Council Regulation (EC) 889/2008).

It is worthwhile noting that other areas work with considerably lower control frequencies. For example, the EU legal framework for the rural development programmes requires annual on-the-spot checks of at least 5 % of all beneficiaries<sup>3</sup> (which could be halved under certain conditions).<sup>4</sup>

##### *Views of stakeholders*

As shown in Table 8.1, stakeholder surveyed found mandatory annual inspections to be an important measure to ensure fair competition among organic operators (mean 2.2)<sup>5</sup>. There are no big differences in the opinions of the different stakeholder groups. As far as mandatory annual inspections are concerned, control bodies/control authorities, competent authorities, processors and organic operator organisations are slightly more positive (mean >2.2) than importers and retailers (mean <1.8). Furthermore, most stakeholders perceive mandatory annual inspections as an important measure to ensure consumer confidence in organic products (mean 2.0). This was particularly stressed by stakeholders from Denmark and the United Kingdom; but to less extent by stakeholders from Poland.

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<sup>3</sup> Article 12 of Commission Regulation (EC) 1975/2006 laying down detailed rules for the implementation of Council Regulation (EC) 1698/2005.

<sup>4</sup> To put the frequency of organic controls in the context of food safety controls (which aim to control microbiological and chemical hazards in the supply chain and, thereby, minimise the risk to consumers' health), two illustrative examples are given here: the German federal state 'Baden-Württemberg' controlled 3.7 % of the farms and 36 - 43 % of other actors of the food chain (MLRV Baden Württemberg, 2012) in 2011. In the United Kingdom, hygiene controls were conducted on 49 % of the milk producing holdings and on 25 % of the egg production sites (Food Standards Agency, 2012).

<sup>5</sup> Measured on a 7-point Likert scale ranging from +3 (total agreement) to -3 (total disagreement).

**Table 8.1:** Views of stakeholders regarding the importance of annual inspections and additional risk-based inspections to ensure fair competition (mean values)

	Mandatory annual inspection of organic operators		Additional risk-oriented inspections	
	Mean value	n	Mean value	n
Producer	2.0	16	2.4	16
Processor	2.3	9	2.4	9
Retailer	1.8	18	1.9	18
Importer	1.7	17	2.0	17
Organic Operator Organisations	2.2	33	2.2	33
Control Body/Control Authority	2.5	54	2.3	54
Competent Authority	2.2	22	2.1	22
Governmental Authority	1.9	16	2.1	16
<b>Total</b>	<b>2.2</b>	<b>205</b>	<b>2.3</b>	<b>205</b>

*Question: How important are the following measures of the control system to ensure fair competition among organic operators (producers, processors etc.)? (Measured on a 7-point Likert scale, +3 = total agreement; 0 = neutral; -3 = total disagreement)*

Source: Own data from web-based stakeholder survey.

### Scientific evidences

Zorn et al. (2010) analysed the **control frequency** in Germany based on data from 2006 of nine organic control bodies. Each operator was subject of 1.14 controls per year (announced and unannounced controls). However, the control frequency per operator varied considerably between the control bodies and between operators. Their analysis shows that in 2006, German producers have been controlled less frequently than processors and with a similar frequency as importers. The average control visits were between 1.00 and 1.22 controls per year for producers, between 1.09 and 1.32 controls per year for processor and between 1.00 and 1.21 controls per year for importers. Therefore, control bodies comply with the requirements of the Regulation of at least one annual control plus additional random control. Given the German default frequency of additional random controls of 10 %, two control bodies achieved less than 1.10 annual control visits per operator (Zorn et al., 2010).

Within the CERTCOST-project, the number of control visits was collected from five organic control bodies and/or control authorities from the Czech Republic, Denmark, Germany, Italy and the United Kingdom (one control body/control authority per country). Table 8.2 shows the average number of annual control visits (announced and unannounced) per operator for the years 2007 -2009. The average number of annual control visits varies between the five countries: they were lowest in the Czech Republic (average 1.01 - 1.05 annual control visits per operator) and Denmark (average 1.02 - 1.04 annual control visits per operator) and highest in Italy (average 1.44 - 1.56 annual control visits per operator). Thus, in the Czech Republic and in Denmark, additional random controls are below 5 % while in Italy on the other hand around 50 % of the operators were additionally randomly visited. Contrary to the results of Zorn et al. (2010) from

nine German control bodies (2006 data), 2007-2009 data collected from one German control body in the CERTCOST-project showed that German producers were visited more frequently than processors and importers. In Italy on the other hand importers were more frequently controlled than processors and producers.

**Table 8.2:** Average number of control visits of organic control bodies and control authorities per operator and year (one control body/control authority per country)

	Total	Producers	Processors	Importers
<b>Germany</b>				
2007	1.07	1.07	1.04	1.06
2008	1.16	1.19	1.06	1.10
2009	1.24	1.27	1.08	1.05
<b>Czech Republic</b>				
2007	1.01	1.01	n.d.	n.d.
2008	1.02	1.02	n.d.	n.d.
2009	1.05	1.06	1.03	1.13
<b>Denmark</b>				
2007	1.04	1.04	n.d.	n.d.
2008	1.02	1.02	n.d.	n.d.
2009	1.03	1.30	n.d.	n.d.
<b>Italy</b>				
2007	1.50	1.49	1.53	3.00
2008	1.56	1.55	1.60	2.90
2009	1.44	1.43	1.50	3.60
<b>United Kingdom</b>				
2007	1.12	1.14	1.10	1.16
2008	1.16	1.17	1.14	1.20
2009	1.12	1.30	1.09	1.11

Total number of operators from the five control bodies: 2007: 15 586, 2008: 15 915, 2009: 17 796; Germany: 80 % producer, 16 % processor, 4 % importer; Czech Republic: 2007 – 2008 only producer, 2009: 86.5 % producer, 12 % processor, 1.5 % importer; Italy: 84.8 % producer, 15 % processor, 0.2 % importer; UK: 55 % producer, 38 % processor, 7 % importer; Denmark: only producer; n.d. = no data

Source: Own analysis based on data from one control body or control authority per country collected in the CERTCOST-project (Moschitz et al., 2009).

Albersmeier et al. (2009) suggested varying auditing intervals, auditing depth, unannounced spot checks of risk-based approaches superior to standard control procedures to ensure non-opportunistic behaviour of operators. Several authors propose using specific approaches (moral hazard theory, statistic approaches) to determine optimum control intensities and thus risk-based inspections (Hirschauer, 2004; Albersmeier et al., 2010; Dabbert, 2011).

Adequacy of the control system is also determined by the **cost of the system**. Stolze et al. (2012) calculated in the CERTCOST-project the whole range from the certification fees to opportunity costs of organic operators and the administrative costs at the various levels of farmers and

processors, standard owners, competent authorities and the control bodies. Results revealed that with respect to the certification cost, the inspection fee is the most relevant monetary expenditure for organic operators (on average 900-1 000 EUR per farm). It corresponds to a share of up to 0.4 % of the raw income<sup>6</sup> of a farm and up to 1 % of the organic turnover of processors. Since the major cost item of control bodies depends on the number of on-site controls and thereto connected office work<sup>7</sup>, the authors conclude that the costs of certification could be reduced by reducing the cost for the on-site control visit and thus the corresponding control fee (e.g. by strengthening risk-based control systems). Dabbert (2011) concluded on the basis of the results from the CERTCOST-project that once effective risk-based control systems have been implemented, the Commission could consider lowering the inspection frequency for proven low-risk operators.

Marketing literature suggests that **consumer trust** in certification or control systems is crucial particularly for organic products (Jahn et al., 2005). Consumer trust is however a multidimensional and dynamic construct, which is determined by the perceived strictness of standards and controls, domestic origin of the product and familiarity with the organic label. While organic labels signal to the consumer that compliance with the Regulation is ensured through regular inspections (Janssen and Hamm, 2011; Stolz et al., 2011), no research results were found showing, which control frequency consumers perceive to be adequate. As Janssen and Hamm (2012) pointed out, consumers have in general rather limited knowledge about organic production standards and the organic control system.

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<sup>6</sup> Raw income is calculated as revenues minus variable and fixed costs, however, without the imputed labour costs of the farm family.

<sup>7</sup> According to Stolze et al. (2012), control bodies dedicate 44 % (median) of the total time spent on certification to on-site controls, whereby the values varied considerably. Furthermore, preparatory work and work after the inspection visit in terms of processing records amount around 30 % of the control bodies' workload.

## Adequacy of the additional risk-based inspections

### *Findings from the analysis of provisions*

According to Article 27(3) of Council Regulation (EC) 834/2007, the nature and frequency of the controls shall be determined on the basis of an assessment of the risk of occurrence of irregularities and infringements. Control authorities or control bodies shall carry out random control visits, primarily unannounced, based on the general evaluation of the risk of non-compliance with the organic production rules, taking into account at least the results of previous controls, the quantity of products concerned and the risk for exchange of products (Article 65(4) of Council Regulation (EC) 889/2008).

The document analysis conducted in the 13 case study countries showed that so far only Austria, Estonia, Germany, Italy and the Netherlands have national guidelines for risk-based inspections or criteria respectively. Thus mandatory risk-based controls are carried out differently across Member States.

### *Views of stakeholders*

Stakeholders responding to the stakeholder survey expressed that additional risk-based inspections are important to ensure fair competition among organic operators (see Table 8.1). Producers, processors and control bodies/control authorities consider additional risk-based inspections slightly more important (mean >2.3) than retailers and importers (mean <2.0). Asking for areas which could improve the effectiveness of the control system, 15 % of the respondents (a total of 164 stakeholders responded to this question) suggested additional risk-based controls. This was particularly mentioned by control bodies (5), traders (4), competent authorities (3), and organic operator organisations (3) and by German (7) and Italian stakeholders (4).

### *Scientific evidence*

The objective of a risk-based inspection approach is to focus resources on risky operators with regards to the frequency and intensity of controls (Alderman and Tabor, 1989). Conversely, these risk-based inspections can also be used to identify low risk operators. While so far risk-based control systems are largely based on qualitative approaches (Dabbert, 2011), there are a number of studies analysing the use of alternative **approaches for estimating the risk potential** of organic operators. Hirschauer (2004) proposes using the moral-hazard theory to establish models for the determination of optimum control intensities. In contrast to this, Dabbert (2011) and Gambelli et al. (2012) consider quantitative approaches to enhance the effectiveness and the usefulness of qualitative risk-based approaches. Their analysis provided evidence that the probability of non-compliance is higher for operators who have already been non-compliant. Furthermore, they found farm size, complexity of operations and presence of pig and poultry production to be determinant for slight non-compliances. However, they consider data collected so far from control bodies (e.g. structural data from organic operators) insufficient for risk-based inspections (Dabbert, 2011). Gambelli et al. (2012) concluded that based on currently available data a risk-

based inspection strategy is quite difficult to implement. Therefore, the results from the CERTCOST-project suggest including personal information about operators (e.g. age of operators, enterprise type, total turnover, liabilities and debt, solvency) additionally to the already collected data (Dabbert, 2011; Gambelli et al., 2012). Zorn et al. (2013) stress that organic operator's personal financial situation and that of his operation could also influence his compliance behaviour: operators with serious liquidity problems will be more inclined to be dishonest. However, any approach to collect more detailed data about the operators would need to take the data protection legal framework of the EU into account as expressed in the charter of fundamental rights of the European Union (European Union, 2010).

Based on comprehensive calculations on the total **cost of organic certification**, Stolze et al. (2012) concluded that reducing the number of control visits per operator by introducing risk-based inspection could reduce the certification costs considerably.

Albersmeier et al. (2009) state that the risk-based approach contrasts sharply with some of the expectations in agribusiness that auditing should be more standardized and equal across all operators. They consider risk-based approaches to be useful to ensure non-opportunistic behaviour of operators. However, this approach requires **additional skills and competences** from control authorities/bodies since different auditing intervals, auditing depth, unannounced spot checks and differentiated auditing focuses are needed. Therefore, it is necessary to provide specific training for control body staff carrying out risk-based controls (Albersmeier et al., 2009). Zorn et al. (2013) highlight that applying more sophisticated risk analysis tools requires technical and methodological skills which are so far not available to control bodies but could be provided by external technical services.

#### *Findings from the review of relevant publications*

Similar conclusions were also drawn by Maresca et al. (2013). They concluded in the EU-project IRM-ORGANIC<sup>8</sup> that a more risk-based and investigative control system would require a mix of measures including unannounced inspections, quick follow-up in case of non-conformities, use of cross-checks by the control bodies, and targeted sampling and testing. This mix of control measures however requires an improved training of inspection staff.

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<sup>8</sup> The IRM-ORGANIC-project (Training on improved risk management tools for organic inspectors) aims to facilitate an open-minded exchange between control bodies in Europe on state-of-the-art inspection methodologies and techniques to optimize consumer protection and fair competition on the emerging green market for products from organic farming. It is funded by the EU Leonardo Da Vinci – Lifelong Learning Programme.

### **Adequacy and justification of Article 28(2) of Council Regulation (EC) 834/2007 which allows Member States to exempt operators who sell products directly to the final consumer or user from the control system**

#### *Findings from the analysis of provisions*

Article 28(2) of Council Regulation (EC) 834/2007 enables Member States to exempt operators who sell products directly to the final consumer or user from the control system if these operators do not produce, process, pack, label or store organic products elsewhere, do not import organic products from third countries and/or outsource these activities to a third party. The document analyses of national regulations and other relevant documents showed that in all 13 case study countries operators selling organic products directly to the final consumer are exempted from submission to the control system provided that the operator does not produce, prepare, process, store other than in connection with the point of sale, or import such a product from a third country, or has not contracted out such activities to a third party. It further showed that the interpretation of the conditions for granting the exemptions varies, so that operators may be treated differently across Member States.

#### *Views of stakeholders*

The stakeholder survey showed varying results with respect to the question whether retailers should be exempted from the organic control system (see Table 8.3). Producers and control bodies/control authorities on the one hand and stakeholders from France and Italy favour to a large extent the inclusion of retailers in the organic control system (means >1.6). Stakeholders from Denmark on the other hand responded that retailers should not be included in the control system (mean -1.8) however without specifying any reasons. Processors and stakeholders from the United Kingdom were neutral about this.

The most important arguments to include retailers in the control system were ensuring consumer confidence. Stakeholders consider retailers to take a key role as they are in direct contact with the consumers. Therefore, to ensure consumer confidence in organic products, retailers should be included in the control system (7 stakeholders, 3 from Austria). Six stakeholders considered the risk of incorrect labelling and commingling with non-organic products to be high. Furthermore, it was mentioned that the entire organic supply chain should be subject to the control system (4 stakeholders) and that retailers should take responsibility when they sell organic products (3 stakeholders). 19 stakeholders however (among them 6 control bodies, 3 competent authorities, 2 national authorities) take the view that retail of packed food should not be subject of the control system as there is no risk for commingling and incorrect labelling. Retailers should only be included in the control system *“...when they sell organic products which are not originally packaged by a company covered by the scope of the organic regulation”*. Some of these stakeholders argued that including retailers of only packed food in the control system would increase costs but without giving more security to the consumer. Seven stakeholders (among them 3 control bodies) found that the retail sector should be exempted in general.

**Table 8.3:** Views of stakeholders regarding the inclusion of the retail sector in the control system (mean values)

	Mean value	n
Producer	1.7	16
Processor	0.2	9
Retailer	1.2	17
Importer	0.8	16
Organic operator organisation	0.9	33
Control body / control authority	1.6	50
Competent authority	1.0	20
Governmental authority	1.1	16
Germany	1.2	54
Denmark	-1.8	5
France	2.1	10
Italy	1.7	27
United Kingdom	0	13
Czech Republic	1.4	14
Poland	0.7	6
<b>Total</b>	<b>1.3</b>	<b>198</b>

*Question: Please indicate the degree of your personal agreement to the following statement: "The retail sector should be fully included in the control system." (7-point Likert scale, +3 = total agreement; 0 = neutral; -3 = total disagreement)*

Source: Own data from web-based stakeholder survey.

### *Findings from the review of relevant publications*

There is one study analysing the 2005 to 2011 inspection data from 1 025 inspections of retailers with processing operations from Germany. According to this study (Neuendorff, 2012), so far no information on severe infringements and fraud cases concerning the exempted retail operations is available. Neuendorff (2012) considers the risk of non-compliances with the production and labelling rules of the EU legislation on organic production to be quite low if retail operations only deal with packed and labelled food because the risk of commingling with conventional products and incorrect labelling is low.

Neuendorff (2012) shows that written warnings needed to be issued only in a limited number of cases and no references to the organic production needed to be withdrawn and no prohibition of marketing the organic products were issued. On the basis of these results, Neuendorff (2012) defined the following risk categories for not exempted processing operations in the retail sector:

- **Low risk:** off-baking of bread, roasting and grinding of coffee, selling of organic drinks;
- **Medium risk:** portioning and packing of organic cheese, meat and sausages, preparation of mincemeat;
- **Enhanced risk:** preparation of organic salads, organic snack food;

and suggested introducing a risk-based inspection approach for processing operations in the retail sector.

Based on the experience of a German control body, Neuendorff (2013) reported that some retailers undertook a preparation activity (crisped organic bread in their retail outlet) without notifying it to the competent authorities. This suggests that the exemption from the control system is only justified if the conditions for granting it are periodically verified.

### 8.3.2 Effectiveness of the implemented control system in Member States

#### Consistency in the Member State's procedures of setting-up national control systems and the differences in the control procedures

##### *Findings from the analysis of provisions*

The document analysis conducted in the 13 case study countries revealed that only Denmark, Germany, Italy and Slovenia statutorily regulate **residue sampling and analysis** of organic products. In the United Kingdom, national testing procedures for organic food are currently being developed. In Member States without statutorily regulated residue sampling and analysis approaches, each control body has its own procedures with respect to the number of analyses and the maximum threshold to evaluate the level of contamination, to assess the level of corresponding sanctions, and to determine if the products should be declassified or whether the certificate should be withdrawn from the operator.

The document analysis showed further that only four of 13 Member States have a common catalogue for **issuing of sanctions**: Germany (German Regulation on approval of control), Estonia (not very detailed), the Czech Republic (Act. No. 242/2000), and the Netherlands (SKAL sanction regulation R14). In Italy, the national accreditation body provides a classification of non-compliance and sanction. France, Poland and the United Kingdom are currently developing sanction catalogues or plan to do so soon respectively. In Austria, the regional federal government of Vorarlberg urge the compilation of a standardized catalogue of sanctions to ensure that the different control bodies handle infringements and irregularities equally. As a consequence, each control body might define Article 30 in a different way. This leads to operators being sanctioned differently for having committed the same infringement (European Court of Auditors, 2012).

##### *Views of stakeholders*

About 44 % of the stakeholders surveyed indicated that there are differences in the **effectiveness of the control system** across Member States. Particularly retailers (agreement 63 %), importers (53 %) and control bodies/authorities (51 %) took the view of differences in the effectiveness of the control system. In contrast to these stakeholders, the majority of processors (agreement 0 %) and national authorities (agreement 25 %) took a different view. From a country perspective,

stakeholders from France (90 % agreement) and Denmark (86 %) strongly supported the statement of differences in the effectiveness of the control system whereas the majority of the Czech stakeholders disagreed (disagreement 36 %) and only 21 % of the stakeholders from the United Kingdom (71 % do not know) agreed to this statement. The areas of differences in the effectiveness across the Member States are to a large extent similar to the issues raised with respect to different interpretation of the control rules.

The stakeholder survey highlighted the **need for a more harmonised control system** in the EU. In total, 50 % of the stakeholders surveyed indicated that the control rules are interpreted differently in the Member States while 32 % did not know. The results varied only marginally between the different stakeholder groups. Retailers, control bodies/control authorities, national authorities and importers found to a slightly higher extent that the control rules are differently interpreted across the Member States (agreement >55 %). However, there were larger differences between the stakeholders from different countries: 80 % of the French stakeholders and 71 % of the Danish stakeholders but no stakeholder from the Czech Republic (57 % do not know) found that control rules are interpreted differently. The following areas where control rules are interpreted differently across the Member States were mentioned: residue sampling, testing and analysis (15 %; particularly mentioned by control bodies), criteria for risk-based approaches (5 %), control frequency (4 %), share of unannounced controls (4 %), issuing of sanctions (4 %), and accreditation process for control bodies (4 %). As to the latter, the need for harmonisation of control processes with respect to both between accreditation bodies within a Member State and between Member States was particularly highlighted by three German stakeholder surveyed (two competent authorities, one organic sector organisation). Clear and harmonised guidelines for accreditors are suggested to improve harmonisation in accreditation procedures. In this respect, a Finish stakeholder suggested to establish only one EU accreditation body.

The need for a more harmonised control system was also expressed in the interviews carried out in the case study countries. Nine of 12 competent authorities and 11 of 21 control bodies/control authorities interviewed stressed the need for such a harmonisation; notably from the Czech Republic, Germany, Denmark, France, Spain, Italy, Poland, and Slovenia. The interviewed control bodies/authorities or competent authorities from Austria, the Netherlands and the United Kingdom gave partly contradictory answers. While some control bodies or competent authorities in these countries see areas which would need harmonisation, others do not. Additionally to the areas already identified in the web-based stakeholder survey, competent authorities and control bodies mentioned in the interviews the following areas, where the control system should be harmonised across the Member States: information exchange between control authorities or control bodies, the management in case of suspicion of infringements and irregularities, exemption of retailers according to Article 28 of the Regulation, and non-conformity follow-ups and sanctions as well as non-compliance categories. The Standing Committee of Organic Farming (SCOF) was considered to be a useful means to harmonise the control system.

However, there are also stakeholders voicing the risk that the EU organic farming legislation regulates too much and does not leave enough space for effective controls (*“regulatory overkill should be avoided”*). Therefore, a moderate **flexibility in the control rules** might be required and *“any initiatives to further harmonise the control system need to be adequate and appropriate”*. Instead of more detailed rules, the stakeholders interviewed suggested that the organic farming legislation should put more emphasis on the liability of organic operators. Changes in the whole system should be well considered on the aspect of how much improvement can be achieved by more harmonisation.

Even though half of the stakeholders (55 %) state that there is a need for flexibility due to regional differences, on average, they were quite neutral about this (mean 0.3). Processors (mean 1.1) and interviewees from Denmark (mean 1.1), Central and Eastern European countries<sup>9</sup> (mean 1.1) and the United Kingdom (mean 0.8) slightly agreed to the need for regional flexibility. Proponents consider that each Member State represents an own culture and tradition. Differences in the implementation of control rules could therefore sometimes be necessary as the situation in the Member States is different. Therefore, the EU organic farming legislation might not be able to be uniformly applied in each Member State. Stakeholders from France however were against regional flexibility in the control system (mean -1.2).

Few differences were identified with regard to stakeholders' view on the **importance of different control measures** to ensure fair competition. Stakeholders surveyed found an explicit sampling and testing policy (mean 1.8) to be an important means of ensuring fair competition among organic operators (see Table 8.4); to a slightly less extent than additional risk-based inspections (mean 2.3), systematic investigation and follow-up of detected residue cases (mean 2.3), mandatory annual inspections (mean 2.2) and definition of non-compliance and sanction categories (mean 2.1). There are no big differences in the opinions of the different stakeholder groups. Control bodies/control authorities, competent authorities and governmental authorities are more positive than the other stakeholders.

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<sup>9</sup> Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

**Table 8.4:** Views of stakeholders regarding the importance of sampling and testing, systematic investigations and the definition of non-compliance and sanction categories to ensure fair competition (mean values)

	Explicit sampling and testing policy for control bodies		Systematic investigation and follow-up of detected residue cases		Definition of non-compliance categories and sanctions	
	Mean value	n	Mean value	n	Mean value	n
Producer	2.1	16	2.5	16	1.9	16
Processor	1.1	9	2.0	9	1.6	9
Retailer	1.5	18	2.1	18	1.9	18
Importer	1.2	17	2.2	17	1.7	17
Organic Operator Organisations	1.3	33	2.0	33	1.9	33
Control Body/Control Authority	1.9	54	2.3	54	2.2	54
Competent Authority	2.2	22	2.6	22	2.4	22
Governmental Authority	1.8	16	2.4	16	2.1	16
<b>Total</b>	<b>1.8</b>	<b>205</b>	<b>2.3</b>	<b>205</b>	<b>2.1</b>	<b>205</b>

*Question: How important are the following measures of the control system to ensure fair competition among organic operators (producers, processors etc.)? (7-point Likert scale, +3 = total agreement; 0 = neutral; -3 = total disagreement)*

Source: Own data from web-based stakeholder survey.

Differences in the control system become a problem in cases when differences lead to unfair competition. Indeed, 78 % of the stakeholders surveyed (see Table 8.5) were of the opinion that **differences in the implementation of the control rules** lead to unfair competition between organic operators (mean 1.5). There are only minor differences between the stakeholder groups. However, Danish stakeholders were rather neutral (mean 0.6) whereas stakeholders from Italy (mean 2.1) and Poland (mean 2.0) supported this statement more strongly. The stakeholders in general slightly agreed to the statement that differences in the control system could disturb the functioning of the internal market (66 %, mean 1.0). Particularly retailers and importers (mean 1.5 and 1.4, respectively) and stakeholders from Italy (mean 1.8) supported this statement more strongly whereas governmental authorities were rather neutral (mean 0.3). Interestingly, about 25 % of the organic producers, 33 % of the processors, 50 % of the importers and 53 % of the retailers reported in the stakeholder survey that the competitiveness of their operation is or has been affected as a result of differences in the control systems of the Member States.

**Table 8.5:** Views of stakeholders regarding the differences in the control system between Member States (mean values)

Differences in the control system between EU Member States ...	... are necessary to meet national conditions		... lead to unfair competition between organic operators		... disturb the functioning of the EU internal market and do not lead to fair competition	
	Mean value	n=219	Mean value	n=219	Mean value	n=219
Producer	0.1	18	1.6	18	1.1	18
Processor	1.2	9	0.9	9	1.0	9
Retailer	0.1	19	1.7	19	1.5	19
Importer	0.2	18	1.3	18	1.4	18
Organic Operator Organisations	0.5	35	1.2	35	0.8	35
Control Body/Control Authority	0.1	58	1.6	58	0.9	58
Competent Authority	0.4	22	1.5	22	1.0	22
Governmental Authority	0.6	16	1.3	16	0.3	16
<b>Total</b>	<b>0.3</b>		<b>1.5</b>		<b>1.0</b>	

*Question: To which extent does the EU organic farming legislation meet its general aims with respect to the actual control procedures? (7-point Likert scale, +3 = total agreement; 0 = neutral; -3 = total disagreement)*

Source: Own data web-based stakeholder survey.

### Scientific evidence

The analysis of 2007-2009 data of control bodies/control authorities from the Czech Republic, Denmark, Germany, Italy and the United Kingdom collected in the CERTCOST-project (Moschitz et al., 2009) revealed that the **share of unannounced controls** of all control visits varies considerably between both the five control bodies or control authorities respectively and the years 2007 to 2009. The share of unannounced controls thus amounted for the German control body 6.4 % in 2007 and increased to 19.1 % in 2009. In Denmark and in the United Kingdom, the share of unannounced controls was below 10 % while in Italy the share was around 10 % for the years 2007 to 2009. These results are confirmed by Zorn et al. (2010) who found considerable differences in the share of unannounced controls of nine German control bodies of 5.8 % to 19.4 % (2006 data).

It is worthwhile noting that Dabbert et al. (2012) concluded in the CERTCOST-project that there is a need to further clarify the **definitions of 'infringement' and 'irregularity'** with corresponding sanctions as well as to promote good practice. They recommend guidelines to create a harmonised system of sanctions to be applied under Article 30 in the event of infringements or irregularities (harmonised scales) in all Member States and by all control bodies. Regulation (EC) 834/2007 uses the term *"risk of occurrence of irregularities and infringements as regards compliance with the requirements laid down in this regulation"* (Article 27). This has essentially the same meaning as the expression 'risk of non-compliance'. However, a wider understanding of risk could include further aspects. Especially the size of the potential damage to the organic market and consumer trust is important (Dabbert et al., 2012).

Furthermore, Dabbert (2011) concluded that the mandatory accreditation of control bodies has so far led only to a limited extent to a more harmonised supervision of the control system among Member States. He suggests a concerted action of accreditation bodies, e.g. by drawing up codes of Good Practice as encouraged by the EU Commission.<sup>10</sup>

### **Adequacy of distribution of responsibilities among the main actors involved in the control system, including application of the accreditation system**

#### *Findings from the analysis of provisions*

The basic distribution of responsibilities in the control system is defined in Article 27 of the Regulation (EC) 834/2007. Accordingly, Member States may designate one or more competent authorities responsible for controls in respect of the obligations established by the Regulation. The competent authority may confer its control competences to one or more other control authorities and/or delegate control tasks to one or more control bodies. In that case, the Member States has to designate authorities responsible for the approval and supervision of such bodies.

For delegating control tasks to a particular control body, the Regulation requires among others that the control body is accredited to the most recently notified version of European Standard EN 45011 or ISO Guide 65.

#### *Views of stakeholders (control bodies and competent authorities)*

The Spanish competent authority stressed that harmonization is required between Regulation (EC) 882/2004 and Regulation (EC) 834/2007 to better **clarify the surveillance procedures** that competent authorities should execute on control bodies and control authorities. The Regulation on organic farming should establish more clearly the control procedures the competent authority has to exert over the control authority. An Austrian control body highlighted that there should be only one national authority responsible for organic agriculture and no involvement of several authorities and public institutions. One Italian control body felt that there is no coordination between national and regional authorities, and that some regions even do not perform any supervisory activity.

The stakeholder survey provided no indication that the distribution of responsibilities in the control system with respect to **accreditation bodies** is inadequate. Only one stakeholder from Denmark (scientist) mentioned that in Denmark the distribution of responsibilities between the control authority and the accreditation body needs to be clearer.

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<sup>10</sup> The European Cooperation for Accreditation (EA) has established a dedicated task force to foster harmonized supervision of the organic control system. A specific mandatory document for EA national accreditation bodies has been developed and approved in June 2013 (European Cooperation for Accreditation, 2013).

### *Findings from the fraud case analysis*

The fraud case 'Gatto con gli stivali' indicated that an inadequate distribution of responsibilities may hamper a **quick information exchange**. The fraud case was a penal procedure of the Italian tax investigation and details about this investigation were only available to the organic control system to the extent communicated by the prosecuting authority (Rohrdanz, 2012). There was no official interface ensuring that information on suspicious cases from, for example, the tax investigation is transmitted to authorities of the organic control system. Thus, the competent authorities of the possibly fraud-affected Member States had to rely on information from different actors of the organic sector which was often not very reliable and sometimes contradictory. Details on the fraud case are given in the subsequent section on 'Information exchange between the actors involved in the control system'.

### *Findings from the review of relevant publications*

Schulze et al. (2009) emphasize that an effective co-ordination between competent authorities, the accreditation body and the control bodies is needed to establish an effective and efficient control system.

## **Adequacy of the public surveillance system in place**

### *Findings from the analysis of provisions and other information sources*

The public surveillance system encompasses the entire EU framework of activities of national competent authorities and accreditation bodies as described in the EU organic farming legislation to supervise and monitor the organic control system at the level of the control bodies.

A key-element of the supervision of control bodies are office and witness audits<sup>11</sup>. In all case study countries with a system of private control bodies, the competent authorities conduct one office audit per year at the control body. However, the **number of witness audits** conducted by the competent authorities varies considerably between Member States. While in Austria, the Czech Republic, Spain and Germany the competent authority conduct 4 - 5 witness audits, and at least one in the United Kingdom, Bulgaria and Italy, so far no witness audits were conducted in Poland and Slovenia (Slovenia plans to do so in 2013). Own inspections of organic operators are conducted by the competent authority only in Austria (about 20 per year), Germany (about 20 per year) and Poland.

### *Views of stakeholder*

As far as the general assessment of the **adequacy and effectiveness** of the national approval and surveillance system for control bodies is concerned, all competent authorities of the 13 case

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<sup>11</sup> Witness audits are accompanied on-site inspection visits carried out by a competent authority with the aim to inspect (or audit) control bodies themselves.

study countries expressed that the system of their country is implemented adequately and effectively. The control bodies interviewed in Bulgaria, Estonia, France, the Netherlands, Poland and Slovenia were positive towards the surveillance system. However, five control bodies from Italy, Austria, the Czech Republic and from the United Kingdom considered the supervision system of the competent authority over the control bodies ineffective. The French control body considered the national supervision system to be effective through the double requirements of approval and accreditation<sup>12</sup>. In Germany, one competent authority and an organic sector organisation states that control effectiveness of the accreditation body over the control bodies could be improved. The Slovenian competent authority reports that the accreditation body is very strict, reliable and impartial. One control body from the United Kingdom and Portugal take the view that the accreditation body lacks technical competence in organic farming.

Different assessments as regards the adequacy and effectiveness of the public surveillance system were not only expressed in the interviews but also in the web-based survey. The stakeholder survey showed that 47 % of the control bodies consider the supervision through the national competent authorities to be adequate to ensure the functioning of the control system (43 % do not agree). However, 73 % of control bodies from Italy and 60 % from Central and Eastern European countries (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia) take the view that the supervision is not adequate and not functioning. There is criticism that the supervision of competent authorities focuses too much on formal requirements involving extensive reporting. On the other hand, the information collected seems often not to be used. An example is the collection procedures and use of statistical data. It is suggested that competent authorities should audit more frequently and thoroughly to ensure a really effective control system.

The control bodies highlighted that some competent authorities are not endowed with the **financial and human resources** which would be required to do the supervision properly. This was particularly highlighted by stakeholders from the United Kingdom. Also in Austria, two control bodies found the personnel infrastructure of the competent authority insufficient. In this context also lacking competence of competent authority staff was mentioned. An Italian control body criticised that supervision in Italy was criticised for not being substantial enough and focused on documentary and bureaucratic information.

### *Scientific evidence*

Zorn et al. (2012) compared the **official data on sanctions** reported from the German competent authority to the European Commission with the primary data of the issued sanctions from one German control body. They found mistakes in the reporting in the year 2008 due to careless reporting by the control body. Even though these mistakes were quite obvious, they were not

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<sup>12</sup> In accordance with Article 27(5)(c) of Council Regulation 834/2007 the control bodies are submitted to a double control to ensure that the minimum control requirements are applied: a) from the accreditation body (audit every 15 months) and b) from the competent authority (audit once a year).

noticed by both the control body and the competent authority. The authors conclude that the use of the supervision reports might be limited, possibly because of the data structure and quality.

### **Information exchange between the actors involved in the control system**

#### *Views of stakeholders*

The effectiveness of the organic control system is very much affected by the **frequency of information exchange**. About 78 % of control bodies meet more than twice a year and have established a continuous dialogue with the national competent authority (Austria, Belgium, Czech Republic, France, Germany, Hungary, Ireland, Italy, Lithuania, Poland, and Sweden). Control bodies from Spain, Portugal and Slovakia meet twice a year while one control body from Spain and the United Kingdom exchange information with the competent authority only once a year. Responses from the control bodies in Germany and Italy are contradictory. For example, six German control bodies surveyed in the stakeholder survey stressed that there is a lot of information exchanged with the competent authorities via different information exchange platforms while one seems to have no information exchange at all. Similarly, while the 'coordination table' initiated by the Italian Ministry of Agriculture was considered to be an effective tool for information exchange (more than twice a year) for nine control bodies, one control body responded to have no meeting at all with the Italian competent authority. In the case of Germany and Italy, this situation is probably due to the administrative structure of both countries with a national/federal competent authority and regional competent authorities.

Actors of the organic control system use different **approaches to exchange information**. For cases of infringement a regulated information exchange already exists, the Organic Farming Information System (OFIS). In case of suspicion every Member State has the possibility of information exchange with other Member States. Interviews carried out with the competent authorities from the Czech Republic, Poland, the Netherlands and Italy revealed that information between Member States is exchanged during SCOF-meetings and by personal contacts with peers (Czech Republic, Italy, Poland and the Netherlands). SCOF is considered to be effective and helpful for information exchange. The Slovenian competent authority considers the OFIS database enables quick exchange of information between Member States. Control bodies in Austria, Germany, France, and Spain established institutionally quite intense communication through national associations of control bodies. But also Czech, Polish, Slovenian and UK control bodies meet regularly. The Estonian control body interviewed pointed out that information exchange has improved while the Bulgarian control bodies have only contact via e-mail. Competent authorities from Italy and Spain criticised that communication between the national authorities and the regional competent authority is not effectively organised. In Spain, the regional authorities who implement the EU legislation seem to have no established communication and information exchange platform. A German control body complained that they do not have sufficient access to relevant official data sources, which could be used to

prepare the control visit and allow them to focus during the on-site inspection on more relevant issues.

#### *Findings from the review of relevant publications*

The European Court of Auditors (2012) found in two Member States visited that the information flow between the control system for organic production and for policy support under the agri-environment measures to be insufficient. In France, the results of the checks made by the control bodies were not communicated to the paying agency for the agri-environment subsidies. The Court of Auditors concluded that there is the risk that non-compliances affecting the conditions for receiving agri-environment payments, detected by a control body, do not result in a reduction or recovery of the payment. Likewise, in the United Kingdom they found no reverse flow of information and the risk that non-compliances concerning organic farming practices detected by the paying agency as a result of their inspections do not result in sanctions imposed by the control body.

#### *Results of the fraud case analysis*

The fraud case 'Gatto con gli stivali' was until now one of the largest fraud cases in the EU concerning organic products covered by the EU legislation on organic production. The press release of the Italian Guardia di Finanza (tax investigation) reported on a volume of approximately 703 000 tons of false-labelled conventional products sold as organic and financial damage estimated at around 220 million EUR, representing approximately 10 % of the total turnover of the Italian organic market. The subsequent analysis is based on the results of the Anti Fraud Initiative (AFI) seminar in Italy as well as personal interviews with actors involved in the fraud case and an evaluation of correspondence exchanged between competent authorities and control bodies.

According to FederBio (2012), mainly from 2007 to 2009, a network of at least 20 fraudulent operators sold conventional products produced in Italy and Romania as organic to several EU Member States (mainly Austria, Belgium, France, Hungary, the Netherlands, Spain and Switzerland). The fake products were cereals (barley, rye, spelt, wheat), corn, sorghum, flax, peas, faba beans, soybeans, canola, sunflowers and mashed apples.

The fraudulent trade companies supported by two employees of the largest Italian control body 'changed' the conventional status of the commodities to organic by

- fudging conformity certificates (documentary evidences according to Article 29 of Regulation (EC) 834/2007), the production plan (according to Article 71 of Regulation (EC) 889/2008), proofs of land ownership and tenancy agreements, contracts as well as delivery notes and invoices; and
- fudging of invoices of commercial transactions which never happened in reality.

Due to the missing international verification of conformity certificates and bookkeeping documents through cross checks, the detection of the fraud was difficult for control bodies.

Furthermore, the fraudulent activities were facilitated by multiple certifications of organic operators. The Italian organic operators involved in the fraud were often inspected by different control bodies for different activities. Indeed, one of the main actors in the fraud case, the Italian company Sunny Land S.P.A., was inspected by two control bodies: one controlled the trading/processing activities while the other one controlled the import activities.

The fraud case came to light during an inspection conducted by the Italian tax investigations at the trading company Sunny Land. As a consequence of the inspection, the Italian tax investigation started broad examinations of various trading companies and control bodies which lasted for more than one year. Italian competent authorities as well as several control bodies were involved in these investigations, but they were bound to secrecy. During the tax investigation, in May 2011, Sunny Land changed to another control body. However, the original control body confirmed the organic status of Sunny Land to the one that took over without informing about the on-going investigations of the Italian tax police and the suspicion of fraud. The fraud case went public with a press conference of the Italian tax investigation (Comando Provinciale Guardia di Finanza Verona) on 6 December 2011. This press conference immediately attracted the interest of the large international news agencies distributing the information internationally. However, no information was distributed by the Italian Ministry for Agriculture, waiting for official information from the judicial authority and Italian tax investigation. Thus, information about the Italian fraud case came to competent authorities of the possibly fraud-affected Member States through press publications and by different actors of the organic sector and not through information exchange procedures of the organic control system. For example in Germany, the fraud news was delivered to the competent authority by a German control body, which in turn was informed by an Italian control body. Thus, there was no official communication to the actors of the organic control system.

On 9 December 2011, the Italian Ministry for Agriculture confirmed the press release of the Italian tax investigation to the European Commission and to competent authorities of the other Member States. Ten days later, after a consultation between the and the Member States, the competent authorities of the Member States informed the national control bodies providing a list of companies possibly involved in the fraud, a product list and a preliminary list of commercial transactions from Italian trading companies to their direct clients in the Member States. However at that time, the EU-clients of the Italian fraudulent companies had already sold most fraudulent lots to other companies. Moreover, most of the 20 trading companies on the list had already left the organic control system. The situation of voluntary sales withdrawal of Italian companies from the control system, the suspensions, police investigations and sales to further EU-clients, made the traceability of the falsified lots very complex. To conclude, deficiencies in the information exchange were one key problem of the 'Gatto con gli stivali' fraud case. The case study revealed deficiencies at following levels:

### Active phase of the fraud case

Control bodies and control authorities:

- Missing information exchange according to Article 31 Regulation (EC) 834/2007 relating to the authenticity of conformity certificates (documentary evidences) issued by other control bodies, of contracts, of invoices and of delivery notes through cross checks;
- Missing information exchange according to Article 31 Regulation (EC) 834/2007 relating to the parallel certification of one operator by different control bodies;
- Missing information exchange according to Article 31 Regulation (EC) 834/2007 relating to operators changing the control body;
- Missing centralised internet publication of conformity certificates (documentary evidences).

### Phase after publication of the fraud

Control bodies and control authorities:

- Missing information exchange according to Article 31 Regulation (EC) 834/2007 relating to the fraud facts identified during the co-operation with the Italian tax investigation.

Competent authorities:

- Deficiencies on ensuring a co-ordinated approach and quick information exchange to identify and to report operators and lots affected by the fraudulent activities on the national level;
- Deficiencies on ensuring a co-ordinated approach and quick information exchange to identify and to report operators and lots affected by the fraudulent activities between EU-Member States.

Information exchange between control bodies as well as between control bodies and competent authorities was one of the key deficiencies complicating a quick seizure of potentially non-compliant organic products in the Member States.

## **Consumers' confidence in the organic control system**

### *Results of the consumer survey*

Regarding consumer trust in the actors of the organic sector the consumer survey reveals that respondents do trust but their confidence is not very pronounced (see Table 8.6).

**Table 8.6:** Mean values of extent of trust in different actors or institutions in different countries<sup>a</sup>

		All	DE	EE	FR	IT	PL	UK
Inspectors controlling organic farms and processors	Mean	0.7	0.5	0.6	0.6	0.9	0.9	1.0
	n	2805	478	443	472	484	477	451
Organic farmer	Mean	1.0	1.0	1.0	0.9	1.0	1.0	1.1
	n	2841	482	449	473	490	477	470
The supermarket where you usually buy organic products	Mean	0.5	0.3	0.5	0.4	1.0	0.3	0.7
	n	2799	468	442	463	491	469	466
The organic food shop where you usually buy organic products	Mean	1.1	0.9	1.1	0.9	1.1	1.2	1.2
	n	2722	452	430	458	484	467	431
Organic labels	Mean	0.7	0.3	0.7	0.5	1.0	0.9	0.8
	n	2849	477	455	475	493	481	468
Organic processors	Mean	0.6	0.3	0.6	0.5	0.8	0.8	0.7
	n	2752	476	443	453	474	471	435

Question: Considering organic products, to which extent do you trust the following actors or institutions? (7-point Likert scale, +3 = very high confidence, 0 = neutral, -3 = no confidence)

Source: Own data from consumer survey.

There is no clear picture whether consumers prefer publicly or privately organised controls of organic operators (see Table 8.7). Consumers agree that stricter control rules are needed. Furthermore, they would appreciate the publication of control results from organic operators on the internet.

**Table 8.7:** Mean values of extent of confidence in control bodies and rules in different countries

		All	DE	EE	FR	IT	PL	UK
The 'organic' inspections should be done by public institutions/authorities	Mean	1.4	1.4	1.2	1.1	1.7	1.4	1.3
	n	2736	472	431	447	485	463	438
Organic' inspection of farms should be done by independent private inspectors	Mean	1.1	0.9	1.7	0.9	0.6	1.5	1.2
	n	2762	464	452	451	481	462	452
Stricter control rules are needed	Mean	1.6	2.0	1.2	1.6	1.9	1.6	1.1
	n	2707	485	408	464	484	456	410
Control results from organic operators should be published in the internet	Mean	1.9	2.1	2.0	1.7	2.0	2.1	1.5
	n	2852	489	466	470	491	479	457

Question: Do you think the government or the European Commission should be more active to maintain or increase trust in organic products? Please indicate to which extent you agree to the following statements. (7-point Likert scale, +3 = very high confidence, 0 = neutral, -3 = no confidence)

Source: Own data from consumer survey.

### *Views of stakeholders*

The question whether the control system is adequate or not to ensure consumer protection was also addressed in the stakeholder survey. In total, 81 % of the surveyed stakeholders consider the organic control system to be highly effective in ensuring consumer protection. As very important are seen: mandatory annual inspections (83 %), additional risk inspection (80 %) and systematic and follow up investigation (82 %). According to the stakeholder survey, the following control aspects are less important for ensuring consumer confidence: no differences in the control system of the Member States (69 %), an explicit sampling and residue testing policy (63 %) and the definition of non-compliance categories and sanctions (66 %).

### *Scientific evidence*

A research study from Germany (Stolz et al., 2011) showed that organic consumers had a high level of trust in organic inspectors and organic farmers. Trust in organic labels and in organic processors was significantly lower than consumer trust in organic inspectors and organic farmers.

Results of the CERTCOST project (Janssen and Hamm, 2011) revealed that organic consumers from the Czech Republic, Denmark, Germany and Italy trust organic certification schemes in particular. Trust in organic certification systems was largely intertwined with perceived stricter control and familiarity with the organic logo. Consumers however have a low level of factual knowledge about organic production standards and the organic control system (Janssen and Hamm, 2012). This is also confirmed by research from Sawyer et al. (2009), McEachern and Warnaby (2008) and Hoogland et al. (2007).

## **8.4 Judgement and conclusions**

Based on the results presented in the section above, **it is concluded that the overall control system of organic farming is largely adequate in terms of achieving the global objectives of the Regulation, but with some shortcomings as regards its implementation**, taking the following into account:

- Annual inspection requirements are adequate to ensure fair competition and consumer confidence, although risk-based approaches could achieve the same aims at lower costs. However, guidance at EU level may be necessary to ensure a harmonised approach.
- Additional risk-based inspections required by the Regulation are in general an adequate tool to ensure fair competition and consumer confidence. However, they are implemented differently across the Member States and in several countries only to a limited extent. At present, the full potential of risk-based approaches is not exploited. Further development of risk-based approaches is necessary so that they can be applied to the organic control system.
- Exemption from the control system for operators who sell products directly to the final consumer or user are adequate and justified in cases where such operators only sell packed

and labelled food. In such cases, the upstream actors of the organic supply chain were already subject to the control system. However, there is an indication that this exemption is only justified if the supervision system ensures that such retail businesses are notified to the respective competent authorities and that the conditions for the exemption are periodically verified.

- Not all elements of the control system are consistently implemented across the Member States. This leads to a situation whereby, between Member States and even within one Member State, organic operators and products could be differently evaluated with respect to residues, and also operators could receive different sanctions for committing the same infringement. Thus for these areas, fair competition among organic operators and among control bodies cannot be not guaranteed.
- There is no robust indication that the distribution of responsibilities among the main actors involved in the control system is inadequate.
- The national supervision systems are not fully adequately and effectively implemented in some Member States due to insufficient procedures for supervision and limited resources of competent authorities to fulfil the supervisory role.
- There are some deficiencies in the exchange of information illustrated by the analysis of the recent organic fraud case.
- Consumers largely have confidence in the organic control system. But this trust is built upon perceptions and not on factual knowledge.

### **Detailed considerations**

The aim of Evaluation Question 3 is to evaluate to what extent the overall control system of organic farming, from the Commission, through Member States competent authorities, control authorities, control bodies and accreditation bodies, has been adequate to achieve the global objectives of the Regulation. If the control system does not effectively ensure full compliance with the rules across all Member States a) fair competition among organic farmers within the EU and b) consumers' confidence in organic products is not guaranteed. Therefore, it is particularly relevant to assess the functioning of the control system by evaluating whether or not the established processes and practices do lead to unfair competition or barriers to the production and marketing of organic products. The marketing of organic products would also be distorted if consumers' confidence in organic products was not ensured.

The judgement is based on documentary analyses (cross-country comparison) of the control procedures that have been implemented, interviews with national competent authorities and control bodies from 13 Member States, the case study results from the 'Gatto con gli stivali' fraud case, data from the CERTCOST-project, the consumer survey, and the review of scientific literature and public documents. An important information basis was the stakeholder survey which was responded to by 265 European stakeholders.

### *Adequacy of the annual inspection requirements*

Annual inspection requirements are adequate to ensure fair competition and consumer confidence. But risk-based approaches could achieve the same aims at lower costs.

There was consent between all stakeholder groups surveyed that mandatory annual inspections are important measures to ensure fair competition among organic operators and to ensure consumer confidence in organic products. Indeed, mandatory annual inspection is often used in the organic sector to demonstrate the integrity and authenticity of organic products to the consumer. It seems to be a convincing argument which is easy to communicate to the consumer: organic operators are inspected every year. Scientific literature shows that consumer trust is connected to the perceived strictness of the standards and regular controls. However, scientific literature also reveals that consumers have a very limited knowledge about the organic control system. Consumers have trust in the actors or logos rather than in specific elements of the organic inspection system. For consumers it is important that the certification process is trustworthy and that it ensures compliance. According to scientific literature, control bodies comply with the requirements of the Regulation of at least one annual control plus additional random controls. However, the share of unannounced controls varies considerably between control bodies and the Member States.

Scientific literature shows that the amount of the certification fee is not marginal, does matter to organic operators and loads the consumer price for organic products by around 1 %. As certification costs are particularly determined by the number of on-site controls, those could be reduced by reducing the number of on-site control visits for instance by strengthening risk-based inspection approaches. Scientific literature so far provides no evidence that annual inspections are the prerequisite for high detection rates of non-compliances. However, there is a body of literature suggesting that risk-based approaches ensure non-opportunistic behaviour of operators. There is evidence that the probability of non-compliance is higher for operators who have already been non-compliant and low for operators who are compliant.

In contrast to the annual visit of each organic operator, other areas work with considerably lower control frequencies. For example, the EU legal framework for the rural development programmes requires annual on-the-spot checks of 5 % of all beneficiaries (which could be halved under certain conditions).

### *Adequacy of the additional risk-based inspection*

Risk-based inspections are in general an adequate tool to ensure fair competition and consumer confidence. But the application of additional risk-based inspection is done differently and to a limited extent in the Member States.

There was consent between all groups of stakeholders surveyed that additional risk-based inspections are important measures to ensure fair competition among organic operators. In line

with the provisions of Article 27(3) of Regulation (EC) 834/2007 and Article 65(4) of Regulation (EC) 889/2008 control bodies should apply systematic risk assessments of their operators against risk factors linked to the nature of their operation. However, the documentary analysis showed that not all Member States have established national guidelines for risk-based inspection and thus risk-based inspection is done differently and used to different extent across the Member States. This is confirmed by both, stakeholder responses and scientific literature which highlights that there is no harmonised understanding of what criteria for risk-based inspection could be used and how exactly risk analysis should be carried out.

There is broad consent among the stakeholders surveyed and interviewed and in scientific literature that risk-based inspection could a) improve the organic control system considerably and b) reduce the certification costs for organic operators as a result of reducing the number of on-site control visits for low-risk operators. Scientific literature suggests comprehensive and dynamic risk-based approaches which determine auditing intervals, auditing depth, unannounced spot checks and differentiated auditing focuses, cross-checks along the entire supply chain and targeted sampling and testing. These suggestions from research go beyond the currently used approaches for additional risk-based inspection and still need to be further developed so that they can be used in the organic control system. Furthermore, such dynamic approaches are not compatible with static approaches like mandatory annual control visits. Thus the full potential of risk-based approaches is currently not used in the organic control system.

*Adequacy and justification of Article 28(2) of Council Regulation (EC) 834/2007 which allows Member States to exempt operators who sell products directly to the final consumer or user from the control system*

Exemptions from the control system for operators who sell products directly to the final consumer or user are adequate and justified in cases where such operators only sell packed and labelled food.

Article 28(2) of Council Regulation (EC) 834/2007 enables Member States to exempt retail operators who sell products directly to the final consumer or user from the control system if these retail operators do not produce, process, pack, label or store organic products elsewhere, do not import organic products from third countries and/or outsource these activities to a third party. All 13 case study countries use this article and exempt retailers which sell packed and labelled food. The results of the web-based survey showed that stakeholder views vary whether retailers should be exempted from the control system or not. Opponents, particularly producers and control bodies/control authorities, favour the inclusion of the retail sector in the control system to a large extent because retailers are in direct contact with the consumers and therefore have a particular responsibility to ensure consumer confidence. However, both stakeholder groups might have vested interests (non-exclusion of the perceived most powerful actor, principle of same requirements for all, business opportunity for control bodies if all actors of the supply chain are included). A few stakeholders mentioned the risk of commingling organic products with conventional products and incorrect labelling. However, 19 stakeholders (among

them 6 control bodies, 3 competent authorities, and 2 national authorities) take the view that retail of packed food does not bear any risk of commingling and incorrect labelling. In cases where retailers sell packed and labelled food, the upstream actors of the organic supply chain are subject to the control system. Additional controls of retailers which sell the packed and labelled food may increase costs for the retailers but might neither increase consumer confidence nor fair competition among organic operators.

This view is supported by the only research study identified in this context (Neuendorff, 2012) which argues that there is a low risk of commingling with conventional products and incorrect labelling on the basis of 2005-2011 inspection data of one German control body.

The German study by Neuendorff (2013), on the other hand, showed one problem which was not raised by stakeholders: Retailers which start preparation or processing activities and which do not submit their activities to the control system as required could be rarely identified and penalized by the competent authorities. Thus, the exemption of retailers selling only packed and labelled food is only justified and adequate if the supervision system of the Member States can ensure that such retail businesses are notified and the conditions are periodically verified.

#### *Level of harmonization/consistency in the Member State's procedures of setting-up national control systems and the differences in the control procedures*

The results of the documentary analyses in the case study countries, the stakeholder survey and research results indicate that not all elements of the control system are consistently implemented in the Member States.

The documentary analysis conducted in the case study countries identified areas which are regulated differently in the Member States, namely risk-based inspections, residue sampling, testing and analysis, issuing of sanctions, and accreditation processes for control bodies. Furthermore, the review of scientific literature identified differences in the number of unannounced controls. These areas were also mentioned by the stakeholders.

All stakeholder groups agreed that an explicit sampling and testing policy for control bodies and the definition of sanction categories contribute to ensure fair competition. However, Denmark, Germany, Italy and Slovenia were the only countries of the 13 case study countries where residue sampling and analysis of organic products is statutorily regulated, which in turn leaves in all Member States without statutory requirements the procedure for testing and analysis at the responsibility of the control bodies. Similarly, only four of 13 national case studies defined the issuing of sanctions according to Article 30 of Regulation (EC) 834/2007 (Germany, Estonia, the Czech Republic and the Netherlands). This leads to the situation that between Member States and in the case of regional implementation even within a Member State a) organic operators and products are evaluated differently with respect to residue testing and b) operators could be sanctioned differently for having committed the same infringement. For these areas, fair competition among organic operators may not be ensured. Difference in the control procedures

can also lead to unfair competition between control bodies within a Member State. This involves the risk that the way control procedures are implemented could influence operators' control body choice and might cause differences in the certification fees (risk of race to the bottom).

Research results and stakeholders suggest introducing a harmonised system for issuing sanctions. However, it is challenging to define non-compliance and sanctions in a uniform way without losing the flexibility required for acknowledging the specific context of each case, which in turn could also lead to unfair competition among organic operators.

The need for harmonisation of control processes between accreditation bodies across Member States was only highlighted by three German stakeholders (two competent authorities, one organic sector organisation). A similar conclusion was also drawn by Dabbert (2011) who argued in the CERTCOST-project that the effectiveness of mandatory accreditation on harmonised supervision procedures seems to be quite limited.

As far as residue testing and analysis is concerned, on the one hand stakeholders strongly demand a common EU framework, while at the same time there is also a great uncertainty between the Member States and within the organic sector as to how and to what extent residue testing and analysis should be regulated in the EU organic farming legislation. This contradiction might be due to two reasons: First, mandatory residue testing conflicts with the process oriented-approach of organic farming. As there is no scientific technology at hand which allows the unambiguous identification of whether a product has been produced in compliance with the organic rules or not, process orientated control is indispensable. In case of doubt, residue testing could provide evidence about the use of unauthorised substances. Second, there is a controversial discussion surrounding the question whether the introduction of thresholds on pesticide residues make sense or not. The supporters argue for clear criteria for control bodies to decide whether there may be breaches of the organic regulations or any irregularity. However, opponents argue that in a world of increasingly quickly degrading and prohibited pesticides, the introduction of a threshold would lead to the non-identification of prohibited pesticide applications and thus undermine organic integrity.

This conflict between setting clear rules and leaving flexibility to the Member States is also reflected in the results of the stakeholder survey. Particularly stakeholders from Denmark, Central and Eastern European countries and from the United Kingdom were slightly in favour of regional flexibility in the control system. Differences in the implementation of control rules might be necessary to acknowledge the different conditions for agriculture in the Member States. Stakeholders voiced the risk that the EU organic farming legislation regulates too much and does not leave enough space for effective controls.

However, to ensure fair competition, the implemented control procedures have to lead to the same result which is compliance with organic rules and comparable levels of sanction for similar severity of infringement. With respect to the areas identified where the control system does not

seem to be uniformly implemented in the Member States (residue sampling, testing and analysis, risk-based approaches, share of unannounced controls, and issuing of sanctions) there might be different ways to ensure that the control rules will lead to the same results. Therefore there is the need to distinguish carefully between a) areas where harmonisation needs to be achieved through more detailed and mandatory rules, b) areas which where providing general guidelines or a common framework would be sufficient, or c) areas which could be easily harmonized by providing information or information exchange platforms.

*Adequacy of distribution of responsibilities among the main actors involved in the control system, including application of the accreditation system*

There is no robust indication that the distribution of responsibilities among the main actors involved in the control system, including in respect of accreditation, is inadequate.

One Austrian control body, one Spanish competent authority and one Italian control body pointed out deficiencies in the responsibilities among actors involved in the control system. They mentioned scattered responsibilities between different national authorities, not well-defined links between the surveillance activities of competent authorities and accreditation. Due to the fact that these deficiencies were mentioned by only three interviewees and that these deficiencies were not raised in the stakeholder survey, the information basis is considered to be too weak to draw any conclusions. Only one Danish stakeholder mentioned deficiencies in the distribution of responsibilities accreditation bodies. Thus, there is no indication that distribution of responsibilities with accreditation bodies is an issue.

The 'Gatto con gli stivali' fraud case identified a problem related to allocation of responsibilities: detailed information about suspicious fraudulent organic actors identified by the tax investigation was not transferred to the Ministry of Agriculture, as the competent authority. This might point to the general problem that information on fraud cases detected by other actors cannot not be used by the actors of the organic control system.

*Public surveillance system*

The public surveillance system encompasses the entire EU framework of activities of national competent authorities and accreditation bodies as described in the EU organic farming legislation to supervise and monitor the organic control system at the level of the control bodies. The national supervision system is not adequately and effectively implemented in some Member States.

All competent authorities interviewed in the 13 case study countries indicated that the national approval and surveillance system is appropriate in the respective country and control bodies interviewed in France, the Netherlands, Poland, Bulgaria, Estonia and Slovenia were positive about the national surveillance system. Furthermore, also the French and German control body reported that the national supervision system is effective through the double requirements of approval by the competent authority and accreditation through the national accreditation body.

The positive view is however only partly confirmed by the results of the stakeholder survey. For example, 60 % of the control bodies from Central and Eastern European countries and 73 % of Italian control bodies responding to the survey mentioned that national supervision is not fully adequate and functioning. Furthermore, the control bodies interviewed in Italy, Austria, the Czech Republic and the United Kingdom considered the supervision system of the competent authority over the control bodies not to be fully effective. Moreover, several control bodies argued that the competent authorities of two Member States are not endowed with the financial and human resources that would be required to do the supervision properly and that the competent authority staff lack competence. While in the case study countries all competent authorities interviewed conduct annual office audits, only a limited number of witness audits were conducted in the United Kingdom, Bulgaria, and Italy and no witness audits were conducted in Poland and Slovenia. Only a German competent authority and organic sector organisation stated that control effectiveness of the accreditation bodies over the control bodies could be improved whereas the Slovenian competent authority reports that the accreditation body is very strict, reliable and impartial. Lack of technical competence in organic farming of accreditors was mentioned by two stakeholders from the United Kingdom and Portugal. The 'Gatto con gli stivali' fraud case study identified deficiencies in the on-site supervision of control bodies due to for instance ineffective control procedures or not controlling the right sections of an organic enterprise. The varying number of witness audits and the deficiencies identified in the fraud case might be due to the above-mentioned limited resources of competent authorities.

Furthermore, the stakeholder survey revealed that the information collected from competent authorities for supervision is often not used. Research found one case of obvious incorrect reporting by a German control body which was neither detected by the control body nor by the competent authority. This also indicates that at least some competent authorities do not check the information provided for supervision purposes carefully or do not use the information. The stakeholder survey and research suggest that this might be due to data structure and quality.

In some Member States the information collected in the course of supervision activities was reported to be not substantial and too focused on formal requirements, thus the information might not be useful for supervision. Also the European Court of Auditors (2012) observed insufficient procedures for supervision in some Member States.

Even though these might be single cases the findings presented about public surveillance system give an indication that some competent authorities may not fully fulfil their supervisory role over the control bodies. Supervision of control bodies is an important means to ensure both fair competition and consumer confidence. In some Member States, the implementation of the national supervision seems not to ensure these.

### *Information exchange between the actors involved in the control system*

There are some deficiencies in the exchange of information illustrated by the fraud case study.

The stakeholder interviews showed that a continuous and mostly institutionalised information exchange is established between the control bodies at national level in most case-study countries. Furthermore, the control bodies indicated in the web-based survey that there is an established continuous dialogue between the control bodies and the competent authorities in most countries.

However, the results from the 'Gatto con gli stivali' fraud case study highlighted deficiencies in information exchange which at least facilitated the fraud. First, there was a lack of information exchange between different national control bodies controlling different areas of the same operator. Furthermore, there were two different control bodies involved in the process and there was also a lack of information exchange between the original control body and the one that took over later. Thus, even though there seems to be an established dialogue between control bodies in Italy, in this specific case, no procedures were effective in ensuring information exchange to impede fraud. Second, information exchange was lacking between control bodies active in different Member States which made it difficult to prove the authenticity of certificates. Finally, information exchange between competent authorities to identify and to report operators and lots affected by the fraudulent activities on the national level was too slow so that the fraudulent lots were already sold and thus could not be taken from the organic market. Thus, information exchange across competent authorities in the affected Member States did not function in the actual fraud case.

Deficiencies in the exchange of information have also been revealed by the European Court of Auditors (European Court of Auditors, 2012). The court found in two Member States which have been visited that the information flow between the control system for organic production and for policy support under the agri-environment measures to be insufficient. This again stresses the lacking of interfaces between actors of the control system and, in this case, actors responsible for agri-environmental schemes.

### *Consumers' confidence in the organic control system*

Consumers largely have confidence in the organic control system.

The consumer survey revealed that consumers trust largely in the actors of the organic control system but their trust is not very pronounced. This is confirmed through scientific literature showing a high level of consumer trust in inspectors controlling organic operators, which is significantly higher than consumer trust in organic labels. However, there is evidence from various researches that consumers' knowledge about the organic control system is very limited. Stakeholders perceive the procedures of the control system to be effective to ensure consumer trust, even though consumers have almost no knowledge about these procedures. Trust is built upon perceptions and not on factual knowledge which might be due to lacking or not tailored consumer information about organic farming and its control system.



## Chapter 9

# Adequacy of the import regime

### 9.1 Introduction

#### Evaluation Question 4

*To what extent have the import rules been adequate to achieve the global objectives of the regulation (i.e. to ensure the effective functioning of the internal market, to guarantee fair competition and to ensure consumer confidence)?*

*In answering this question the lessons learned from the application of the equivalence principle need to be examined, drawing on the experience gained with the expiring import regime based on import authorisations managed by Member States, and with the import regime based on recognition of equivalent third countries managed by the Commission.*

In the last two decades, organic supply and distribution chains have become increasingly globally organised and a large number of products sold on the EU market are imported (Halberg et al., 2006). Although no detailed data is available about the share of products imported into the EU, there are few indicators showing the relevance of imports for the organic market. For example, the EU Member States have been granting around 4 000 import authorisations annually (European Court of Auditors, 2012) and there are around 1 600 approved importers in the EU, mostly located in Germany, the Netherlands, the United Kingdom, Denmark, Sweden and France (see Figure 2.3).

Typical products which are imported include coffee, cacao, tea, tropical fruits but also products which are grown in Europe (Willer and Kilcher, 2012). According to Schaack et al. (2011), for example 95 % of linseeds, 15 % of potatoes, 11 % of barley, and 8 % of wheat sold on the German market were imported from non-EU countries in 2009/2010. This illustrates that imported organic products are competing with organic products grown in Europe. For ensuring fair competition and consumer protection it is of high importance that production rules are equivalent with the EU requirements and that the control systems ensure the same level of assurance of conformity as within the EU. On the other hand, it is relevant for functioning of the internal market that administrative procedures allow for timely delivery of the products at a reasonable cost.

Requirements for imported products and the recognition and supervision procedures of control authorities and control bodies in third countries are specified in Article 32 and 33 of Regulation (EC) 834/2007. As shown in Table 9.1, the import rules comprise of four different procedures to place organic products from third countries on the EU market. Accordingly, organic products may

be imported when the equivalence<sup>1</sup> is assured through import authorisations (Procedure 1, only applicable until July 2014)<sup>2</sup>, the recognition of a third country (Procedure 2) or the recognition of a control body using equivalent standards (Procedure 3, in force since July 2012). Details on the requirements are given in Chapter 3 and in Section 9.3.1. Besides the equivalence approach, products may also be imported that are certified by a control body and comply fully with the EU Regulation (compliance approach, Procedure 4). However this approach has not yet been implemented and therefore has not been considered here.

**Table 9.1:** Approaches and procedures of the import regime

Approach	Procedure	Status
Equivalence with the EU Regulation	Procedure 1: <b>Granting authorisations to importers</b>	Implemented under Regulation (EEC) 2092/91 Member States shall no longer grant any authorisation from July 2014
	Procedure 2: <b>Recognition of third countries</b> having a national system complying with principles and production rules equivalent to EU rules and applying control measures with equivalent effectiveness to EU rules (Recognition by the Commission)	Implemented under Regulation (EEC) 2092/91
	Procedure 3: <b>Recognition of control bodies</b> complying with principles and production rules equivalent to EU rules and applying control measures with equivalent effectiveness to EU rules (Recognition by the Commission)	Implemented under Regulation (EC) 1235/2008 In force since 01.07.2012
Compliance with the EU Regulation	Procedure 4: <b>Recognition of control bodies</b> applying the EU Regulation by the Commission	Not yet implemented <sup>a</sup>

a) Implementing rules exist but the deadline for submitting applications from control bodies has been postponed until 31 October 2014

Source: Own presentation based on Regulation (EC) 834/2007.

In the following section, the judgment criteria and approach are described. This is followed by a presentation of the results with regard to the adequacy of the import procedures, effectiveness of the control system and the degree of consumer confidence in imported organic products. Finally, the judgement in response to the evaluation question is presented.

<sup>1</sup> According to Article 2 of Regulation (EC) 834/2007 the term 'equivalence' means that applied systems and measures "are capable of meeting the same objectives and principles by applying rules which ensure the same level of assurance of conformity."

<sup>2</sup> Under the previous import regime (Regulation (EEC) 2091/92), the majority of products were imported on the basis of import authorisations. This has changed since the Commission recognises control bodies to carry out controls in third countries.

## 9.2 Approach

The adequacy of the import regime is evaluated on the basis of several judgement criteria, which were deduced from the model of intervention logic (see Chapter 5) and the background of the evaluation question. The following criteria were used for this evaluation question:

- (1) **Procedures of the import regime (import authorisation managed by Member States, recognition of equivalent third countries, recognition of control bodies operating in third countries with equivalent rules) are (or are not) adequate to assure conformity of organic products imported from third countries with EU requirements and to ensure a timely delivery of these products**

While within the EU the structures, responsibilities, controls and surveillance are clearly defined, the situation in third countries is more complex. The framework conditions (climate, socio-economic situation, knowledge on organic agriculture, etc.) often differ substantially from the situation within the EU. This is particularly the case in developing countries where a functioning legal structure or access to advisory services is not always given. The import procedures have to reflect these different conditions while at the same time ensuring the same level of assurance of conformity but also a timely delivery of the products at a reasonable cost. To evaluate the adequacy of the import procedures, available publications and documents were reviewed, an import case study was carried out and a web-based stakeholder survey was conducted complemented by semi-structured interviews with European Commission representatives, recognised control bodies and importers.

- (2) **The control system is (or is not) effective**

While the first criterion is focussing on the general concept of the import regime, the second criterion deals with the effectiveness of controls, i.e. the concrete output of a specific element of the import regime. Furthermore, this criterion also addresses the question of whether public institutions involved in supervising control bodies are functioning effectively (or not) focussing on the specific challenges related to supervision of operations in third countries. Means for assessing this criterion were scientific literature (e.g. results from EU-funded CERTCOST-project) and other documents from European and private bodies, the results of the import case study and a stakeholder survey which was complemented by semi-structured interviews with European Commission representatives, recognised control bodies and importers. It is worth noting that the difficulties to assess the effectiveness of controls as pointed out in Chapter 8 also apply for controls in third countries.

(3) **Consumers have (or have not) confidence that the import regime assures conformity of organic products imported from third countries regime with organic products produced in the EU**

From a market perspective, it is essential that consumers can trust organic products from third countries as being produced and controlled in an equivalent way as organic products from the EU. If this is not the case, the import regime would not be adequate. In order to assess consumer confidence in products from third countries, the results of the consumer survey from the six study countries were used (see Chapter 10 for details).

## 9.3 Results

### 9.3.1 Adequacy of the import procedures

In the following, the results of the adequacy of the import procedures are described. First, information about the general feasibility and problems related to the import procedure focussing on the equivalence approach is presented. Subsequently, findings with regard to the adequacy of the three specific import procedures ensuring equivalence (import authorisation, recognition of third countries, recognition of control bodies operating in third countries) are described.

#### 9.3.1.1 Adequacy of the import procedure in general

##### *Views of stakeholders*

The response of stakeholders to the web-based survey indicates that the **rules and procedures of the import regime** are in general perceived as equivalent with the EU requirements and thus meet the same objectives and principles as the regulatory requirements within the EU. Almost half of the surveyed stakeholder agreed totally or largely that the production and processing standards for imported organic products are equivalent to the EU requirements (see Table 9.2). In order to express differences between stakeholder groups, individual ratings were transformed in a seven-point metric ranging from +3 (total agreement) to -3 (total disagreement) with 0 indicating neither agreement nor disagreement. The mean value of the metric was 1.3. On average, equivalence was particularly positively assessed by control bodies (1.7), producers (1.5), processors (1.4), whereas competent authorities (1.2), organic operator organisations (1.1) and governmental authorities (0.7) were more reluctant in their agreement.

**Table 9.2:** Views of stakeholders regarding the equivalence of organic standards and controls in third countries compared to EU requirements

		Agree			Neither/ nor	Disagree			I don't know
		totally	largely	partly		partly	largely	totally	
The production and processing standards for imported organic products are equivalent to the EU requirements	n	33	64	41	5	28	10	7	16
	%	16	31	20	2	14	5	3	7
The control system for imported organic products is equivalent to the EU requirements	n	30	50	43	10	29	18	6	18
	%	15	25	21	5	14	9	3	8
In case of suspected or detected irregularities of imported organic products: the existing procedures are adequate to ensure fair competition and functioning of the EU internal market	n	16	42	32	11	30	24	15	34
	%	8	21	16	5	15	12	7	16

*Question: Please indicate the degree of your personal agreement to each of the following statements.*

Source: Own data from web-based stakeholder survey:

As far as the **equivalence of the control system** is concerned, 61 % of the stakeholders agreed that the system is equivalent to EU requirements. The mean value was 1.1 where again the control bodies (1.6) and producers (1.4) had the highest agreement whereas competent authorities (1.0), organic operator organisations (0.7) and governmental authorities (0.5) agreed only partly.

Interestingly, survey participants were much more sceptical whether the **procedures to follow up on suspected or detected irregularities** of imported products are adequate to ensure fair competition and functioning of the internal market. As shown in Table 9.2, only 45 % agreed with that, while 34 % disagree. Producers largely agreed (mean value 1.3) whereas the majority partly agreed (mean value of all stakeholders 0.9). The most critical judgement came from governmental authorities (0.3).

#### *Findings from the review of publications*

According to Regulation (EC) 1235/2008 the release of products from third countries for free circulation in the EU requires that products are accompanied by an original certificate of inspection at customs when entering the EU. To be accepted, the certificate of inspection must have been issued by a control body recognised through an import authorisation by a Member States authority (Procedure 1) or by the control authority or control body from a recognised third country (Procedure 2) or by a recognised control authority or control body in the third country (Procedure 3).<sup>3</sup>

<sup>3</sup> See Article 13(2) to (7) and Annex V of Regulation (EC) 1235/2008 for details.

Neuendorff (2007) reported, irrespective of import procedures, that EU-importers perceived the existing model of the **certificate of inspection as a burden**, mainly because administrative procedures implemented by control bodies in third countries are slow and the procedure is paper-based (no electronic database so far). Importers and the first recipient of organic products from third countries need to be defined before the import of the organic products takes place. If there is a change, the certificate must be re-issued by the control body or control authority operating in the third country.

#### *Results of the import case study analysis*

According to the results of the interviews carried out in the import case study, import companies as well as control bodies state that the certificate of inspection does not allow the EU import company to **ensure full traceability** of organic products, because only the export company and the latest processor in the third country are mentioned, but not, e.g., the farm(s) where the raw material is produced. For this reason, importers often consider the traceability of organic products in third countries as not fully adequate.

### **9.3.1.2 Adequacy of the import procedure based on granting import authorisations to importers (Procedure 1)**

#### *Findings from the analysis of provisions*

The import procedures based on granting authorisations to importers are regulated by transitional rules set out in Article 19 of Regulation (EC) 1235/2008. For issuing an import authorisation a certificate of inspection from a control body is needed. Competent authorities decide whether the control system deems to be equivalent with EU requirements. There are no EU rules on how a control body has to prove its competency and how supervision of a control body has to be guaranteed. National competent authorities (e.g. Germany) usually require an ISO 65 accreditation<sup>4</sup> of control bodies or an equivalent assessment as proof for technical competence, impartiality and professional integrity. Since July 2012, import authorisations are only granted for products that are not certified by a recognised control body or originated from a recognised third country. As the implementing regulation for imports sets out, existing authorisations shall expire on 1 July 2014 at latest and Member States may not grant new authorisations beyond that date.

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<sup>4</sup> ISO 65 is an international quality norm for certification bodies operating a product certification system. This standard has been revised recently by ISO/IEC 17065.  
See: [http://www.iso.org/iso/home/news\\_index/news\\_archive/news.htm?refid=Ref1657](http://www.iso.org/iso/home/news_index/news_archive/news.htm?refid=Ref1657)

### *Data on requests for import authorisations*

As a result of the implementation of the import procedure based on recognised control bodies, one could expect that the number of import authorisations decreased. In fact, data from the Organic Farming Information System (OFIS)<sup>5</sup> shows that the number of issued authorisations dropped from 450 for the period 01.01.2012 to 31.03.2012 to 198 for the same period in 2013. Between 01.01.2013 to 21.06.2013, 442 import authorisations were granted – mainly for cacao, coffee, tea, aquaculture products, bee products, wine and fresh and processed herbs, fruit and vegetables (see Table 9.3). Considering that import authorisations are only requested for imports not covered by the other two import procedures (i.e. Procedure 2 and 3), the number is however still relatively high.

On the basis of the requested import authorisations, four main reasons can be deduced why import authorisations were requested:

- First, because certain products were not covered by the scope of recognised countries. For example, this was the case for imports of wine from Argentina or aquaculture products from China.
- Second, because no control body has been recognised so far to carry out controls and issue certificates of inspections in a certain country. This was the case for imports of spices from Myanmar.
- Third, because the control body carrying out the control was not recognised by the Commission, although other control bodies operating in this country were recognised. This was the main reason for requesting import authorisation in the first half of the year 2013.
- And fourth, the recognition for a third country or control body has been withdrawn and issued certificates were no longer sufficient for exports. This was e.g. the case for India where the recognition for processed agricultural products for use as food was withdrawn in spring 2013, which led to a situation where no control body operating in the country was directly recognised by the Commission and subsequently numerous import authorisations were issued.

A key question in this context is whether the phasing out of the import authorisations will have a negative impact on imports from third countries or not. Possible effects can be deduced on the basis of theoretical considerations. The first reason will probably become less relevant in the future, since the EU implemented rules for wine production in 2012 and it can be expected that control bodies will extend their scope. The might also be valid for aquaculture where the rules came into force in 2010. As far as the second reason is concerned, it can be expected that such products will be certified by recognised control bodies only or similar products will be imported from other countries where recognised control bodies are operating. A similar shift is also likely with regard to the third reason. In all three cases, little negative effects on the supply of products

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<sup>5</sup> See [http://ec.europa.eu/agriculture/ofis\\_public/index.cfm](http://ec.europa.eu/agriculture/ofis_public/index.cfm); Swiss import authorisations have been excluded.

from third countries can be expected. There are however few specific cases, where the phasing out of the import authorisation could lead to a certain market failure. This could happen, if food specialities are produced in only certain countries, no substitutes exist in other countries and where control bodies have no incentive to request for a recognition to carry out controls (e.g. because it is not economically viable even if a demand for such products exist). Problems could also occur, if recognised control bodies are not able or not willing to expand their activities even if a demand for such products exists. A further case is the withdrawal of the recognition of third countries or control bodies or limitations of scopes granted earlier as in the case of India. Withdrawals bear the risk of trade distortion depending on the trade volume affected.

**Table 9.3:** Number of import authorisations per product group notified in the period 01.01.-21.06.2013

Products	Examples	Number of import authorisations
Wine	-	39
Bee products	Honey, pollen	28
Aquaculture products and seaweed	Algae products, spirulina, chlorella, shrimps	40
Processed fruit	Dried fruit, pulp, juice	43
Other process products	Soy bean flower	45
Cacao, coffee	-	47
Tea	Green and black tea	51
Other products	Herbs, fresh fruit and vegetables or import authorizations comprising of various products of the categories above	149
<b>Total</b>		<b>442</b>

Source: Own calculation based on OFIS.

### *Findings from the review of publications*

Weaknesses in the system used for granting import authorisations were identified by the European Court of Auditors (2012), who stated that it is *“extremely difficult to ensure a harmonized approach by the competent authorities (...) when issuing import authorisations”*. They further noted that *“Member States do not actively check whether control bodies charged with issuing the certificates of inspection keep their accreditation up to date and whether the scope of the accreditation provided is pertinent to ensure equivalence with EU standards”*. Furthermore only documentary checks are done and none of the Member States carry out on-the-spot inspections. The report finally concluded that the Commission does not have access to sufficient reliable data to be able to assess whether import authorisations granted by Members States satisfy the conditions established by the Regulation.

Concerns about the different interpretation of rules in third countries were mentioned by Coli (2012). She argued (from the control bodies' perspective) that under the procedure based on

import authorisations, control bodies operating in third countries with the same agronomic conditions, took different decisions about conversion period reduction, on derogations for the use of non-organic seeds or on use of non-organic agricultural ingredients. Very often lower requirements were used to achieve a competitive advantage over competing control bodies. The consequence of this was according to Coli (ibid) that *“imported organic products, even if certified by control bodies and authorised by EU Competent Authorities, were not managed in equivalent systems.”* From that she concluded that there is a need for more transparency and clear specific instructions for control bodies.

Concerns with regard to unfair competition were also reported by Abay et al. (2011) who carried out a focus group discussion with stakeholders to evaluate the strengths and weaknesses of the import procedure based on recognised control bodies compared to granting import authorisations. Stakeholders stressed particularly the problem that Member States apply different approaches for issuing import authorisations and that it is difficult or very time consuming in some Member States to get an import permit.

### 9.3.1.2 Adequacy of the import procedure based on recognition of third countries (Procedure 2)

#### *Findings from the analysis of provisions*

Regulation (EC) 837/2007 allows the import of organic products from non-EU countries, if the country is included in the Commission’s list of third countries, which requires that the national organic legislation in these countries complies with principles and production rules equivalent to the EU rules and that the control measures are of equivalent effectiveness. The procedure for requesting inclusion is defined in Article 8 of Regulation (EC) 1235/2008. Accordingly, the third country has to submit a technical dossier, which includes among others:

- the production standards applied; and
- the control system applied in the third country, including the monitoring and supervisory activities carried out by the competent authorities.

Currently, 11 countries are included in the list of third countries. As shown in Table 9.4, recognition is specified for particular product categories. Unprocessed plant products, processed agricultural food products and vegetative propagating materials and seeds for cultivation may be imported from all third countries included in the list, whereas exceptions exist e.g. with regard to seaweed and wine. Furthermore some third countries are also recognised with regard to live animals or unprocessed animal products as well as processed agricultural feed products. The list further specifies the origin of recognised products. For most third countries the EU recognises only those products that have been produced within the third country but not the ones

imported.<sup>6</sup> Only for Israel, Switzerland and USA imported products are accepted if certain conditions are met.

**Table 9.4:** List of third countries and relevant specifications

	Unprocessed plant products <sup>a</sup>	Live animals or unprocessed animal products	Aquaculture products and seaweeds	Processed agric. products for use as food <sup>b</sup>	Processed agric. products for use as feed	Vegetative prop. material and seeds for cultivation
Argentina	✓	✓		✓		✓
Australia	✓			✓		✓
Canada	✓	✓		✓	✓	✓
Cost-Rica	✓			✓		✓
India	✓					✓
Israel	✓			✓		✓
Japan	✓			✓		✓
Switzerland	✓	✓		✓	✓	✓
Tunesia	✓			✓		✓
United States	✓	✓		✓	✓	✓
New Zealand	✓	✓		✓		✓

a) Seaweed not included apart from Canada and USA.

b) Wine not included apart from USA.

Source: Own aggregation of information provided in Annex I of Regulation (EC) 508/2012 and Regulation (EC) 125/2013 amending Annex III of Regulation (EC) 1235/2008.

### *Findings from the review of publications*

Problems with regard to the import regime based on the recognised third countries were identified in the CERTCOST-project. Abay et al. (2011) reported that some recognised third countries are occasionally exporting certified products which are fraudulent. This problem was also addressed by the European Court of Auditors who concluded in their report that *“the Commission does not have sufficient information to satisfy itself that the control system for organic production in third countries recognised as equivalent continues to fulfil the regulatory requirements as long as they keep this status* (European Court of Auditors, 2012).

A critical note on the third countries list was given by Ball (2012) from the IFOAM EU Group if the recognition is based on a bilateral agreement. He remarked with regard to the bilateral agreement recognising the US National Organic Program and the EU legislation on organic farming as being equivalent that such agreements improve prospects for trade but also bear the risk of market distortions. He illustrated this concern by the following two examples: *“The US NOP list of permitted additives contains several additives such as Tragacanth Gum which are not permitted in the EU regulations. Therefore US processors could make an organic product containing Tragacanth Gum and sell it in the EU but EU manufacturers could not produce and sell*

<sup>6</sup> If, for example, a company in Costa Rica produces chocolate and all the ingredients are originated from Costa Rica, the product would be recognised. On the contrary, if only one ingredient, e.g. milk powder, has been imported, the product would not be in the scope of the third country recognition.

*the same product. Similarly the addition of Calcium Carbonate to food as a source of calcium is permitted in the US organic rules, but EU organic regulations only allow it where addition is required by other EU legislation.”* To maintain trust in the light of such concerns, he stressed that *“the process whereby equivalence is developed must be transparent. Ideally it must be monitored and reported on publically by the Commission and the Member States who conduct equivalence assessments.”* The request for more transparency for the assessment of equivalent standards has also been raised by various stakeholders (AFI, 2011; EOCC, 2011).<sup>7</sup> Another problem was mentioned by the Commission who stated that the bilateral equivalence system is arriving at its limits in terms of administrative burden<sup>8</sup> and for resources so a plea was made to move towards multilateral agreements (European Commission, 2012).

The European Court of Auditors identified weaknesses in the management of the list of equivalent third countries caused by the fact that the Commissions resources for treating requests of inclusion in the list of equivalent third countries is inadequate. An example given was that out of 25 applications for inclusion in the list of equivalent third countries received between 2000 and 2011 only 8 could be examined (European Court of Auditors, 2012).

### 9.3.1.3 Adequacy of the import procedure based on recognition of control bodies (Procedure 3)

#### *Findings from the analysis of provisions*

For products not imported from a recognised third country, Article 33(3) of Regulation (EC) 834/2007 lays down that the Commission may recognise control bodies competent to carry out controls and issue certificates of inspection in third countries. For the recognition, control bodies have to submit a technical dossier, which includes among others:

- an overview of the activities of the control body in the third country;
- a description of the production standards and control measures applied in the third countries, including an assessment of the equivalence of these standards; and
- a copy of the assessment report issued by an assessment body<sup>9</sup> confirming performance of the control body and the equivalence of the implemented production standards and control measures.

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<sup>7</sup> The EOCC called for equivalency criteria to be made public to indicate which elements were non-negotiable baselines for equivalency, both for Annex IV and for Annex III. The EOCC also asked for a base line for control body standards. They raised concern on the reliability of the overall system in the absence of clarity on equivalency criteria.

<sup>8</sup> A key challenge for the Commission is to ensure continued equivalence considering the rapid growth of the sector and the dynamics of the legislation.

<sup>9</sup> Assessment bodies are e.g. competent authorities (either of the third country concerned or of a Member State), national accreditation body with competence in organic agriculture or an international supervisory or accreditation body that is specialized in organic agriculture.

Because control bodies cannot refer to the EU Regulation as applied standard but have to submit a standard equivalent, each of these standards is assessed individually by the Commission. Single regional standards equivalent with EU rules are not foreseen in the import rules. Once a control body has been recognised, it needs to undergo regular on-the-spot evaluation, surveillance and multiannual re-assessment of their activities by an assessment body.

According to Annex IV of Regulation (EC) 502/2012, 53 control bodies have been so far recognised to carry out controls and issue certificates of inspection in third countries that are all together operating in 126 non-EU Member States (see also Table 9.5).

**Table 9.5:** Number of countries where at least one control body is recognised to carry out controls and issue certificates of inspection in third countries differentiated for individual product categories

	Unprocessed plant products <sup>c</sup>	Live animals or unprocessed animal products	Aquaculture products and seaweeds	Processed agric. products for use as food <sup>c</sup>	Processed agric. products for use as feed	Vegetative prop. material and seeds for cultivation
Africa	37	11	1	36	1	2
Asia <sup>a</sup>	30	11	3	31	1	1
Europe	18	10	1	17	1	4
Oceania	9	2	0	8	0	0
North America	1	0	0	1	0	0
South America <sup>b</sup>	23	16	6	22	3	3
<b>Total</b>	<b>118</b>	<b>50</b>	<b>11</b>	<b>115</b>	<b>6</b>	<b>10</b>

<sup>a</sup> Including Middle East.

<sup>b</sup> Including Caribbean and Central America.

<sup>c</sup> Some products are exempted, see Annex IV of Regulation (EC) 502/2012 for details. exceptions apply.

Source: Own aggregation of information provided in Annex II of Regulation (EC) 508/2012 amending Annex IV of Regulation (EC) 1235/2008.

### *Findings from the review of publications*

Very little published evidences were identified about the adequacy of the procedure based on recognised control bodies. This is not a surprise, since this import procedure has been implemented very recently. The new approach is welcomed by several stakeholders mainly because it is expected to create a more level playing field for all actors involved in organic trade (EOCC, 2012, Kalter, 2012). However, some concerns with regard to degree of equivalence and management of the import procedure were expressed before the implementation of the new import regime. Abby et al. (2011) reported e.g. that stakeholders were concerned whether the

new approach would result in a common interpretation of equivalency.<sup>10</sup> A similar concern was also voiced by the European Organic Certifiers Council (EOCC) who criticised in 2012 that it is not yet defined which degree of variation is possible when applying equivalence for certain production rules (EOCC, 2012). Furthermore, Kalter (2012) expected that 50 to 60 recognised control bodies are insufficient to cover all countries involved in providing material for the European market without providing more details why this will be the case and which material are likely not to be covered.

It is worth noting that an International Task Force on Harmonization and Equivalence (ITF) and later on the Global Organic Market Access (GOMA) project, an initiative run by UNCTAD, FAO and IFOAM, have been working on minimizing potential trade distortive effects by mutual recognition/equivalence of organic standards/regulations. Within the project the elaboration of various regional standards was supported. As a result of this project Twarog (2013) recommended that technical standards should not be embedded in their entirety in the legislation itself but kept separate and linked to the regulation/legislation by reference. By doing so, control bodies would have the possibility to apply regional standards and trade barriers could be reduced, which may improve the flow of goods. Not a regional but an international equivalence standard has been developed by Accredited Certification Bodies (2009). The 'Equivalent European Union Organic Production & Processing Standard for Third Countries' combines, rationalises and simplifies Regulation (EC) 834/2009 and the more detailed implementing rules in Regulation (EC) 889/2008 and adapts them for use in third countries. According to Nicolls (2013), representing the International Accredited Certification Bodies (IACB), 14 control bodies approved by the EU are applying this standard though according to current procedures the standard has to be submitted by each control body individually.

It is further worth noting that importers expected that they have to intensify their own quality management system in order to compensate the reduced overview/checks by the Member States competent authorities (under the import authorisation procedure) when certificates are issued by recognised control bodies (Abay et al., 2011).

### 9.3.2 Effectiveness of the control system for imported organic products

While the previous section was focussing on the general concept applied to assure conformity of organic products imported from third countries with EU requirements, this section deals with the effectiveness of two specific elements of the control system: a) controls in third countries and b)

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<sup>10</sup> The questionnaire included a prioritisation of the issues and concerns. 77 stakeholders completed the questionnaire. Most respondents came from Europe with importers, governmental authorities and certification bodies being the most relevant stakeholder groups. More than 70% of the respondents had a more than six year professional experience in organic imports or certification, respectively.

supervision of control bodies carrying out controls and issuing certificates of inspection in third countries.

### 9.3.2.1 Effectiveness of controls in general

#### *Findings from the review of publications*

Data on residue analyses of organic products from EU and third countries provide a first insight to assess the effectiveness of the control system in third countries. Such an analysis focussing on the organic products sold on the German market has been carried out by the German federal state Baden Württemberg (MLRV, 2011). As shown in Table 9.6, the highest number of irregularities has been found in the period 2002 to 2011 in products from Italy (9.2 % of samples taken), followed by Egypt (9.1 %), Greece (8.9 %) and Argentina (5.6 %). There is no indication that imported products have more often residue findings indicating irregularities. However, the number of samples per country varied and was not representative. Furthermore, it is important to keep in mind that the threshold applied by Baden-Württemberg does not prove that a product is compliant – it just proves that the sample has no residues (irregularities are not only relating to pesticide applications and proper application of pesticides does not necessarily lead to residues in products).

**Table 9.6:** Identified irregularities in unprocessed organic foods sold on the German market between 2002 and 2011, differentiated by country of origin

Country of origin	Number of samples	Samples with irregularities <sup>a)</sup> (%)
Germany	1 115	2.0
Italy	672	9.2
Spain	383	4.2
Israel	133	2.3
The Netherlands	130	3.8
France	92	-
South Africa	59	3.4
Greece	56	8.9
Egypt	44	9.1
Argentina	36	5.6
Morocco	28	3.6
Other <sup>b)</sup>	349	4.0
<b>Total</b>	<b>3 097</b>	<b>4.4</b>

a) Due to deception or exceedance of the Ministry.

b) Other countries and unknown origin.

Source: MLRV (2011).

Information about the effectiveness of controls in third countries is also provided by various publications. Huber (2012) and Neuendorff (2012) for example reported about stakeholder discussions carried under the roof of the Anti-Fraud Initiative<sup>11</sup>, an initiative that aims to improve cross border communication among inspection and certification bodies, trade companies, label organisations and authorities to strengthen organic integrity. The discussions among the experts show that fraud prevention does not need a new control system or stricter rules. What is necessary is to improve enforcement of organic regulations. Similar conclusions were also drawn by IFOAM (IFOAM, 2012).

### *Results of the fraud case analysis*

One approach to assess the effectiveness of controls is the analysis of fraud cases. There is no systematic documentation on fraud cases in third countries publicly available, but useful insights can be derived from recent fraud cases in the EU. The two recent fraud cases detected in Italy, 'Gatto con gli stivali' (see Chapter 8 for further details) and 'Green War' (FederBio, 2013), show that detection of fraud cases is facilitated when public structures are cross-linked with those involved in organic controls, i.e. when data transfers between different public bodies and cross-checks are possible. In both cases, there was strong criminal intention to evade tax. Consequently, they have been investigated and made public by the Italian Guardia Finanzia and not by the organic control system.

### *Results of the import case study analysis*

In the import case study, carried out in the framework of this evaluation, three suspicious cases with organic banana, tea and soybeans were analysed. Although all three products were imported based on an import authorisation, the findings of the case study can be applied to the other import procedures as well. The results of the case study do not indicate that the control system in third countries is generally ineffective. However, the suspicious cases illustrate an insufficient implementation of preventive measures and a lack of enforcement of risk-orientated control measures by control bodies operating in third countries. Both lead to an enhanced risk of import of non-compliant products into the EU.

According to the stakeholders interviewed, a limited knowledge of organic farming techniques is a common and high risk. Organic production of banana, tea and coffee in third countries is often based on 'organic farming by neglect' (organic tea) or 'organic farming by replacement of inputs' (organic banana, organic soybean). 'Organic farming by neglect' describes a production system based on the non-use of prohibited inputs, but without implementing supportive techniques, e.g. to improve soil fertility or strengthening plant and animal health to reduce the vulnerability to diseases or other negative effects. Farmers operating 'organic farming by replacement of inputs' do often not understand that organic farming requires more than using approved fertilizers and pesticides, e.g. a change in crop rotation and in soil fertility management. Both approaches are

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<sup>11</sup> See [www.organic-integrity.org/](http://www.organic-integrity.org/).

not appropriate for organic farming and increase the risk of using prohibited inputs. The stakeholder interviews revealed that one of the most important preventive actions on farm level is to ensure sufficient training of farmers before they become certified. Such trainings assure that farmers and operators along the subsequent supply chain (processors, exporters) can identify areas where the organic product is at particular risk and implement preventive measures to avoid these risks. However, in many third countries, it is still difficult for farmers to get access to specific organic advisory services or trainings (Neuendorff, 2006).

A number of stakeholders confirmed that the control measures currently implemented are often not fully adequate to address the specific risks for organic integrity. The use of unannounced inspections and quick follow-up inspections in case of suspect and non-compliances, laboratory analysis during the production phase (e.g. leaf analysis, input analysis, dust analysis of storage facilities) is uncommon in many third countries. Detection of the risk of non-compliances in third countries was considered by different stakeholders as being substantially lower than in the EU Member States for all three value chains.

### 9.3.2.2 Effectiveness of controls of different import procedures

#### *Views of stakeholders*

In the web-based survey, stakeholders were asked to assess the effectiveness of the control system for imported organic products. Below the results are shown differentiating between the three import procedures and stakeholder groups.

As shown in Table 9.7, about 58 % of the surveyed *control authorities and control bodies* (50 participants in total) assessed the **import authorisations** as being effective while 20 % perceived it as only slightly or not at all effective (average mean value 1.7). There were some variations among the countries, for Germany, being the country issuing the most import authorisations, the mean value for import authorisations was 2.0 whereas the Mediterranean countries rated in average 1.1 and Central and Eastern European countries 1.7.

More than two-thirds perceived the control system in **recognised third countries** as effective and 10 % only as slightly effective. The mean value for the third country list was 2.0 varying between 1.7 (Central and Eastern European countries) and 2.1 (Mediterranean countries).

Only 40 % assessed the new systems with **recognised control bodies** as being effective, 26 perceived it as only slightly or not at all effective. For the recognition of control bodies the mean value was 2.1 with a rather moderating rating in Germany (1.4) and in the Mediterranean countries (1.6). By contrast, Central and Eastern European countries assessed the effectiveness as extremely effective (2.6). However, this result is based on only six individual ratings and one may to bear in mind that Central and Eastern European countries are importing relatively few organic products from third countries.

**Table 9.7:** Views of control bodies and authorities regarding the effectiveness of the control system for imported organic products (mean value)

		Effective				Not at all effective	I don't know
		extremely	very	moderately	slightly		
For imports based on import authorisation	n	1	11	17	9	1	11
	%	2	22	34	18	2	22
For imports from countries listed on the third country List	n	4	14	16	5		11
	%	8	28	32	10		22
For imports certified by regime control bodies recognised for their operations in third countries (new system)	n	6	4	10	12	1	17
	%	12	8	20	24	2	34

*Question: How effective is the control system for imported organic products to ensure fair competition and functioning of the EU-internal market?*

Source: Own data from web-based stakeholder survey.

Among the surveyed *importers* (14 participants in total), 72 % assessed both the **import authorisations** as well as the **third country list** as effective. About 21 % assessed the system with **recognised control bodies** to be effective regarding controls. The low rate needs to be considered against the background, that this procedure has been implemented recently. Presumably for this reasons, 64 % were not able to give an assessment (see Table 9.8).

**Table 9.8:** Views of importers regarding the effectiveness of the control system for imported organic products

		Effective				Not at all effective	I don't know
		extremely	very	moderately	slightly		
For imports based on import authorisation	n	1	5	4	2		2
	%	7	36	29	14		14
For imports from countries listed on the third country List	n		6	4	2		2
	%		43	29	14		14
For imports certified by regime control bodies recognised for their operations in third countries (new system)	n		1	2	2		9
	%		7	14	14		64

*Question: How effective is the control system for imported organic products to ensure fair competition and functioning of the EU-internal market?*

Source: Own data from web-based stakeholder survey.

### *Findings from the review of publications*

As far as irregularities are concerned, it is interesting to note that the German competent authority was able to follow up and close 75 out of 100 reported irregularities originating from other EU Member States or **recognised third countries**, whereas for irregularities reported on products imported according to Article 33(3) of Regulation (EC) 834/2007 (**recognised control bodies**) and Article 19 of Regulation (EC) 1235/2008 (**import authorisations**) this was possible only for 25 notifications out of 68 (BLE, 2013). The likely reason is that for countries with competent authorities a contact partner is available and there is usually a better flow of information. Competent authorities in recognised third countries or EU Member States have a direct contact to the control bodies approved by them. Contrary to this, the supervisory bodies responsible for the supervision of control bodies covered by Article 33(3) (control bodies operating equivalent systems in third countries) and Article 19 (import authorisations) are not involved in the system of information exchange for irregularities operated between the Member States, the Commission and the third countries control bodies.

### **9.3.2.3 Effectiveness of supervision**

#### *Findings from the analysis of provisions*

As described in Section 9.3.1.2, there are no EU rules on how supervision of a control body is guaranteed under the procedure based on **import authorisations**. In fact, however, the request for import authorisations allowed the competent authorities to get an insight into inspection and certification practices of a control body and to easily intervene (i.e. not issuing an import authorisation) if doubts exist on the equivalence with requirements or on the effectiveness of controls.

Supervision of control bodies from **recognised third countries** is carried out by the national competent authorities. The adequacy of the implemented supervisory system is assessed annually by the Commission on the basis of the annual reports of the recognised third countries which among others describe the monitoring and supervisory activities carried out, the results obtained and corrective measures taken.

**Recognised control bodies** are supervised by the assessment bodies and the Commission. According to Article 12 of Regulation (EC) 1235/2008, the control body has to send annually a report to the Commission that describe in particular the control activities carried out by the control body or control authority in the third countries in the previous year, the results obtained, the irregularities and infringements observed and the corrective measures taken. Furthermore the annual report has to contain the most recent assessment report or update of such report, which includes the regular on-the-spot evaluation, surveillance and multiannual reassessment.

Although assessment bodies play a key role in supervising recognised control bodies operating in third countries, there is no defined relationship or stream of communication defined in the Regulation between the Commission and the assessment bodies. The import guidelines describe in this respect only the minimum requirements for the surveillance and the assessment reports that are submitted by the control bodies to the Commission. The European Cooperation for Accreditation (EA) has elaborated 'Guidelines on the Accreditation of Organic Production Certification' (European Cooperation for Accreditation, 2013) as encouraged by the EU in the import guidelines.

#### *Findings from the review of publications*

The review of literature reveals some general shortcomings of the supervision of control bodies that are not related to a specific import procedure. Neuendorff (2007), for example, reported that control authorities and control bodies see specific risks in the lack of expertise for accreditation of control bodies operating in third countries without referring to a specific import procedure. Furthermore, some actors have further mentioned the varying quality of accreditation of control bodies operating in third countries as a problem, e.g. missing witness audits, missing know-how in organic agriculture and the missing cooperation among control bodies operating in third countries (ibid). Dabbert (2011) recommended based on the results of the CERTCOST-project that there is generally a need to harmonise supervision of the certification system, approval of control bodies, and data collection, as well as specifically to strengthen supervision in third countries. He further suggested a concerted action of accreditation bodies involved, e.g. by drawing up codes of Good Practice as encouraged by the EU Commission to improve this situation.

Concerns with regard to the surveillance of recognised control bodies were addressed in several stakeholder position papers. AFI (2011) and IFOAM (2013) pointed out that it is necessary to strengthen the surveillance of certification since there are no cross checks of single imports by national competent authorities anymore as it is the case for import authorisations. The EOCC (2012) concluded that the main challenges concerning the import procedure based on recognised control bodies lies in the shift of roles and responsibilities towards the Commission. As a result, the EOCC expects a need for additional labour resources at the level of the Commission and assessment bodies. With the end of import authorisations, the role of competent authorities is strongly reduced and with that, an important security lock has to be replaced. IFOAM (2012) and the EOCC (2012) suggested that this could be facilitated by making it mandatory for control bodies to disclose the equivalency standards, e.g. on their websites.

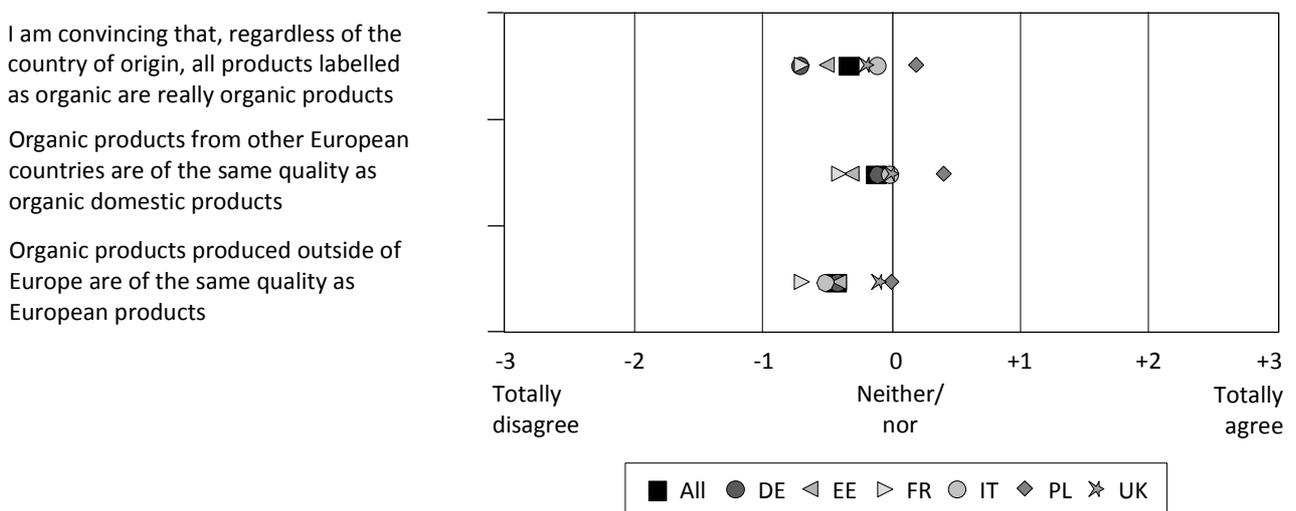
### 9.3.3 Consumer confidence in imported organic products

#### Results of the consumer survey

The results of the consumer survey show that the origin of organic products is an important aspect for many (but not for all) consumers. Almost every second participant of the consumer survey considers the origin when buying organic products and 60 % welcome the fact that the new EU organic logo differentiates between ‘EU agriculture’ and ‘Non-EU agriculture’. Consumers’ knowledge of organic farming in third countries and the import requirements seems however to be limited. For example, 14 % of the respondents assumed that organic products could legally not be imported from overseas and 27 % were not sure about it.

The consumer survey reveals further that 25 % of the test persons think that organic products produced outside Europe are of the same quality as EU organic products, while 37 % disagree with this statement (mean value -0.4, see Figure 9.1). Comparing the quality of domestic organic products with organic products from other EU-countries, ratings are slightly but not substantially different: 31 % agree and 31 % disagree with the corresponding statement (mean value -0.1). This result is also reflected in the responses to the question whether participants are convinced that regardless of the country of origin, all products labelled as organic are really organic. Only 31 % have this opinion, while 50 % are sceptical and disagree (mean value -0.3). However, this scepticism refers to foreign organic products from within the EU as well as from third countries.

**Figure 9.1:** Views of consumers regarding trust in organic products coming from other countries (Mean agreement with statements)



Source: Own data from consumer survey.

## 9.4 Judgement and conclusions

Based on the results presented in the section above, **it is concluded that the import regime is largely adequate in terms of achieving the global objectives of the Regulation but with shortcomings in implementation**, taking the following into account:

- Procedures of the import regime are generally adequate to assure conformity of organic products imported from third countries. However some shortcomings were identified with regard to the working resources required to assess the equivalence at the Commission and varying interpretation of equivalency by the control bodies. Furthermore, importers complain that procedures for issuing certificates of inspection implemented by some third country control bodies are slow, compounded by the fact that they are paper-based;
- Control systems implemented in some third countries displayed shortcomings in particular as regards the application of specific preventive measures (e.g. training for operators) and risk-orientated controls. There are also concerns about the supervision of control bodies operating in third countries, in particular whether supervision is sufficient. Furthermore, stakeholders have indicated that procedures to follow up on irregularities are not always satisfactory; and
- Consumers have some reservations towards organic products not produced in their country. This attitude does however not differ substantially between organic products from other EU-countries and organic products from third countries.

### Detailed considerations

In the last two decades, organic supply and distribution chains have become increasingly globally organised and a large number of products sold on the EU market are imported. For farmers and consumers in the EU, it is important that organic products from third countries are produced according to equal requirements and that the control systems ensure the same level of assurance of conformity as within the EU. Furthermore, it is relevant that administrative procedures allow for timely delivery of the products at a reasonable cost. The evaluation question examines to what extent the import rules have been adequate to ensure an effective functioning of the internal market, fair competition (considering the application of the equivalence principle) and confidence of consumers.

The evaluation is based on relevant publications and documents, the findings of an import case study, the results from two web-based surveys targeting stakeholders and consumers and complementary interviews with stakeholders.

#### *Adequacy of the import regime with regard to the assessment of the equivalence*

A key element of the import rules is the assessment of the equivalence of production and control rules in third countries, whilst at the same time recognising that production conditions in countries outside the EU can be different from those within the EU. The Regulation provides for three different mechanisms for this purpose. Firstly, equivalency is recognised by the inclusion of

a country in the third country list (i.e. the national legislation of the country in question is formally recognised as being equivalent to that of the EU). Secondly, EU control bodies can be authorised by the European Commission to carry out controls in third countries. This latter approach has been in force since July 2012 and replaces the authorisation of individual imports by Member State authorities at the request of an importer located in the EU. This third option was the most relevant procedure under the previous organic regulation and is due to be phased out in July 2014.

The response of stakeholders to the web-based survey indicates that the rules and procedures of the import regime are in general perceived as equivalent with the EU requirements. The analysis of the individual import procedure however reveals some specific shortcomings.

The import procedure based on recognised third countries seems to lead to adequate assessments of the equivalence. The stakeholder critique regarding this import procedure is limited and concerns a lack of transparency in assessing equivalency in bilateral negotiations and occasional problems related to fraudulent products imported from recognised third countries.

In contrast, a number of shortcomings were identified with respect to the import procedure based on import authorisations. The review of literature shows that there are several concerns with regard to varying interpretation of equivalency and different approaches for issuing import authorisations which is mainly due to the fact that the recognition of equivalence is carried out by different competent authorities of the Member States. Problems with varying interpretation of the equivalency were reported with respect to the interpretation of exceptional rules (e.g. use of non-organic seeds or non-organic ingredients) and conversion rules (recognition of conversion period prior application for certification). Consequently, the rules do not sufficiently prevent that control bodies operating in third countries aim to achieve an advantage against competitors by granting more flexibility for exceptions (e.g. less strict interpretation of conditions for separating organic and conventional farm units or less strict interpretation of conversion period) and that Member States authorities assess such conditions as being equivalent. As long as all Member States are involved in assessing the equivalence, a harmonised assessment of the equivalence is rather difficult, as the European Court of Auditors (2012) argued. Since the procedure is not fully adequate to ensure equivalent production and control conditions and therewith to ensure a fair competition and the protection of consumer interests, it is concluded in this respect that phasing out the possibility to grant import authorisations is adequate.

In Council Regulation (EC) 834/2007, the shortcomings associated with the import authorisation have been addressed by introducing the new import procedure based on recognised control bodies. This approach allows a harmonisation of the equivalent assessment by providing a common and stricter framework and shifting responsibilities from the 27 Member States to the Commission. The review of literature shows that stakeholders generally acknowledge the attempt to harmonise the assessment of equivalence but also see a need for more transparency and clear specific instructions for control bodies. Some concerns were raised by individuals (before the implementation of the new system) whether the recognition of control bodies results

in a common interpretation of equivalence. However, this general concern was not based on real experiences of the new system. In view of the recent implementation of this approach a firm judgment of its adequacy is not yet possible.

*Adequacy of the import regime to ensure a smooth, continuous and timely delivery of product at reasonable costs*

A second key issue with regards to the import procedures is the question of whether they are able to ensure smooth, continuous and timely delivery of imported products at a reasonable cost. The analysis has shown that some shortcomings exist regarding the administration of the import regime itself and certain procedures implemented to issue certificates of inspection and different custom procedures in Member States.

Regarding the administration of the list of recognised third countries, the Court of Auditors (2012) critically noted that there is a significant backlog in assessing applications for equivalence caused by limited resources at the Commission. The high administrative effort needed to recognise the equivalence can be seen as one reason why only 11 countries have been recognised so far. The problem of administration is however not only limited to the recognition itself but refers also to follow-up assessments of the equivalency when national legislation are changed.

Limited working capacities seems also to be a challenge for the recognition of (and on-going supervision of recognised) control bodies operating in third countries. Since control bodies cannot refer to the EU Regulation but have to submit a standard equivalent to EU rules within their application for recognition, every standard has to be assessed individually and requires working capacities. Furthermore, one may expect that even more working capacities are needed at the Commission if Member States may no longer grant import authorisations and therefore the number of requests for recognition from control bodies are likely to increase.

Another relevant question with regard to ensuring the smooth, continuous and timely delivery of products is whether the new import system based on recognised control bodies is able to cover all imports that have been administered or are still being administered by import authorisations. An analysis of OFIS data on import authorisations showed that the number of import authorisations dropped drastically when the procedure for recognised control bodies became operational. Yet, during the first three months of 2013, still 198 import authorisations were issued by Member States which account for 44 % of the respective period in 2012 when the procedure of recognised control bodies was not yet functional. A more detailed analysis of import authorisations reveals that the phasing out of import authorisations will not likely have immediate negative impacts on import flows. Instead it is more likely to assume that without import authorisations additional control bodies will request recognition or already recognised control bodies will expand their activities. Market disturbances are only likely in very specific cases (e.g., the withdrawal of the recognition of third countries). A key question will be whether the market mechanisms will properly function. Since it is difficult to fully anticipate the reactions

of the market in response to the phasing out of the import authorisations, it seems to be useful to monitor the supply and to take adequate actions if market failures are observed.

A third issue with regard to ensuring smooth, continuous and timely delivery of product refers to the procedures implemented to issue certificates of inspection, which needs to accompany a product along its transport from the exporting country to the destination in Europe. One study reported about complaints from importers that administrative procedures implemented by third countries control bodies are slow and the paper-based procedure further slows down the process. It is obvious that electronic procedures would allow a faster and less burdensome procedure for international trade. However in view of the limited information identified in the framework of this evaluation, a sound judgement is not possible.

### *Effectiveness of the control system*

The control system in third countries has to ensure that production and processing of organic food complies or equally complies with the EU rules. The data and information presented in Section 9.3 provides no indication that the control system in third countries is, in general, less effective than the control system in the EU. However, this also implies that some of the shortcomings of the EU control system, as discussed in Chapter 8, are also true for controls in third countries (e.g. deficits in the exchange of information between different authorities as identified in the fraud case analysis).

The specific requirements of an effective control system in third countries are illustrated by the results of the import case study. Accordingly, preventive measures (such as training for organic operators aiming to empower them to identify specific risks), risk-based inspections or residue sampling are an important means to address the specific risk for the organic integrity in third countries, but which are still not very common. These findings are in line with discussions carried out under the roof of the Anti-Fraud Initiative, which pointed out that fraud prevention does not need stricter rules but a better enforcement of existing measures.

The stakeholder survey addressed differences with regard to the effectiveness in the three import procedures. Although the number of respondents was rather low, the results provide at least some indications. Accordingly, stakeholders do not perceive substantial differences with regard to the effectiveness of controls in recognised third countries and in countries that use import authorisation to place their products on the EU market. Most stakeholders assess the control systems as very or moderately effective. Control systems in third countries are slightly more positively assessed, which might be due to the fact that recognised third countries have a functioning legal structure for surveillance of organic production and awareness of organic agriculture is expected to be much higher than in countries with only a few organic operators. Such structures as well as the available know-how on organic agriculture and organic certification are likely to reduce the risk of irregularities. Only few participants were of the opinion that the control system based on recognised control bodies is effective. This result is certainly influenced by the fact that the assessment was rather based on assumptions than on real experiences, since the survey was carried out six months after the implementation of this import procedure.

The effectiveness of the control system is also determined by the supervision of control bodies. Findings from the analysis of provisions show that the EU Regulation does not set specific rules for the supervision of control bodies operating under the import regime based on recognised third countries and import authorisations. However, the inclusion in the third country list requires that third countries carry out adequate monitoring and supervision activities. Under the regime of import authorisations, control bodies are implicitly supervised by Member States authorities since they get an insight into the inspection and certification practises of control bodies and may not issue an authorisation. The review of publications shows that less formalised supervision systems may have a negative impact on the effectiveness of controls in third countries. This problem has been addressed by the Commission with the recognition of control bodies and clear supervision guidelines for assessment bodies as well as by encouraging assessment bodies introducing specific requirements for the accreditation of control bodies operating in third countries (European co-operation for Accreditation, 2013).

Some of the stakeholders however remain sceptical, whether the supervision system for the import procedure based on recognised control bodies is robust enough. As the review of literature reveals, stakeholders raised concerns whether supervisory bodies have sufficient working capacities to carry out their duties and responsibilities. However, more experiences gained over a longer period would be needed to come to a sound judgment, whether the supervision has been sufficiently strengthened by the recent activities.

Furthermore, the findings from the analysis of provisions reveal that neither the Regulation nor the import guidelines foresee a direct link between the Commission and the assessment bodies. The reporting is only done from the control body to the Commission and it is the control body which has to submit the assessment report of the assessment body to the Commission. There is an exchange between the Commission and the assessment bodies but this exchange is not formally defined. Subsequently assessment bodies are not necessarily involved in the management of irregularities, for example, if a control body does not react promptly to a suspect case. Even severe problems, for example suspension or withdrawal of accreditation has according to the legal provisions to be communicated by the control body to the Commission.

The stakeholder survey revealed furthermore concerns about the procedures to follow up on suspected or detected irregularities of imported products. This assessment is supported by the statistics of the German BLE for 2012, where 75 % of the reported irregularities originating in the EU or in recognised third countries could be followed up and closed, while for the other import procedures (based on recognised control bodies and import authorisations) only 37 % could be followed up and closed.

### *Consumer confidence*

According to the results of the consumer survey, consumers trust more domestic organic products than organic products from other countries. Interestingly, no substantial differences regarding trust in organic products from other EU-countries and non-EU-countries seem to exist. The results of the survey need to be interpreted with caution, since scepticism towards imported

organic product could also be a result of the limited knowledge of consumers about the control system in foreign countries and import requirements. Thus, no robust evidence was identified to assume that the import regime as such is not adequate to ensure consumer confidence.

## Chapter 10

# Consumer perception on organic farming

### 10.1 Introduction

#### Evaluation Question 5

*To what extent is the concept of organic farming understood by the consumers in the EU?*

*In answering this question the following elements needs to be examined:*

- *How developed is the degree of knowledge of the concept of organic farming (such as the awareness on general objectives and principles of organic farming, products covered by the scheme, special production requirements, etc.)?*
- *How developed is the degree of knowledge of the European organic logo? How developed is the degree of knowledge of the other compulsory indications that accompany the logo ('code number' and 'place of farming of the raw materials')? To what extent do they contribute to ensuring consumer confidence? To what extent does mentioning of 'place of farming of the raw materials' influence consumer's decision? To what extent is the European logo considered as a guarantee for the quality of agricultural products?*

Consumer demand for organic food has been a key factor for the development of organic farming in the EU. In order to encourage the demand for organic food, a number of market measures have been implemented in several Member States (see Chapter 4). Besides this, at EU level, the labelling rules for organic products laid down in Regulation (EC) 834/2007 are another important demand-oriented support instrument. These rules provide a legal basis for the use of terms referring to organic production and thus contribute to the functioning of the internal market. A key element of the labelling rules in the Regulation is the new EU organic logo, which aims to improve the recognition of organic products in all EU countries and to provide consumers with confidence that organic food is produced entirely in-line with the EU Regulation. After a two-year transition period for the organic food sector to comply with revised EU labelling rules, the new EU logo for organic food, became mandatory on all pre-packaged organic products produced in the EU in July 2012.<sup>1</sup> The use of a logo requires however consumer understanding of the concept of organic farming as well as knowledge of and trust in the organic logo (Janssen and Hamm, 2012; Daugbjerg et al., 2013; Teisl et al., 2008). So far, neither aspect has been studied

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<sup>1</sup> The logo was introduced in July 2010. In the transition period, it was possible to use existing packaging material or to place products produced, packaged and labelled before 1 July 2010 on the market not bearing the new EU logo.

comprehensively in relation to the new organic EU logo. Against this background, the aim of Evaluation Question 5 is to understand how consumers perceive the organic farming concept and the European organic logo which was introduced in order to make the recognition of organic products easier for them.

This chapter is structured as follows: The following section describes the criteria used to evaluate consumer perceptions of organic farming. Subsequently the results of a review of literature and a consumer survey carried out in six Member States (Estonia, France, Germany, Italy, Poland and the United Kingdom) are presented for each criterion separately. A judgement of the results and conclusions are included in the fourth section of the chapter.

## 10.2 Approach

Evaluation Question 5 was answered on the basis of several judgement criteria, which were deduced from the evaluation question itself and the model of the intervention logic based on the Regulation (EC) 834/2007. In order to apply these criteria, consumers were surveyed by means of a web-based questionnaire in six case study countries (Estonia, France, Germany, Italy, Poland and the United Kingdom). In total, 3 000 persons participated in the survey (500 per country; for details on the methodology see Chapter 1). In addition, relevant literature was reviewed.

The following judgement criteria were used:

### (1) Consumers' knowledge (or lack thereof) about the concept of organic farming

Only if consumers know about the advantages of organic production can they act according to their preferences at the point of purchase. This is particularly important since organic food tends to be more expensive and additional willingness to pay needs to be activated. The indicator used was the share of consumers' with specific knowledge of the legal definition of organic farming. In addition, differences in the knowledge according to the frequency of purchasing organic food and of participants' self-assessment of being expert on organic farming were analysed.

### (2) Consumers recognise and know (or do not know) the compulsory EU logo

Knowledge of the existence and meaning of the EU logo is a precondition for the fulfilment of the global objective of the Regulation of increasing consumer confidence and transparency. In order to assess to what extent consumers recognise the EU logo, three indicators were used: a) share of test persons having seen the EU logo before, b) share of respondents knowing the meaning of this logo, and c) their knowledge of the EU logo compared with other organic and non-organic logos.

Against the background of various alternative logos for organic products in the market place, the EU organic logo and other organic and non-organic food logos were compared with the aim of yielding additional insights. Additionally, a fake organic logo was used. The

rationale is that comparing a newly introduced logo with logos which have been present in the market for many years will always disfavour the new logo. Therefore using a fake logo gives the new logo the chance to exhibit its potential regarding easy recognition by consumers and market success.

**(3) Consumers know (or do not know) about additional compulsory indications**

The legislation defines that besides the EU logo itself, two additional compulsory indications are placed on the product. The 'place of production of raw materials' (EU/non-EU agriculture) was introduced in order to provide additional information and to avoid "*deceptive practices and any possible confusion amongst consumers*" (Recital 27 of Regulation (EC) 834/2007). These aims can only be achieved if consumers know about the indication and believe it to be sufficient with respect to its information content. Furthermore, the 'code number of the control body' needs to appear in the labelling. In order to evaluate consumers' knowledge, their awareness about additional indications in general and about those which are compulsory was chosen as indicators.

**(4) The indications contribute (or do not contribute) to consumers' confidence and trust in organic farming**

After answering the question of consumers' knowledge of these indications the next criteria aims to explore whether they increase consumer confidence and trust. Only then, can a long term impact on markets be expected. To judge the contribution of the additional compulsory indication, consumer confidence in the EU organic logo, their trust in the indications and their opinions and perceptions of organic products were used as indicators.

**(5) Indications are (or are not) relevant for consumers' purchase decisions**

The Regulation aims at contributing to an effective functioning of the internal market for organic food. This includes "*providing conditions under which this sector can progress in line with production and market developments*" (Recital 3). This aim requires the mandatory indications to be relevant for consumers' purchase decisions. This criterion was evaluated by asking consumers directly for those organic and non-organic logos which they perceive to be relevant for their purchase decision.

**(6) Consumers perceive (or do not perceive) the EU logo as an indicator for quality**

According to Article 3, organic production aims at producing products of high quality. Quality perception differs according to individual preferences and intended use of a product. Therefore consumers' opinion is decisive for the evaluation of the achievement of this specific aim. The first indicator used was consumers' understanding of food quality; the second, whether (and which) organic and non-organic logos indicate high product quality.

## 10.3 Results

### 10.3.1 Knowledge of consumers about the concept of organic farming

#### *Scientific evidence*

Earlier studies indicated that many consumers lack knowledge on the objectives and production standards of organic farming (Harper and Makatouni, 2002; Hughner et al., 2007; McEachern and Warnaby, 2008; Mesías Díaz et al., 2010; Janssen and Hamm, 2012; Padel, 2010). This includes knowledge on the certification system and on the implication of the introduction of a new EU wide logo for organic farming (Mesías Díaz et al., 2010; Janssen and Hamm, 2012; Teisl et al., 2008).

#### *Results of the consumer survey*

According to the results of the consumer survey carried out for this evaluation, most consumers were aware of the concept of organic farming and the selected production requirements since their answers were mostly correct (Table 10.1). However going more into detail, some shortcomings in the level of knowledge became obvious. Only two thirds of the respondents knew that organic products cannot be grown from genetically modified seeds. This share is even lower in relation to the requirements of processing with ionising radiation. Also, about a quarter were not sure about the existence of a third-party inspection and control system. Interestingly, only less than half of the test persons knew that organic food need not be produced on small farms and need not be produced locally according to the legal definition.

There are some differences between countries (Table 10.1). While on average across all countries about two third of the participants knew that organic food needs to be grown from GMO (genetically modified organism) free seeds, this share is markedly lower in the United Kingdom and in Germany. The topic of ionising radiation obviously is most prominent in Italy since the share of correct answers is highest for participants from that country. In Germany, Estonia and the United Kingdom the knowledge about the third-party control and inspection system is lowest. Only about one quarter of the respondents in Estonia and in Poland was able to give correct answers regarding the statement 'Organic food is locally produced' and 'Organic food is produced on small farms'. In fact, on average the farm size of organic farms in many countries is higher than that of conventional farms. This holds true also in Estonia and in Poland (EUROSTAT, 2013; Szeremeta, 2006).

**Table 10.1:** Share of consumers giving a correct answer with regard to the legal definition of specific production requirements of organic food (in percentage, n = 500 per country)

	All	DE	EE	FR	IT	PL	UK
Is grown without the use of chemicals	86	82	85	85	92	85	90
May be grown from genetically modified seeds <sup>a)</sup>	67	62	66	73	71	70	57
Is processed without artificial additives	80	72	79	72	89	87	81
Is processed without ionising radiation	56	52	52	61	66	58	47
Is subject to a third-party system of control and certification	71	64	57	81	82	89	55
Is produced on small family farms <sup>a)</sup>	45	59	27	52	53	24	55
Is produced locally <sup>a)</sup>	44	49	27	43	52	30	60
Cannot be imported from overseas <sup>a)</sup>	59	52	57	64	65	58	59
Is produced by methods protecting the environment	82	67	76	88	94	87	75

a) These aspects are not part of the legal definition regarding organic farming. The numbers are the share of correct answers!

*Question: The following statements refer to the legal definition of organic food products. To the best of your knowledge, please indicate whether they are true or false.*

Source: Own data from consumer survey.

Knowledge of the legal definition of organic farming was also tested against respondents being experts on organic food or not (self-assessment)<sup>2</sup> and regular organic consumers vs. occasional and non-organic consumers. Respondents who felt that they have good knowledge of organic food also showed that they had better knowledge by exhibiting a higher share of correct answers to all statements, but still with important errors (Table 10.2). All differences are significant. Comparing the answers of regular, occasional and non-consumers of organic food shows that frequency of organic purchases seems to be a good predictor of the knowledge of organic farming principles.<sup>3</sup>

<sup>2</sup> Respondents were asked to indicate their degree of agreement with the two following statements on a 7-point scale (1-totally agree, 7-totally disagree): 'In comparison to an average consumer, I know a lot about organic food' and 'People who know me, consider me as an expert in the field of organic food.' The numbers of both answers were summed up and participants with scores between 2 and 6 were classified as 'experts', those with scores between 7 and 9 'neither/nor' and those with scores higher than 10 as 'no expert'.

<sup>3</sup> For the definition of individual groups see Table 1.2.

**Table 10.2:** Share of consumers giving a correct answer with regard to the legal definition of specific production requirements of organic food differentiated in the level of expertise and consumption of organic food (in percentage)

	Expert	No Expert <sup>a)</sup>	Organic consumer		
			Regular	Occasional	Non <sup>a)</sup>
Group size (n)	510	1548	869	1508	623
Is grown without the use of chemicals	88	86 *	90	88	79 ***
May be grown from genetically modified seeds	70	65 ***	71	68	56 ***
Is processed without artificial additives	85	78 ***	85	81	71 ***
Is processed without ionising radiation	68	51 ***	61	57	47 ***
Is subject to a third-party system of control and certification	84	65 ***	80	73	56 ***
Is produced on small family farms	49	46 ***	50	43	44 ***
Is produced locally	45	44 ***	47	42	42 ***
Cannot be imported from overseas	68	58 ***	64	59	53 ***
Is produced by methods protecting the environment	89	78 ***	85	83	70 ***

a) Probability of error: \* 10 %, \*\*\* 1 %.

Question: The following statements refer to the legal definition of organic food products. To the best of your knowledge, please indicate whether they are true or false.

Source: Own data from consumer survey.

### 10.3.2 Consumers' recognition and knowledge of the compulsory EU logo

#### Scientific evidence

Some earlier studies exist on the knowledge of the mandatory EU logo. According to Eurobarometer (2012), on average over all 27 EU Member States, 24 % of the respondents indicated to know the EU organic logo on organic farming. This share was higher in Denmark (39 %), France (38 %), Luxembourg (37 %) and Austria (36 %). The lowest share of respondents knowing the EU logo was found in Romania (10 %), Poland (12 %), Bulgaria (13 %) and Spain (14 %). Awareness of at least one of several logos tested was higher among respondents with higher education levels. The only logo better known than the EU organic logo on average across all countries was the Fairtrade logo. Other European logos such as 'Protected designation of origin' (PDO) or 'Protected geographical indication' (PGI) scored worse regarding awareness although they were introduced much earlier than the new EU organic logo. In Italy more people were aware of PGO and PGI than of the EU organic logo (Eurobarometer, 2012).

A French study compared the knowledge of the EU logo of all French consumers with that of organic consumers (Agence Bio, 2012). On average of all French consumers, the knowledge of the

EU logo had increased from about 13 % in 2010 to 42 % in 2012. The share of people knowing the EU organic logo was higher among organic consumers 21 % in 2010 and 61 % in 2012. In comparison, in 2012 93 % of the interviewees knew the national AB logo (Agriculture Biologique) (Agence Bio, 2012).

A recent German study indicates that only 15 % of the test persons stated to know the EU organic logo. In contrast, 75 % knew the German Bio-Siegel. Interestingly, 23 % indicated to know a fake environmental logo. So, knowledge of the EU organic logo was lower than knowledge of a fake logo. Asked for the meaning of the logos only 31 % of those who indicated to know the EU logo stated to be aware of the meaning of the logo. In contrast, 75 % of the test persons who knew the German Bio-Siegel also were aware of its meaning (Meyer-Höfer and Spiller, 2013).

### *Results of the consumer survey*

In the research carried out as part of this evaluation, the issue of knowledge of the EU organic logo was approached stepwise. At the very beginning of the interview respondents were asked in an 'unprompted' manner for their knowledge of the EU logo. In order to avoid any manipulation they were not informed about the topic of the research beforehand. The question 'Have you seen this logo before' was contested by a quarter of all test persons with 'yes' (Table 10.3). This share was highest in Estonia and in France and lowest in Poland and the United Kingdom. The share of consumers having seen the EU logo before was significantly higher among regular consumers (36 %) compared to occasional consumers (23 %) and non-organic consumers (13 %).

**Table 10.3:** Share of consumer having seen the EU logo before  
(in percentage; n = 500 per country)

	All	DE	EE	FR	IT	PL	UK
Yes	25	28	36	35	19	13	17
No	45	37	38	38	51	53	51
Don't know	31	34	26	27	30	34	32
<b>Total</b>	<b>100</b>						

Question: We will show you a logo:  Have you seen this logo before?

Source: Own data from consumer survey.

The numbers found in this survey are similar to (but sometimes slightly lower than) the respective country results of the Eurobarometer (2012): Germany 33 %, Estonia 34 %, France 38 %, Italy 24 %, Poland 12 %, and the United Kingdom 22 %. The reason for slightly higher numbers in the Eurobarometer (2012) might be that the question on the awareness of this logo was set in the context of food while in the present study no context at all was given. This approach was used in order to avoid any bias due to context effects. However, the coincidence is quite high, given that different samples were used.

Test persons were then asked 'where have you seen it' in order to verify their earlier answers. Out of those who stated that they had seen the EU logo before 54 % remembered to have seen the logo on food. This share was higher among German respondents (67 %) and lowest in the United Kingdom (45 %). About 20 % stated not to remember where they had seen it. The share of wrong answers 'have seen it on clothing' was very small with less than 1 %.

The subsequent question aimed at investigating if consumers really know the message of the EU organic logo by putting an open question on their understanding of the logo. The answers were coded according to categories (Table 10.4). Only a small share of respondents knew that the EU logo indicates organic food according to common European standards (EU organic food). A larger share of the respondents knew that this logo indicates organic food (Organic food). Answers in these two categories can be interpreted as correct answers. Another small share of respondents associated the logo with Europe or the European Union (Europe, EU) or something natural, ecological etc. (Nature, environment, natural). On average, almost one third of the answers was wrong and another 50 % answered 'Don't know, not sure' or indicated that they were not sure about the meaning of the logo. Knowledge was particularly low in the United Kingdom.

**Table 10.4:** Share of answers with regard to meanings of the EU logo (in percentage; n = 500 per country)

	All	DE	EE	FR	IT	PL <sup>a)</sup>	UK
EU Organic (food)	5	6	6	7	3	5	1
Organic (food)	12	14	16	12	11	14	2
Europe, EU	7	3	5	8	9	16	3
Nature, environment, natural, ecological	11	8	15	11	9	19	6
Other wrong answers	14	8	10	16	24	22	9
Don't know, not sure	50	60	47	46	44	24	79
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

a) The share of test persons knowing that the EU logo stands for organic food in Poland is higher than the share of people who has seen the logo before. This might be an indicator for people to search in the internet for correct answers.

*Question: Can you tell us in your own words what this logo stands for?*

Source: Own data from consumer survey.

The answers to this question were also differentiated by being an organic consumer or not. The share of respondents correctly assigning the EU logo to organic farming according to EU legislation (i.e. those who referred to 'EU Organic (food)') was significantly highest among regular consumers (7 %) followed by occasional consumers (5 %) and by non-organic consumers (1 %).

In order to relate the results on knowledge of the EU organic logo with other organic and non-organic logos, participants were shown 8 to 10 different food logos including some non-organic ones (Table 10.5). This approach was used in order to assess the degree of confusion among test persons regarding (organic) food logos. For each country up to three important organic logos, the Fairtrade logo, an animal welfare logo where available (for Italy another 'green' logo was selected), a non-organic quality food logo, a fake organic logo, the EU organic logo, the old EU logo and the German 'Biosiegel' were presented to the test persons.

**Table 10.5:** Logos tested in the consumer survey

	DE	EE	FR	IT	PL	UK
EU organic logo						
Old EU organic logo						
German Biosiegel						
Organic logo 1						
Organic logo 2		n/a			n/a	
Organic logo 3						
Fake organic logo						
Fairtrade logo						
Animal welfare/ 'green' logo		n/a				
Non-organic quality food logo						

Source: Own compilation.

When confronted with these food logos and asked to identify those indicating organic food, best known on average were the national organic logos (Organic logo 1 in Estonia and France, Biosiegel in Germany) (Table 10.6). The German Biosiegel was also well known in Poland and in Italy. The reason for this is the export into these countries of German organic products carrying the logo. In this 'prompted' question the EU organic logo was recognised as an organic logo on average by less than 10 % of the respondents. This share was a little higher in Estonia and Poland. In Italy the old EU logo is still better known than the new one.

Consumers' confusion becomes obvious when looking at the numbers for the fake organic logo. This logo scores quite high in France, Italy and in Poland. In Poland it was the most known organic logo and in Italy its score was identical with the old EU logo, second after the German Biosiegel.

These results reflect the history of labelling of organic food (organic labelling traditions) in the study countries. National organic logos were established and are well known in Germany, France and Estonia. In the United Kingdom, one private logo is very prominent in the market, whereas Italy and Poland were lacking well known organic logos. In both countries the old EU logo was widely used previously (e.g. Janssen and Hamm, 2012). Additionally, the German Biosiegel is rather well known for two main reasons: first, German organic products exported to these countries bear this logo and second, the logo includes the protected term 'bio'.

**Table 10.6:** Share of logos recognised by respondents as organic logos (in percentage; n = 500 per country)

	DE	EE	FR	IT	PL	UK
<b>EU organic logo</b>	<b>25</b>	<b>26</b>	<b>25</b>	<b>18</b>	<b>26</b>	<b>10</b>
Old EU organic logo	4	15	19	34	21	4
German Biosiegel	94	22	29	38	41	5
Organic logo 1	54	73	96	19	26	40
Organic logo 2	28	n/a	27	7	n/a	27
Organic logo 3	36	1	2	5	1	2
Fake organic logo	16	18	36	34	44	4
Fairtrade logo	52	14	14	12	5	70
Animal welfare/'green' logo	10	n/a	31	17	3	16
Non-organic quality food logo	12	46	2	6	14	39
Don't know any of these logos	2	3	1	13	15	6
Don't know/remember	1	5	1	8	12	2

*Question: Which of the following logos do you recognise as organic food logo?*

Source: Own data from consumer survey.

In some countries confusion exists regarding existing non-organic logos. In Estonia and the United Kingdom nearly half of all respondents believed the non-organic quality logo to be organic. In Germany and in the United Kingdom a very high share of respondents associated the Fairtrade logo with organic farming. Although the share of products which are certified against the Fairtrade **and** organic standards is increasing, the Fairtrade logo in itself does not certify organic production.

### 10.3.3 Consumers' knowledge about additional compulsory indications

#### *Scientific evidence*

To the authors' knowledge, only Janssen and Hamm (2012) reported on a study in which focus groups participants were asked about their opinion on the mandatory indications on origin of the raw materials. They report a lot of 'scepticism' around this indication (Janssen and Hamm, 2012: 346). Test persons generally rejected the statement 'the indication EU or non-EU, without the specific country is sufficient' (ibid).

#### *Results of the consumer survey*

Table 10.7 exhibits the share of consumers who were aware of the additional mandatory indications. Only 10% of the respondents stated that they know about these indications ('unprompted' question). This share was markedly higher in Italy and markedly lower in the United Kingdom. On average of all countries, more than two thirds of the test persons were not aware of any additional indications.

Asked for the indications which accompany the EU logo, most participants answered that the term 'bio' or 'organic' accompanies the EU logo. Also well-known was the code number of the control body which is mandatory already since Regulation (EEC) 2092/91. Less known was the mandatory indication on place of farming of the raw materials (EU agriculture or non-EU agriculture). Instead, people assumed the country of origin to accompany the EU logo.

Comparing the answers of organic and non-organic consumers shows that the awareness of additional compulsory indications is highest among regular consumers (19%), followed by occasional (8%) and by non-organic consumers (2%).

**Table 10.7:** Share of respondents being aware of additional mandatory indications (n = 500 per country)

		All	DE	EE	FR	IT	PL	UK
<b>Question A</b>	<i>(total n)</i>	3 000	500	500	500	500	500	500
Aware	%	10	11	7	9	17	11	4
Not aware	%	71	76	59	79	68	53	89
Don't Know	%	19	13	33	15	15	36	6
<b>Question B</b>	<i>(total n)</i>	296	54	37	43	85	55	22
Bio/Organic	%	97	98	97	98	97	100	91
Without GMO	%	81	87	81	70	88	76	68
Code number of the Organic Control Body	%	87	87	78	98	92	80	73
Country of origin	%	85	85	70	84	95	75	91
Quality product	%	76	78	43	77	75	93	86
EU or Non-EU agriculture	%	81	76	73	77	88	86	77
Locally produced	%	63	57	68	44	71	62	82

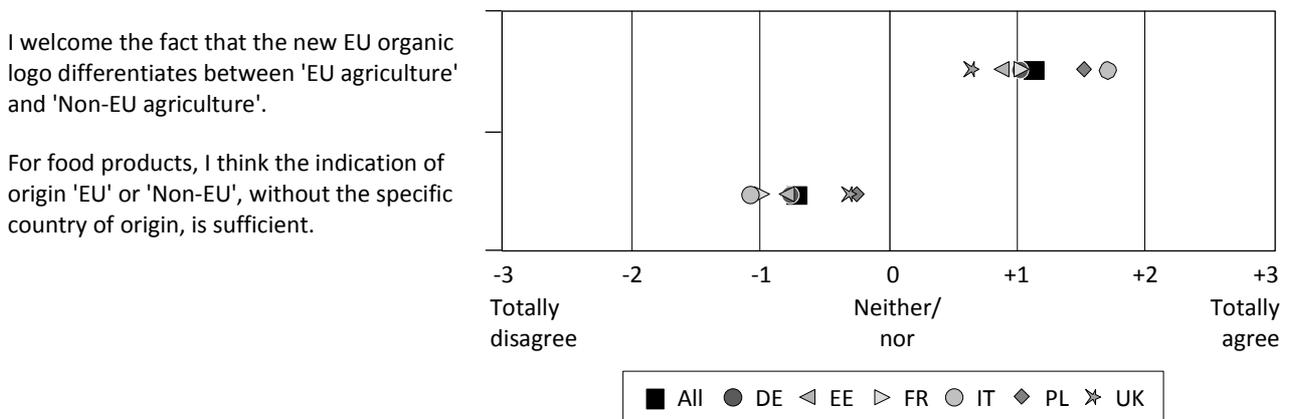
*Question A: This logo is the EU organic farming logo. From July 2010 the EU organic logo is obligatory for all organic packaged food products within the European Union. Are you aware of additional indications that accompany the EU organic logo?*

*Question B (only for respondents answering Question A with 'yes'): We will now show you a list of indications of which some accompany the mandatory EU logo and some don't. Please state which indications, in your opinion, accompany the EU logo.*

Source: Own data from consumer survey.

Additionally, test persons were asked for their opinion on the indication on the place of farming of the raw materials, 'EU Agriculture' or 'non-EU Agriculture'. Generally, test persons welcomed the fact that the EU organic logo differentiates between EU agriculture and non-EU agriculture (Figure 10.1). The agreement to this statement was highest in Italy and lowest in the United Kingdom. At the same time, on average, respondents thought this differentiation not to be sufficient. This was particularly the case in Italy and in France and to an extent (less than average) in Poland and in the United Kingdom.

**Figure 10.1:** View of consumers regarding the indication 'EU/non-EU Agriculture' (Mean agreement with statements)



*Question: Below you find a list of different statements regarding organic food. Please indicate to which extent you agree or disagree with the following statements. (+3 = total agreement, 0 = neither/nor, -3 = total disagreement).*

Source: Own data from consumer survey.

The degree of agreement with these statements was compared between organic consumers and non-organic consumers. The answers to the first statement were significantly different. Regular organic consumers agreed more (mean 1.6) than occasional organic consumers (mean 1.1) and non-organic consumers (mean 0.5) to the first statement (see Table 10.8). With respect to the second statement no significant differences could be detected.

### 10.3.4 Contribution of compulsory indications to consumers' confidence and trust in organic farming

#### *Scientific evidence*

Consumers' trust is a precondition for a logo to be successful in the market place. Much work has been done to explore the role of confidence and trust for successful labelling (e.g. Janssen and Hamm, 2012, Daugbjerg et al., 2013, Golan et al., 2001). With regard to the new EU organic logo, Meyer-Höfer and Spiller (2013) found that in Germany only 6% trust this logo. The share of people trusting in the new EU organic logo was even lower than the trust in a fake environmental logo. Sirieix et al. (2011) report on the results of focus groups: While the organic farmers' labels mostly increased trust, the additional EU label was only valuable for a few participants.

#### *Results of the consumer survey*

Consumer confidence in the EU organic logo was evaluated in comparison with other organic and non-organic logos. Test persons were asked about their confidence in all those logos they identified before as organic logos (see Table 10.6). The results in Table 10.8 show that most respondents had some confidence in the EU organic logo. This was relatively low in France and in

Germany: both countries have strong national logos. Compared to the old EU logo, confidence in the EU organic logo varied between countries. Trust in the old EU logo was high in those countries in which it had been widely used in the market place before, such as Estonia, Italy and Poland. In countries in which it was not present before, a low degree of knowledge coincides with little confidence.

**Table 10.8:** Degree of confidence in different (organic) logos (Mean values)

		DE	EE	FR	IT	PL	UK
<b>EU organic logo</b>	<b>Mean</b>	<b>1.1</b>	<b>1.4</b>	<b>0.9</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>
	<b>n</b>	<b>118</b>	<b>124</b>	<b>114</b>	<b>88</b>	<b>118</b>	<b>41</b>
Old EU organic logo	Mean	0.9	1.4	0.8	1.3	1.6	1.0
	n	18	65	85	169	96	21
German Biosiegel	Mean	0.9	1.1	0.3	1.1	1.2	0.9
	n	457	103	124	182	190	26
Organic logo 1	Mean	0.9	1.4	0.8	1.1	1.2	1.7
	n	257	336	458	95	114	183
Organic logo 2	Mean	1.0	n/a	0.2	1.4	n/a	1.2
	n	134	n/a	114	34	n/a	126
Organic logo 3	Mean	1.5	2.8	1.2	1.6	1.3	0.4
	n	178	6	11	25	3	8
Fake organic logo	Mean	1.0	1.1	0.2	1.1	1.2	0.9
	n	78	72	156	163	205	21
Fairtrade logo	Mean	1.3	1.4	0.4	1.4	1.3	1.4
	n	255	65	69	57	25	335
Animal welfare/'green' logo	Mean	1.1	n/a	0.8	1.1	1.9	1.3
	n	50	n/a	149	80	12	81
Non-organic food quality logo	Mean	0.8	1.6	1.1	1.5	1.4	1.2
	n	58	223	9	30	65	185

*Question: To what extent do you have confidence in the following organic logos when you are looking for organic food? (Test persons were presented only those logos which they identified before as organic) (7-point Likert scale, +3 = very high confidence, 0 = neutral, -3 = no confidence)*

Source: Own data from consumer survey.

The EU organic logos are only fairly trusted. On average, confidence is highest for the 'Demeter' logo (Organic logo 3), but this was not tested in France where it is not widely used and the 'Nature & Progres' logo was tested instead. In the United Kingdom, the 'Soil Association' logo (Organic logo 1) was trusted most. Interestingly, on average the non-organic food quality logos have rather high levels of confidence, but there are large differences between countries. Particularly in Estonia, Italy and Poland these logos are trusted, and in all countries except France also the Fairtrade logo has a good reputation.

With respect to the mandatory additional indications most persons trusted the indication 'EU/non-EU Agriculture', followed by the Code number of the control body (Table 10.9). Again, there are large differences between countries and the indication of origin is trusted most in Italy and Poland. Interestingly, the Code number of the control body is highly trusted in Italy. The reason is that Italian consumers have been informed a lot about how to recognise a true organic product in the past (before the introduction of the EU organic logo). The mandatory code number of the control body was considered the most credible assurance that use of the term 'bio' was genuine.

**Table 10.9:** Share of respondents trusting in the respective indications (in percentage; n = 500 per country)

	All	DE	EE	FR	IT	PL	UK
EU or Non-EU agriculture	38	35	28	40	48	52	25
Code number of the organic control body	23	20	17	17	57	18	11
Neither of them	22	34	24	21	7	12	32
I don't know	25	15	35	28	10	22	36

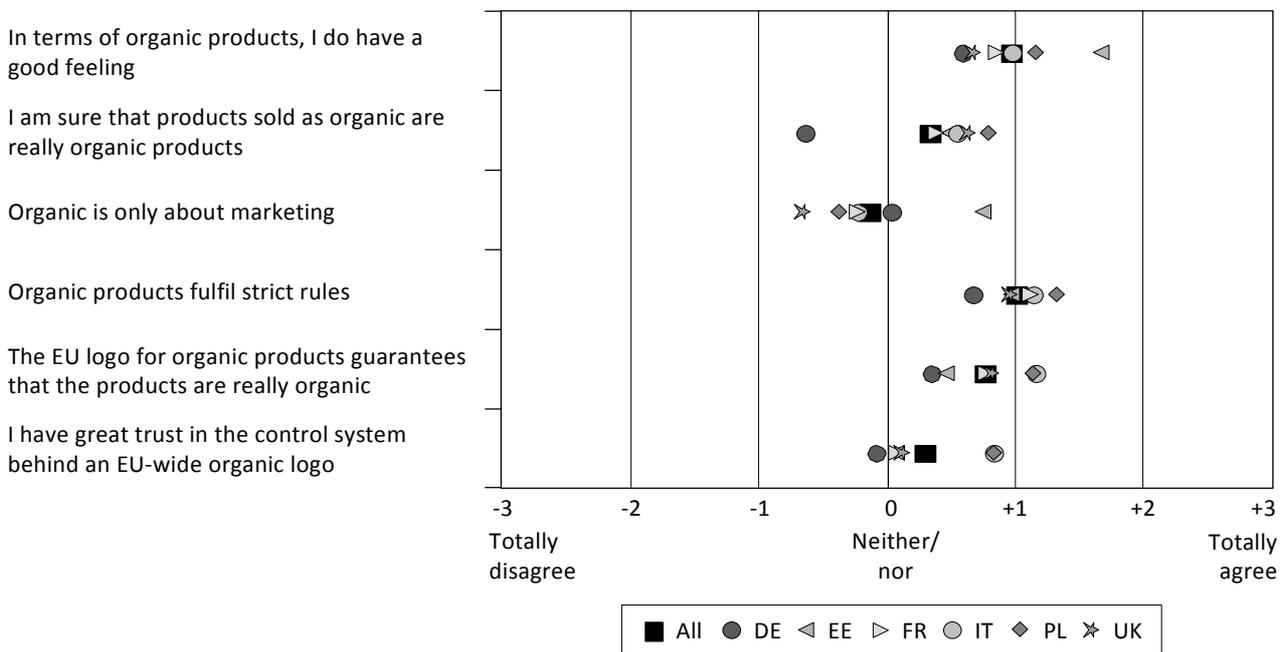
*Question: Which of the two following indications increase your trust in organic food production?*

Source: Own data from consumer survey.

Trust in the indication of the place of production of raw materials (EU agriculture or non-EU agriculture) was highest among regular consumers (51 %) followed by occasional consumers (39 %) and non-organic consumers (16 %).

When asked about their degree of agreement to various statements regarding organic products it turned out that confidence in organic production and European labelling generally is not very high (Figure 10.2). On average, respondents slightly agreed with the statement that they have a good feeling in terms of organic products, but they are less sure that organic products really are organic. They only slightly disagreed with the statement that organic was only about marketing whereas their agreement in that organic products fulfil strict rules is somewhat higher. At the country level, respondents in Estonia have the best feeling regarding organic products. The EU logo seems to increase consumers' confidence in Italy and in Poland because of the rather high degree of agreement with the statement 'the EU logo for organic products guarantees that the products are really organic'. Consumers in these countries are used to trust in EU logos since the old EU logo played an important role in these national markets. The agreement to the statement 'I have great trust in the control system behind an EU-wide organic logo' is only small and the mean over all countries is very close to neither agreement nor disagreement.

**Figure 10.2:** Views of consumers regarding trust in organic food (Mean agreement with statements)



Question: Below you find a list of different statements regarding organic food. Please indicate to which extent you agree or disagree with the following statements. (+3 = total agreement, 0 = neither/nor, -3 = total disagreement).

Source: Own data from consumer survey.

The frequency of purchasing organic food has a significant impact on trust in organic food production (Table 10.10). The level of agreement to almost all statements was significantly lower among non-organic consumers than among occasional consumers than among regular consumers. The only exception is the third statement on marketing where regular consumers agree to a lesser extent than occasional or non-organic consumers.

**Table 10.10:** Views of consumers regarding trust in organic food by frequency of organic food consumption (Mean agreement with statements)

	Organic Consumer		
	Regular	Occasional	Non
In terms of organic products, I do have a good feeling	1.7	1.1	-0.3
I am sure that products sold as organic are really organic products	0.8	0.4	-0.4
Organic is only about marketing	-0.5	-0.1	0.6
Organic products fulfil strict rules	1.5	1.0	0.3
The EU logo for organic products guarantees that the products are really organic	1.3	0.8	0.0

Question: Below, you will find some statements concerning organic products. Please indicate to which extent you agree or disagree with the following statements. (7-point Likert scale, +3 = total agreement; 0 = neutral; -3 = total disagreement)

Source: Own data from consumer survey.

### 10.3.5 Relevance of compulsory indications for consumers' purchase decisions

#### *Results of the consumer survey*

In order to explore the relevance of compulsory indications for consumers' purchase decisions consumers were asked to indicate those (organic) food logos which they consider to be important for their purchase decision. In using this approach, purchase relevance of the EU logo can be compared with that of other (organic) logos. Since only a few of the test persons were aware of the additional mandatory indications, their relevance for the purchase decision is minor. Therefore, they are not explicitly addressed in this section.

The relevance of the EU organic logo for consumers' purchase decisions was tested in a comparative manner by asking consumers to indicate out of the logos they recognised as organic logos those which they perceived to be important in their purchase decisions on organic food. In all countries except Italy, the new EU organic logo is more relevant for purchase decisions than the old EU organic logo (Table 10.11). In Italy the old EU logo is still on the shelves. National logos are very important in Estonia and in France (Organic logo 1) and in Germany the Biosiegel was most important. The German Biosiegel was also relevant in Poland and in Italy. In the United Kingdom the Fairtrade logo was most relevant.

**Table 10.11:** Share of respondents indicating the relevance of different (organic) logos for the purchase decision on organic food (in percentage)

		DE	EE	FR	IT	PL	UK
	<i>(total N)</i>	487	457	489	393	365	461
<b>EU organic logo</b>	%	<b>13</b>	<b>13</b>	<b>8</b>	<b>15</b>	<b>21</b>	<b>4</b>
Old EU organic logo	%	1	7	4	29	16	1
German Biosiegel	%	60	8	3	24	29	2
Organic logo 1	%	15	46	73	11	13	26
Organic logo 2	%	8	n/a	3	4	n/a	14
Organic logo 3	%	19	1	1	2	0	1
Fake organic logo	%	5	6	5	24	24	2
Fairtrade logo	%	27	6	3	8	4	36
Animal welfare/'green' logo	%	4	n/a	14	7	2	6
Non-organic quality food logo	%	3	36	0	5	11	18
None of these logos	%	17	11	10	12	13	18
Don't know	%	6	11	7	10	12	8

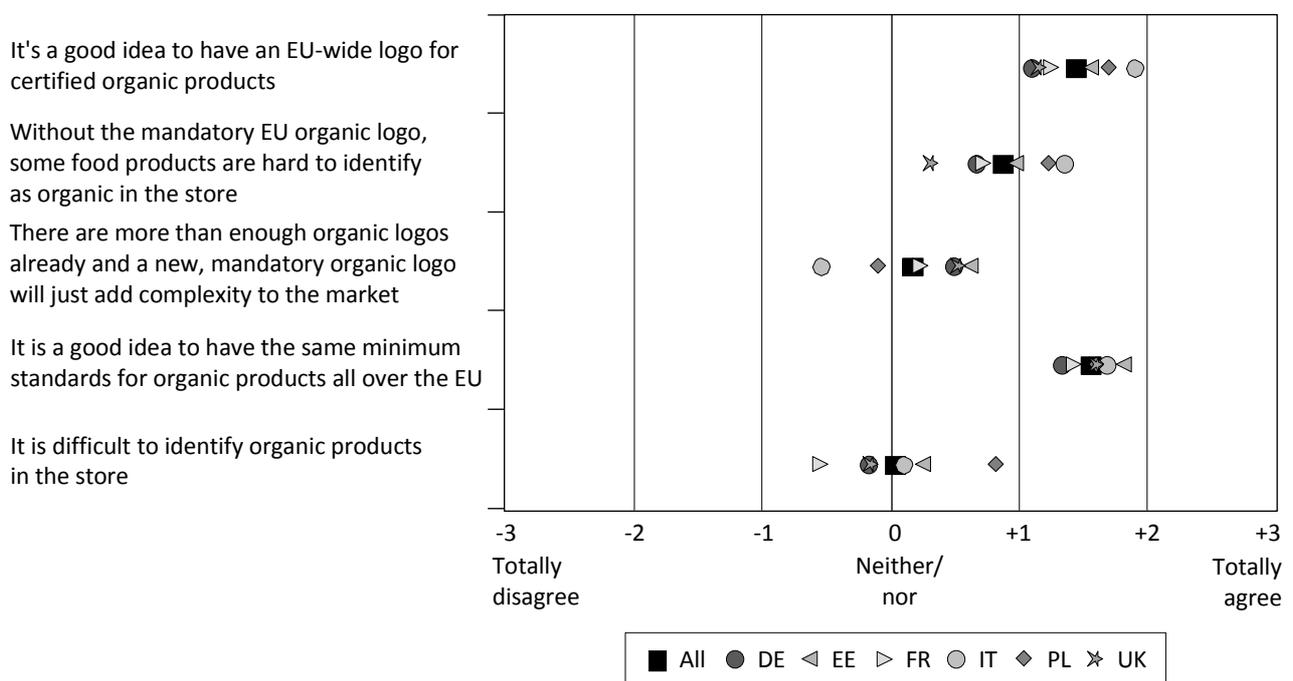
*Question: Which one of the following logos do you consider to be relevant for your purchase decision regarding organic food? (Test persons were presented only those logos which they identified before as organic)*

Source: Own data from consumer survey.

In addition to the direct question on purchase relevance, respondents' general attitudes towards the EU organic logo help to understand the acceptance of the EU organic logo by the market. On average, test persons agree with the statements listed in Figure 10.3 regarding the EU organic logo. The degree of agreement to the statement 'It's a good idea to have an EU-wide logo for certified products' is higher in those countries where knowledge of and trust in the logo is higher, such as Italy and Poland as compared to Germany and the United Kingdom. The latter have strong organic logos: in Germany the national Biosiegel and in the United Kingdom the private logo of 'Soil Association'. The answers to the subsequent statements are consistent with this first statement.

All organic logos were of higher purchase relevance for organic consumers than for non-organic consumers. Within the group of organic consumers, regular organic consumers perceived these logos to be more important for their purchase decisions than occasional organic consumers. This tendency holds also true for the EU organic logo. Out of regular organic consumers almost 20 % considered this logo when purchasing organic food while only 3.5 % of non-organic consumers indicated this logo to be relevant for their purchase decisions.

**Figure 10.3:** Views of consumers regarding the EU logo for organic products (Mean agreement with statements)



*Question: Below you find a list of different statements regarding organic food. Please indicate to which extent you agree or disagree with the following statements. (+3 = total agreement, 0 = neither/nor, -3 = total disagreement).*

Source: Own data from consumer survey.

Attitudes of non-organic consumers towards the EU organic logo were statistically different regarding the first four statements of Figure 10.3. The degree of agreement was lower among non-organic consumers to the first, second and fourth statements. Interestingly, agreement to the statement 'there are more than enough organic logos already and a new, mandatory organic logo will just add complexity to the market' was higher among non-organic consumers.

### 10.3.6 Perception of consumers with respect to the EU logo as an indicator for quality

#### *Scientific evidence*

The Regulation intends organic food to be perceived as food with high quality standards. The perception of high quality needs to be understood against the background of consumers' expectations regarding specific product quality. To the authors' knowledge, only little research exists on whether organic food is perceived as high quality food. Zanolli et al. (2004) found out that higher product quality was an important reason for buying organic food in several European countries. Many consumers understand organic food to be good food (Sirieix, 2011). Quality parameters associated by consumers with organic food are better taste and a fresher product. This refers particularly to fresh fruit and vegetables. However, perceived quality depends on the specific product and may vary. Therefore Pearson et al. (2010) identify only a weak general association of organic food and high quality products by consumers.

#### *Results of the consumer survey*

In order to understand consumers' perceptions of high product quality, they were asked for the properties a high quality product should have. Free from any chemical substances, such as residues from treatment in the production of raw materials, or additives frequently used in food processing were, on average, the most important quality attribute in all countries (Table 10.12). This was immediately followed by freshness. Interestingly, good taste was less important. Organic production as such was no direct quality attribute for three quarters of the respondents. Healthiness was particularly important in Estonia. In Germany high animal welfare standards were among the first two attributes. Good taste was particularly important in the United Kingdom. For Italian consumers freedom from chemical substances was followed by organic production. Interestingly, those attributes which are commonly associated with high quality products, such as highest hygienic standards and good appearance were not among the top three properties of a high quality product according to consumers' understanding in all countries.

**Table 10.12:** Share of respondents identifying different characteristics of high quality products (in percentage, n = 500 per country)

	All	DE	EE	FR	IT	PL	UK
Free of chemical residues	42	45	42	43	56	40	29
Free from synthetic additives	40	41	45	35	40	55	26
Freshness	38	34	46	27	31	47	45
Good taste	27	19	39	23	16	20	45
Organically produced	26	25	19	27	38	30	15
Healthiness	24	17	43	24	12	29	19
Naturalness	23	21	21	30	23	29	16
High animal welfare standards	23	45	6	20	21	12	35
Highest hygienic standards	21	20	6	28	31	22	19
Fair producer prices	19	22	18	28	17	6	22
Good appearance	6	3	8	3	2	5	13
Convenience	2	2	2	2	1	1	3

*Question: Which characteristics does a high quality product need to have from your point of view? (Maximum of three answers).*

Source: Own data from consumer survey.

Regular organic consumers rank free of chemical residues and of synthetic additives, organic production and higher animal welfare standards higher than occasional and non-organic consumers: freshness, good taste, healthiness and good appearance seem to be less important to regular organic consumers.

Test persons were then asked to select those logos which indicate high product quality out of all initially presented logos. There were important differences between countries (Table 10.13). The EU organic logo served as quality indicator most frequently in Italy, followed by Poland and Estonia. National organic logos served as indicators for high product quality in Germany, Estonia and France. In the United Kingdom the private 'Soil Association' (logo 1) was a signal for high product quality. Non organic quality logos were highly appreciated as quality indicators in Estonia and in the United Kingdom.

**Table 10.13:** Share of respondents for which different logos indicate high product quality (in percentage; n = 500 per country)

	DE	EE	FR	IT	PL	UK
<b>EU organic logo</b>	<b>19</b>	<b>21</b>	<b>18</b>	<b>30</b>	<b>25</b>	<b>13</b>
Old EU organic logo	3	11	7	25	14	4
German Biosiegel	54	11	7	26	19	5
Organic logo 1	26	43	58	15	8	30
Organic logo 2	14	n/a	5	20	n/a	26
Organic logo 3	24	1	4	3	1	1
Fake organic logo	10	10	6	28	18	5
Fairtrade logo	28	10	10	7	3	43
Animal welfare/'green' logo	8	n/a	57	6	8	17
Non-organic food quality logo	6	60	15	20	30	43
None of these logos	11	3	4	3	3	5
Don't know	14	22	16	31	31	22

*Question: Producers use logos in order to indicate specific product characteristics. Which logos generally indicate a high product quality?*

Source: Own data from consumer survey.

On average of all countries, regular organic consumers selected the EU organic logo, the three organic logos 1, 2, and 3, the Fairtrade logo, the fake logo, the old EU logo and the German Biosiegel more often than occasional and non-organic consumers. The share of 'Don't know' answers was much lower among regular organic consumers (13 %) than among occasional (21 %) and non-organic consumers (49 %).

Test persons additionally were asked for their agreement to the statement 'Organic products meet my expectations of a high quality product' (7 point Likert scale, +3 totally agree, -3 entirely disagree). The mean value over all countries was 0.8 indicating slight agreement. The degree of agreement was much higher in Poland (mean 1.3) and in Italy (mean 1.2) and lowest in Germany and in France (mean 0.6). As expected from the results presented above, regular consumers agree to a much larger extent to this statement (mean 1.5) than occasional (mean 0.8) and non-organic consumers (mean -0.1).

## 10.4 Judgement and conclusions

Based on the results presented in the section above, **it is concluded that the concept of organic farming is largely understood by most consumers in the EU**, taking the following into account:

- the majority of the respondents were familiar with the main issues of organic farming, such as growing without the use of synthetic chemicals, production by methods protecting the environment or grown without the use of genetically modified seeds; but
- a large share of consumers surveyed also agreed with 'incorrect' statements as being part of the legal definition, such as 'needs to be produced on small farms' and 'needs to be produced locally'; and
- a quarter of respondents to the consumer survey recognise the new EU organic logo which was introduced in 2010 and became compulsory without exception in July 2012.

### Detailed considerations

Labelling rules for organic products have been recognised as an important support measure to foster the development of organic farming. For this reason, Evaluation Question 5 examines consumers' perception of organic farming and the effects of the labelling rules of Regulation (EC) 834/2007.

Before the introduction of the mandatory EU logo, Member States used different logos for organic food. In some countries national logos placed together with other private logos were well known in the market places and in some countries the old EU logo was widely used. These different labelling histories were assumed to have an impact on consumers' opinions and perception of the EU organic logo. Therefore, based on a review of literature, a web-based survey was carried out in six study countries (Estonia, France, Germany, Italy, Poland, United Kingdom; 500 participants in each country) representing those different labelling traditions. The study countries serve as examples of consumer perception of the EU logo. Results might differ between countries with different specific conditions such as past promotion campaigns for the EU organic logo.

The main elements of the consumer survey were the degree of knowledge of the concept of organic farming and of the EU organic logo and the compulsory additional indications. Additional questions referred to the contribution of the mandatory indications to consumer confidence and trust in organic farming and on their impact on consumers' purchase decisions. Finally, consumers' perception of the EU logo as an indicator for the quality of food was evaluated.

The approach of using a web-based survey is well suited for covering the opinions and perceptions of a wide range of consumers. Representativeness in its pure form usually cannot be achieved in empirical social research. Instead, researchers aim at avoiding systematic biases by excluding particular groups of consumers. A disadvantage of web-based surveys is that non-users of the internet cannot be addressed. Nevertheless, there is no reason to assume that non-users

of the internet have opinions and perceptions of the EU organic logo which are systematically different to that of internet users. Therefore, this approach is assumed to give a realistic picture of consumers' opinions and perceptions at least in the study countries.

The participants in the survey included buyers and non-buyers of organic food (non-organic consumers), since the strengthening of the organic market suggested in the European Action Plan for Organic Food and Farming requires to target also organic as well as non-organic consumers. Both need to become convinced of the advantages, the reliability and the quality of organic farming and to become able to recognise its labelling.

#### *Knowledge of consumers about the concept of organic farming*

Knowledge of the subject in question is considered essential for consumers' confidence and purchase decisions (e.g. Janssen and Hamm, 2012, Daugbjerg et al., 2013, Teisl et al., 2008). The review of literature reveals that better knowledge generally increases organic consumption and that reliable information on specific aspects of organic farming could augment consumers' willingness to pay.

Consumers' knowledge of the concept of organic farming is high regarding the use of synthetic chemicals in production and processing, but low with respect to issues not covered by the legal definition, such as local production and production on small farms (on average less than 50 % gave correct answers). Since organic farming has a long history, better knowledge of the concept of organic farming might have been expected. However, the interpretation of the results depends on the perspective. The survey addressed all consumers and not only organic ones. About 20 % of the respondents classified themselves as non-organic consumers, which have much little understanding of the organic farming concept than consumers buying organic food.

Comparing the high share of correct answers regarding the concept of organic farming with observed market shares of organic food of only a few percentages (see Schaack et al., 2013), one may argue that many consumers do not buy organic food although knowing the concept and main principles. At the same time higher purchase frequency was found to be linked with better knowledge. Therefore, the results of the survey show that knowledge is one, but not the only, factor influencing purchase decisions on organic food.

#### *Consumers' recognition of and knowledge about the compulsory EU logo*

Generally, knowledge of the new EU organic logo turned out to be limited. With some differences between studied countries, about a quarter of all respondents had seen the EU organic logo before. These results are similar to the results from Eurobarometer (2012). The small deviations found may be due to the fact that different samples were used and different contexts were given.

A comparative analysis of the EU organic logo and other organic and non-organic food logos showed that in all six countries except Italy the EU organic logo was better known than the old

EU organic logo. However, in all countries other organic logos exist in the market place, which were better known than the EU organic logo. This is not surprising, given that the EU organic logo although introduced to the market in 2010 became compulsory without exceptions only in July 2012.

The high share of respondents in Italy, Poland and in France recognising the fake organic logo which includes the term 'bio' as an organic logo, might serve as an indicator that consumers are missing some minimal information on the meaning of the logo. The EU organic logo does not give any explanation on itself but it must be accompanied by the code number of the control body which needs to 'include a term which establishes a link with the organic production method' (Regulation 889/2008 Article 58(b)). In practise, terms used in European countries are e.g. 'BIO', 'ECO', 'ÖKO', 'EKO', 'ORG' and 'ØKO (one per country). This indication supports consumers to link the EU logo with organic farming; however the term 'organic agriculture' is not mandatorily accompanying the EU logo. When designing the EU organic logo it was agreed on not having a clear reference to organic by including e.g. the term 'bio' because it might have been meaningless in some countries due to different languages.

Results might have been different if the EU organic logo would have been tested together with the additional mandatory indications. However, in line with earlier research (Eurobarometer, 2012, Agence Bio, 2012) the EU logo (and the additional indications) was tested separately. This approach also takes into consideration the fact that generally logos are meant to be expressive without any additional information.

The rather high share of people having recognised the EU organic logo in France of about 38 % (results are also reflected by Agence Bio (2012) and Eurobarometer (2012)) may serve as an example for the impact of a well suited combination of the (old) national and the (new) EU organic logo: the EU organic logo always going together with the well-known national AB-logo and being promoted jointly.

Results also indicated that on average test persons agreed to the statement 'It's a good idea to have an EU-wide logo for certified organic products'. Therefore increasing knowledge of the EU organic logo should be aimed at and seems to be promising for the organic market. This would foster the achievement of global objectives of the EU Regulation on organic farming such as enhancing consumer confidence in organic food and contributing to the functioning of the internal market by establishing a common organic logo.

#### *Consumers' knowledge about additional compulsory indications*

Additional compulsory indications such as the indication of the place of farming of the raw materials (EU agriculture and non-EU agriculture) and the code number of the control body (in force already since Regulation (EEC) 2092/91) were introduced in order to increase information and to reduce consumers' confusion. A precondition for the achievement of this aim is that

consumers must know about the indications and believe them to be sufficient with respect to information content.

The results show that consumers' knowledge on additional mandatory indications is low. With only 8 to 9 out of 100 test persons being aware of the additional mandatory indications, such as 'EU agriculture' or 'non-EU Agriculture' and the code number of the control body, it must be concluded that the aims in this respect are not met to a satisfactory degree. Only in Italy, where the code number of the control body was communicated to consumers as a reliable indicator for organic food, was knowledge higher. The reason is supposed to be that the code number is not easy to recognise and remember since it has no clear visual image. For this reason, the relevance of the code number of the control body for supporting consumers to understand the meaning of the EU logo might be limited.

According to the Regulation, products can be labelled with the name of the country if 98 % of all raw materials have been farmed only in one country, which is however rarely the case for processed food products (EU Regulation 834/2007, Article 24(c)). Test persons slightly welcomed the existence of the indications 'EU Agriculture' and 'non-EU Agriculture'. However, on average they did not believe this indication to be fully sufficient. This result is in line with the results from Janssen and Hamm (2012). In a globalised world, many processed products contain ingredients from EU and non-EU countries. These products need therefore to be labelled with 'EU/non-EU Agriculture' – the gain of information might be low. Therefore, in its present form this indication might not be very promising in supporting consumers' purchase decisions. By allowing only 2% of raw materials not to be from the country indicated, the Regulation is stricter than some other indications on regional food (e.g. products with protected geographical indications such as 'Gutes aus Hessen'<sup>4</sup> or 'Geprüfte Qualität Schleswig-Holstein'<sup>5</sup>). Council Regulation (EC) 510/2006 on the protection of geographical indications and designations of origin for agricultural product stipulates e.g. that in the case of the origin of the raw material for PGI products just the production and/or processing and/or preparation of a product takes place in the defined geographical area, but not that all raw materials have to originate from that area.

#### *Contribution of compulsory indications to consumers' confidence and trust in organic farming*

Knowledge of the production standards and of the logo is not enough to affect consumption decisions. Instead trust is also needed (e.g. Janssen and Hamm, 2012; Daugbjerg et al., 2013). The survey results suggest that consumers have some confidence in the EU logo; more respondents trusted the logo than did not trust it. Furthermore, with the exception of Poland, in all countries trust in the EU organic logo is the same or higher than in the old EU logo. These results are supported by test persons' opinions and perceptions on organic food in general and the role of

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<sup>4</sup> <http://www.gutes-aus-hessen.de/unsere-zeichen/gepruefte-qualitaet-hessen.html>.

<sup>5</sup> <http://www.gzsh.de/guetezeichen/das-qualitaetssiegel/>.

the EU organic logo in particular. With regard to additional indications, on average about 40 % of the respondents trust in the indications on the origin of the raw materials and a smaller share in the code number of the organic control body (23 %). Due to a targeted promotion campaign before the introduction of the EU organic logo, this last share is higher in Italy. Although, on average there is some trust in the EU organic logo, this could be increased by better communicating underlying standards and certification systems in order to contribute to the EU Regulations' general objective of ensuring consumers' trust.

At this point, it might be helpful to differentiate between organic and non-organic consumers. Regular organic consumers showed a higher degree of trust also in the EU logo. On the one hand, this may serve as an indication that increasing trust may increase organic consumption. On the other hand, it stresses the need to directly address also non-organic consumers by communicating the existence of independent certification systems.

#### *Relevance of compulsory indications for consumers' purchase decisions*

Since the knowledge of the EU organic logo was only limited, purchase relevance of compulsory indications was also expected to be low. The results of the survey prove this assumption. The EU organic logo is considered to be relevant for the purchase decision by only 13 % of all respondents. Due to the limited knowledge which in turn is due to the fact that the EU organic logo was only recently introduced, other organic logos were perceived to be much more important at the point of sale.

However, against the background of the short presence in the markets and the lack of promotion campaigns, purchase relevance, at least in countries without strong national or private logos such as Poland and Italy, is notable.

#### *Perception of consumers with respect to the EU logo as an indicator for quality*

The survey results show that the majority of test persons do not perceive the EU logo as an indication for quality, notwithstanding some differences between countries. This is not a surprise bearing in mind that the knowledge of the EU logo turned out to be low.

In order to examine the potential of the EU logo as an indicator for quality, it is useful to consider whether test persons perceive organic food itself as a quality indicator. The results of the survey indicate that this is true only for a quarter of all respondents. However, typical properties of organic food such as freedom from chemical residues and from synthetic additives are highly ranked quality attributes. Furthermore, when asked test persons for their opinion on the statement 'Organic products meet my expectations of a high quality product', regular organic consumers agreed on average while non-organic consumers were more sceptical. This finding corresponds also to the result that regular organic consumers mentioned typical attributes of organic food, such as low residues of chemicals and additives, more frequently than occasional or non-organic consumers. This consumer group selected the EU logo more often as a quality

indicator and agreed to a higher degree to the statement that organic food meets their expectations of a high quality product.

From that it can be concluded that organic food meets important consumer expectations regarding quality attributes particularly for regular organic consumers but at the same time some expectations of consumers regarding quality of organic food are not always fulfilled. From the answers to the question of quality characteristics it can be deduced that these properties are particularly freshness and good taste. Thus, the EU organic logo has a potential - particular for regular organic consumers - to serve as quality indicator given improved knowledge of the logo.



## Chapter 11

# Simplified administration and management of the organic farming legislation

### 11.1 Introduction

#### Evaluation Question 6

*To what extent has the current legislative framework for organic farming contributed to achieving a simplified administration and management of the legislative measures applied to the organic sector as compared to the legal framework applicable before 2009?*

*In answering this question, the following groups of actors need to be considered: farmers, other operators (processors, importers, retailers), Member States' Competent Authorities, Member States' accreditation bodies, control authorities and control bodies, and European Commission.*

The European Union introduced its first regulation for organic food in 1991 (EEC/2092/91) with the aim to protect organic farming by ensuring fair competition between producers and improving the credibility of such products in the eyes of consumers. Over the next 15 years, until 2006, the regulation was amended 40 times, through 6 Council and 32 Commission regulations as well as two Acts of Accession. As part of the European Action Plan for Organic Food and Farming (European Commission, 2004a) the EU Council called on the Commission to review the legal framework for with a view "to ensure simplification and overall coherence", as well as "to reduce the level of detail where possible" (Recital 4 of Regulation (EC) 834/2007). The Commission working document to the Action Plan stated in particular the need to simplify the rules related to animal husbandry (European Commission, 2004b). The outcome of this process is the current Regulation (EC) 834/2007 with objectives, general and sector specific principles as well as production rules for the various sectors and separate Commission Regulations with more detailed implementing rules. The new regulations also include provisions on information exchange between authorities regarding information from control bodies and the Organic Farming Information System (OFIS) has been set up to facilitate such exchange.<sup>1</sup>

Against this background the aim of this evaluation question is to establish whether the total revision of the legal framework for organic farming has contributed to simplification in terms of

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<sup>1</sup> [http://ec.europa.eu/agriculture/ofis\\_public/index.cfm](http://ec.europa.eu/agriculture/ofis_public/index.cfm).

administration and management of the legal measures, compared to the legal framework in existence before.

Efforts to simplify the legislative framework for organic food and farming should be seen in the context of the Common Agricultural Policy framework, where such actions should have the goal of *“reducing red tape for both farmers and administrations by making rules more transparent, easier to understand and less burdensome to comply with”* (European Commission, 2005a). Potential further areas for simplification could also be clarity, language structure, accessibility and a reduction in the complexity of technical details to make the rules as easy to comply with as possible and by removing some unnecessary requirements. This is part of the EU strategy for better and smarter regulation which re-affirms the need to consider the views of affected stakeholders and to reduce red tape for both operators and administrations (European Commission, 2005b; European Commission, 2010; European Commission, 2012).

In the context of this evaluation, simplification is understood to refer mainly to the transparency of the structure of the rules and the administrative burden of the rules for various operators. Changes considered with potential impact on transparency are: stating objectives and principles, changes to the structure of the production rules, changes to the control systems through linking it with the Regulation (EC) 882/2004 (Official Food and Feed Control) and changes to the approval process of various permitted inputs through inclusion of criteria. The approval process also considers the role of the expert Group for Technical Advice on Organic Production (EGTOP). Other activities of EGTOP, such as technical advice on any matter relating to the area of organic production are not considered in this chapter. The main change considered with impact on the administrative burden is the replacement of derogations with exceptional rules.

After this introduction and listing the judgement criteria and sources, results are presented related to the transparency of the new framework, its impact on the approval processes for permitted inputs, bureaucracy and administration for operators at various levels and the question of whether inclusion of exceptional rules has contributed to simplification.

## 11.2 Approach

The answer to Evaluation Question 6 is based on several judgement criteria which were mainly derived from the concept of simplification in the context of the CAP set out above. The following criteria are examined:

- (1) **The new regulations (Council Regulation (EC) 834/2007 and the implementing rules in Commission Regulation (EC) 889/2008) are (or are not) more transparent compared with the previous one (and repealed Council Regulation (EEC) 2092/91**

This was judged on the basis of documentary analysis of the Regulations and views of stakeholders, experts from EGTOP and staff of the European Commission.

(2) **The approval of substances to be included in the Annex has (or has not) been made simpler under the new rules**

This was judged on the basis of documentary analysis of the regulations and views of experts from the EGTOP in relation to the approval process and the European Commission were considered.

(3) **The new Council and Commission regulations have (or have not) reduced red tape for operators and administration**

This was judged on the basis of the views of stakeholders in the 13 case study countries.

(4) **The inclusion of exceptional rules and adaptation to local conditions rather than derogations has (or has not) simplified administration and management**

To judge whether the current legislative framework has contributed to simplifying administration and management of the legislative measures, the (different) views and experiences of those stakeholders that are directly involved in the administration and management of the legislative measures should obviously be considered. To achieve this, the opinions of competent authorities, control bodies and organic operators (producers, processors, wholesalers, retailers, business groups) from the 13 case study countries have been gathered. Furthermore, the views of EGTOP members and EU Commission officials have also been taken into account.

## 11.3 Results

### 11.3.1 Transparency of the Regulation compared with the previous instrument

#### Changes to the structure of the Regulation

##### *Findings from the analysis of provisions*

Council Regulation (EEC) 2092/91 was one regulation with several Annexes, of which Annex I (A to C) contained the main production rules. The new regulatory framework consists of one Council Regulation and two Commission regulations (see also Chapter 3) with implementing rules. Of issues related to simplification set out by the Commission in the context of better regulation; repealing, codification and re-casting are particularly relevant in this context. Table 11.1 gives an overview of sections, headings and articles of Regulation (EC) 834/2007 and the related implementing rules, compared with Regulation (EEC) 2092/91.

**Table 11.1:** Structure of Regulation (EC) 834/2007 compared with old regime

Council Regulation (EEC) 2092/91 Article	Council Regulation (EC) 834/2007 Article    Heading	Commission Regulations Article
	I Aim, Scope and Definition	
1-3	1            Scope	1            Reg. (EC) 834/2007 1            Reg. (EC) 1235/2008
4 Annex VI	2            Definitions	2            Reg. (EC) 1235/2008 2            Reg. (EC) 1235/2008
6 Annex I	3-7        II Objectives & principles	
7 Annex I (A, B,C) Annex II (B) Annex IV	8-22      III Rules of production	See Table 7.1 for details
5	23-26    IV Labelling	57-62      Reg. (EC) 834/2007
8+9	27-31    V Controls	63-69      Reg. (EC) 834/2007
11	32-33    VI Trade with outside EU	1-21        Reg. (EC) 1235/2008 Annexes    Reg. (EC) 1235/2008
13-15	34-43    VII Final & transitional rules	93-94      Reg. (EC) 834/2007
Annex II - IX		Annex I-XIV    Reg. (EC) 834/2007

Source: Own presentation based on Regulation (EC) 2092/91, Regulation (EC) 834/2007, Regulation (EC) 889/2008 and Regulation (EC) 1235/2008.

The following changes are most relevant to simplification:

- **Objectives and principles** have been included in one section. The question of whether objectives and principles have contributed to more common understanding of organic agriculture was addressed in Chapter 7.
- The **production rules** in Council Regulation (EC) 834/2007 brought together various sections from Annex I of Regulation (EEC) 2092/91, whereby requirements related to the whole farm (rather than crops or livestock) and farm conversion rules that were previously in several different places were brought together. The section includes criteria for the approval of substances listed in various Annexes. Also a statement of setting out conditions for flexibility was included allowing organic production to be adapted to local conditions where necessary. These exceptional rules replaced the previous system of derogations. For livestock production

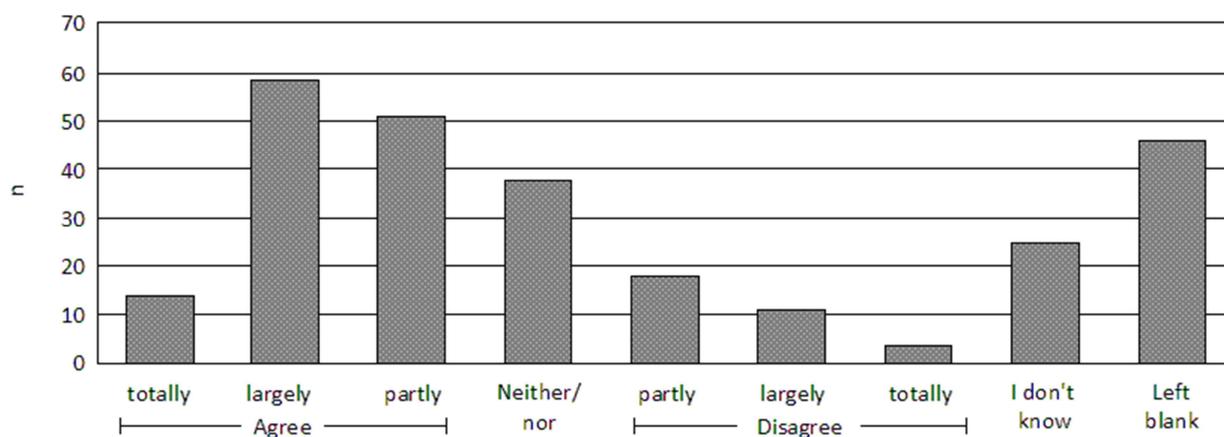
it removed the situation where national rules could be stricter than the EU rules.<sup>2</sup> Most detailed rules previously stated in the various Annexes of Regulation (EEC) 2091/91 were transferred with very few changes to their content, but some new areas were introduced (e.g. aquaculture, wine).

- The **control rules** were linked to Regulation (EC) 882/2004 (see also Chapter 8).
- The mandatory use of a common EU logo in the **labelling rules** is also likely to have improved transparency for consumers (see Chapter 10).

### Views of stakeholders and experts

In general, the introduction of the principles and objectives in a legal context was broadly welcomed as contributing to the understanding of the concept of organic farming, although opinions as to the extent to which this had improved overall transparency were mixed. In the stakeholder survey the majority of respondents agreed that the new organic farming legislation is more transparent than the previous regime (see Figure 11.1).

**Figure 11.1:** Views of stakeholders whether the new organic farming legislation is more transparent than Regulation (EEC) 2092/91 (219 respondents)



Question: Do you agree with the following statement? The new organic farming legislation (Council Regulation (EC) No. 834/2007 and the implementing rules) is more transparent than Regulation (EEC) 2092/91.

Source: Own data from web-based survey of stakeholders.

There was some concern that the objectives and principles have introduced several terms that are not legally defined (e.g. sustainability) which could reduce their impact in the implementation or lead to lengthy discussion about their interpretation in the context of the Regulation.

<sup>2</sup> Council Regulation (EC) 1804/1999 amending Council Regulation (EEC) 2092/91.

Looking in greater detail at the views that emerged from the interviews in case study countries, some competent authorities (Czech Republic, Estonia, France and the United Kingdom), control bodies (Austria, Czech Republic, Estonia, France) and Ministry of Agriculture respondents (Austria, Germany) suggested that there needs to be **greater precision and clarity of definition** in order to facilitate a common interpretation, and consequently implementation, across Member States. Areas where this was felt to be particularly relevant included the status of animals in the case of non-simultaneous conversion, soil protection rules, definition of a region, and, more generally clearer definitions of terms used in the Regulation such as ‘irregularities and infringements’ and a definition of ‘high quality’. One competent authority was of the contrary opinion that Regulation (EC) 834/2007 is more precise thereby giving less room for interpretation.

The need for clearer and more precise definitions was echoed by a number of producer representatives who felt that certain areas were too open to interpretation. Eight organic producer organisations and farm advisors from Austria, Czech Republic, Estonia, France, and the United Kingdom called for more closely defined production rules in order to remove ambiguity and limit room for interpretation. Examples given of areas where Member States have differing interpretations include housing conditions for calves, authorised inputs, soil protection, definition of a poultry house, greenhouse crop production and the use of substrates. As one producer organisation representative put it, *“where there’s no intention for there to be flexibility (...) it should be clearer what the intended interpretation should be. (...). It should be absolutely clear within the Regulation what the intention of that is and the interpretation. There shouldn’t be any regional interpretation”*.

One competent authority and one control body felt that more detailed rules are not needed but rather a more **unified and harmonised interpretation** expressed as a balance between flexibility and harmonisation. Another competent authority cautioned against harmonisation at the expense of simplification. 18 respondents (competent authorities, control bodies and farm advisors) in eight countries (Austria, Czech Republic, Denmark, Estonia, France, Italy, Poland, Slovenia and the United Kingdom) expressed a desire for some kind of a harmonised, EU-level, interpretation of the Regulation: *“...where there is a question, I don’t think it’s down to an individual certifier or even a group of control bodies in a Member State to come up with our own interpretation of it. It should be the Commission that says what the intention of that part of the Regulation is and how it should be applied”*. One suggestion was to create an *“overarching document or web based reference for common interpretation”*.

16 respondents (from competent authorities, Ministries of Agriculture, control bodies, organic producer organisations, farm advisors, business groups) in seven countries (Austria, Czech Republic, Spain, France, Italy, Poland and Slovenia) commented on the **control system** in terms of its transparency and the consistency of enforcement and sanctions. The link between organic farming inspection systems and the system of official controls in accordance with Regulation (EC) 882/2004 is very much welcomed. However, three respondents (competent authority, control

body, Ministry of Agriculture) observed that this has introduced an extra layer of complexity. It was suggested that control systems would benefit from greater harmonization between Regulation (EC) 882/2004 and Regulation (EC) 834/2007 to better clarify the surveillance procedures competent authorities should perform on control bodies and control authorities.

Several respondents (competent authorities, Ministries of Agriculture, control bodies, organic producer organisations and business groups) felt that interpretation of infringements and sanctions by Member States differed greatly and that clarification of the system is required to ensure greater transparency and a more harmonised interpretation. Suggestions included a common European standard for non-compliance and sanction to make the reporting of control bodies comparable or a *“European platform for sharing information between control bodies and competent authorities”*. One control body observed that the definitions of terms could allow for clearer comprehension to avoid different interpretations between Member States, especially regarding the terms ‘irregularities/infringements’ and ‘inspections/controls’.

As regards the **separation of the principles / main rules and implementing rules** into separate documents, opinions were mixed. Several representatives from competent authorities, control bodies, producer organisations and organic business groups in six countries (Austria, France, Italy, Poland, Slovenia and the United Kingdom) were concerned that the split of the Regulation into Council and Commission Regulations has made it more difficult to see the coherence of the legislative provision and has compounded the lack of clarity. Specific concerns were that the implementing rules can be read on their own without reference to the objectives and principles. This concern was reiterated by one of the EGTOP experts. However, another EGTOP expert was of the opinion that whilst splitting the Regulation had not simplified the situation, it had contributed to overall transparency. Interviewees from control bodies (Austria, Slovenia and the United Kingdom) and Ministries of Agriculture (Austria, Germany) commented on the practical difficulty of reading the regulations as issues are spread throughout the separate documents.

Several respondents suggested that the detail in Regulation (EC) 834/2007 needed to be pared down to a few, clear basic principles and objectives with no rules and focus in greater detail in the implementing rules in Regulation (EC) 889/2008.

Other stakeholders (competent authorities in France and the United Kingdom, producer organisations in France, Slovenia and the United Kingdom as well as control bodies in the United Kingdom) questioned how well the principles and objectives are aligned with the implementing rules. It was pointed out that there are **inconsistencies between the objectives of the Regulation and the production rules** applied which could jeopardise delivery of the aspirations set out in Regulation (EC) 834/2007:

- *“834 is good but it needs to be carried through by implementing rules which are progressive and live up to the high expectations. (...) There’s no real mechanism within the exceptional rules for ensuring that there is progression and evaluation of that progression”;*

- *“There needs to be more of a focus and a facility to look at things like environmental performance and energy use. There are some openings for that in 834 but it needs to be stated more explicitly”.*
- *“Rules prohibiting the use of amino acids in feed processing act against the principle of sustainability, as they lead to higher emissions and act against animal welfare provisions”.*

One expert from EGTOP highlighted that shared information via the **OFIS system** about imports, exceptional rules, irregularities and frauds has contributed to more transparency, as has the inclusion of criteria for approval of substances in the Annexes.

The Commission expressed the view that the structure of the new regulations and the fact that production rules are now defined at the level of the Council Regulation has contributed to transparency because it **makes changing the rules easier**. Similarly they considered that the replacement of derogations by flexibility rules has contributed to transparency although it was not specified why this should be the case.

### 11.3.2 The approval process for permitted substances

#### *Findings from the analysis of provisions*

One major change of the Regulation is the inclusion of criteria for the approval process for permitted inputs (Article 16 of Regulation (EC) 834/2007 for products used in farming and Article 21 for use in processing). Changes to the approval process included the introduction of an Expert Group for Technical Advice on Organic Production (EGTOP) in order to assist the Commission in evaluating products, substances and technologies which can be used in organic production.<sup>3</sup> Other activities of the EGTOP, such as technical advice on any matter relating to the area of organic production are not considered in this section. It is worth noting that the EU approval process at present only covers generic substances and not the approval of specific trade products for use by organic operators; this is currently handled either at national or at control body level.<sup>4</sup> Lists of products that can be used by organic operators are published in several countries (e.g. Austria, Germany, and France) and are made available by some control bodies to their members, but they do not exist in all Member States.

#### *Views of stakeholders*

Four competent authorities (Denmark, the Netherlands, Poland and Slovenia) did not have a clear opinion on whether the EU approval procedure has been simplified and three (Estonia, Italy, and

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<sup>3</sup> By Commission Decision 2009/427/EC of 3 June 2009, the Commission established the Expert Group for Technical Advice on Organic Production (EGTOP).

<sup>4</sup> See also inventory of the implementation of input approval process under regulations in various EU Member States QLK5-CT-2002-02565 <http://www.organic-research.net/organicinputs.html?&L=0>.

Spain) felt there had been no change. Two (Austria, United Kingdom) were of the view that the approval procedure has become more transparent, in so far as people know better what is expected and what level of detail is needed. It is important to note that the approval procedure applies to generic substances but not to the approval of specific products. The Czech competent authority and one control body were concerned that at present there is not enough clear information for operators on what products they can or cannot use.

Staff of the Commission and EGTOP members shared the view that the approval process has not become easier but is now more transparent. Particularly for crop protection agents it is now simpler to introduce new generic substances and the criteria against which dossiers have to be evaluated are more transparent. The EGTOP process with clear rules of operation, using criteria set out in the Regulation, and the publication of its reports has improved the expertise and transparency of the process.

According to Commission staff, the introduction of the approval procedure for substances has created expectation in the input industry, which submits more and more requests for approvals and the current procedure is very time consuming and should therefore be changed. It was felt that future provisions should focus on identification of the best substances for organic agriculture rather than all, and make it possible to remove as well as add substances to the lists.

#### *Findings from the analysis of other publications and information*

Both the Commission and EGTOP agreed that the approval process for substances from the constitution of a dossier by the Member State to either inclusion of the substance in the respective Annex of the Commission Regulation or rejection has generally taken a long period of time. Before the setting up of the EGTOP in 2009, the Commission used ad-hoc expert groups to help evaluating the substances and tended to gather dossiers in batches to achieve a critical mass to be examined by the expert. This process could take up to five years on average, sometimes even more. Once the EGTOP was operational, the process was streamlined and it is estimated that the minimum period of time to get a substance approved (or rejected) has been reduced to approximately two to three years, if all conditions along the process are optimal. As before, dossiers are not examined on a continuous basis, but in batches to reach critical mass. Delays can occur if dossiers presented by the Member States are incomplete and further work from the national administrations is required. Delays can also occur because the working procedures of the EGTOP foresee the constitution of sub-groups with a view to appoint experts with adequate experience to the type of substances and subject under consideration.

After EGTOP has provided written recommendations, the normal legislative procedure has to take place, before a decision on inclusion (or rejection) is taken. Of the four EGTOP reports<sup>5</sup> related to the approval of substances (plant protection products, fertilisers and soil conditioners, feed additives, organic food) only one has so far resulted in changes to Regulation (EC) 889/2008. One interviewed expert viewed this as inhibiting innovation and constituting a handicap for the further development of sector, both in primary production and in food processing.

### 11.3.3 Impact on bureaucracy (red tape) and administration for operators and authorities

It is not easy to separate the impact of specific changes aimed at simplification from the overall impact of the new regime compared to the old one, because several new areas were introduced (e.g. aquaculture, wine). The total administrative burden of competent authorities and control bodies will also have been affected by the fact that the number organic operators and the size of the market have increased since the Regulation was introduced. All this is likely to result in greater workload for administration at various levels. For example, some interviewees in Germany pointed out with a slightly ironic undertone that “*each deleted regulation was followed by two new ones*”. This needs to be kept in mind when interpreting the responses of the various stakeholders.

#### *Views of stakeholders and experts*

Asked whether the new Regulation had reduced bureaucracy the overwhelming response of stakeholders in the case study countries was that this is not the case. A majority of respondents who expressed an opinion (90 interviewees) believed that it has remained the same, with some believing that the situation had got worse. This was described by a couple of respondents as an inevitable consequence of a more complex, more comprehensive regulatory framework (e.g. control bodies in Spain, competent authority in Germany). Many respondents attributed it to the increased need to interpret aspects of the legislation. Only 12 respondents believe that bureaucracy has been reduced and only in certain areas. Areas cited by respondents were imports, invoicing, and documentary evidence. However, none of these respondents elaborated on the particular aspects that have contributed to this reduction.

Looking in greater detail, opinions varied according to the type of stakeholder. All except one of the organic producer organisations interviewed (16 out of 17) commented that bureaucracy had not been reduced for farmers and growers and in some cases had increased. Only two respondents elaborated on their answer. One attributed the increase in bureaucracy to the lack

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<sup>5</sup> See [http://ec.europa.eu/agriculture/organic/eu-policy/expert-recommendations/expert-group\\_en](http://ec.europa.eu/agriculture/organic/eu-policy/expert-recommendations/expert-group_en). One further report of EGTOP is related to the mandate to review the provisions for organic poultry production and is not related to input approval.

of clarity in the regulations which, according to them, has created confusion resulting in more time and effort being spent on interpretation (see also 11.3.1). A second commented that bureaucracy has increased in particular for small scale producers and is seen as a major barrier for them in taking up organic production (Italy). Only one interviewee, from a producer organisation in the Netherlands was of the opinion that there had been some reduction in bureaucracy resulting from the move towards 100 % organic feed for ruminants, but did not provide further details. Presumably this referred to the fact that record keeping in relation to different feed inputs has been simplified.

Among other organic operators (processors, wholesalers, retailers, and business groups) the majority view was that bureaucracy had increased or stayed the same with only seven of 55 interviewees disagreeing. Reasons given include national exceptional rules creating more bureaucracy; too bureaucratic for small scale producers; documentary evidence (*“From a theoretic point of view the bureaucracy concerning the documentary evidence as in Article 29 should decrease. However, what we can notice from our experience is that the bureaucracy increased”*).

Only one competent authority was of the opinion that bureaucracy had been reduced due to what they see as the greater precision of the Regulation resulting in fewer resources being spent on issues of interpretation. In contrast, competent authorities in the other twelve case study countries saw the situation unchanged or worsened. Reasons given include, for example, *“The duty of providing exception [which was] given to the competent authority”*, or *“lack of clarity and consistency in the Regulation”*.

The prevailing opinion among control bodies in nine of the thirteen case study countries was that bureaucracy has not been reduced, and might even have increased because more time is being spent on interpreting and clarifying the Regulation. One comment was concerned whether such interpretation work is being replicated across all Member States: *“To start with the Regulation has to be clear so it’s not open to interpretation.... it’s a huge waste of resources and it would be far better to have some kind of Commission based entity to make decisions on. Not where there are regional differences, but on simple procedural things and interpretation and implementation”*. In contrast, control bodies in Estonia and Slovenia were of the opinion that situation had improved slightly for them partly due to there being less need for authorisations (Estonia), and as a result of the control body transferring some of its administrative tasks to the competent authority (Slovenia). A similar was expressed by a Bulgarian control body without however specifying any reasons.

Four Italian respondents (control body, organic producer organisation, organic retailer and environmental NGO) as well as one Austrian control body commented that the control system was overly bureaucratic especially for small scale producers and operators. It was felt that a simplified control system might be put in place for small scale operators, possibly through small group certification.

Commission staff expressed the view that the inclusion of the main production rules in the Council Regulation has led to a clear separation of tasks between the Council and the Commission and has made changing some of the rules easier.

#### **11.3.4 Simplification through the inclusion of exceptional rules and flexibility**

##### *Findings from the analysis of provisions*

In Article 22 the Regulation (EC) 834/2007 replaced the system of derogations (e.g. for the use of certain non-organic or restricted inputs) with a system of exceptional rules that allows the adaptation to local conditions rather than derogations.

##### *Views of stakeholders and experts*

Respondents from control bodies were split in their opinion of whether or not the inclusion of exceptional rules and adaptation to local conditions as compared to the previous regime of derogations has simplified administration and management for them. Five respondents, from Bulgaria, Czech Republic, Estonia, Italy and Slovenia thought that this change had simplified their administration but did not specify reasons. Nine control bodies in eight countries (Austria, Estonia, France, Italy, the Netherlands, Poland, Spain and the United Kingdom) were of the opinion that inclusion of exceptional rules had not led to a corresponding simplification in terms of administration. Explanations given included the need to manage the referral process to the national competent authority as well as the difficulty of managing and controlling exceptions. One control body pointed out that as they did not issue many derogations under the terms of their private standard, a change in bureaucracy with respect to the exceptional rules was not expected.

Representatives from competent authorities were mostly of the view that there was no real simplification through the inclusion of exceptional rules due to the fact that they are responsible for administrating the exceptional rules at national level. Only two competent authorities (Czech Republic, Slovenia) were of the view that inclusion of exceptional rules and approval at the level of the competent authority had contributed to transparency because there is only one authority taking decisions which has increased clarity for operators.

Experts from EGTOP were of the view that the move to exceptional rules has not made a great difference compared to the previous derogation regime, because Member States must grant exceptions and inform each other about them. One expert pointed out that in some cases suppliers of organic ingredients, who have an interest in them being used, should be given opportunity to challenge non-compliance with exceptional rules. He referred to the example of Annex IX (Non-organic agricultural raw materials for processing) and the related exceptional rule (Article 22(c) of Regulation (EC) 834/2007) and suggested that this could be replaced by the statement that organic ingredients have to be used when available and the obligation for

processors to declare in a public space (e.g. their website or OFIS) when they had to use non-organic raw materials. With that information potential suppliers can challenge a processor that claims not to find certain ingredients and there is no need for the administration to maintain and update lists of what is and is not available.

Commission staff was of the view that exceptional rules did not simplify the administration in the Commission as the exceptions need to be approved.

## 11.4 Judgement and conclusions

Based on the results presented in the section above, **it is concluded that the current legislative framework for organic farming has significantly improved the transparency compared with of the legislative measures applicable before 2009, but has not resulted in simplified administration and management**, taking the following into account:

- Objectives, principles and production rules are now defined at the level of Council Regulation (EC) 834/2007. The structure of the new regulations, whereby the implementing rules are contained in separate Commission Regulations, runs the risk that not all relevant sections are considered by operators. There is a lack of clarity of some terms (e.g. region, irregularities and infringements, high quality).
- The approval process of permitted substances and practices has been clarified and criteria have been laid down, but there are concerns about the length of the approval process.
- The new Regulation and the replacement of derogations with exceptional rules have not overall resulted in reduced red tape and administration.

### Detailed consideration

The European Union introduced the first Regulation (EEC) 2092/91 for organic food in 1991 with the aim to protect organic farming by ensuring fair competition between producers and improving the credibility of such products in the eyes of consumers. After numerous amendments a total revision resulted in Council Regulation (EC) 834/2007 and separate Commission Regulations of implementing rules. This chapter evaluates whether this total revision of the legal framework has contributed to simplification in terms of administration and management of the legal measures, compared to the legal framework in existence before.

The judgement compared current provisions with previous ones and considered the views of stakeholders, including operators and bodies directly involved in the administration and management of the legislation (such as competent authorities and control bodies) in 13 case study countries, the views of the European Commission and of members of EGTOP.

### *Transparency of the rules*

Council Regulation (EC) 834/2007, in conjunction with the detailed rules for the implementation have been laid down in Commission Regulation (EC) 889/2008, has resulted in greater transparency compared with Council Regulation (EEC) 2092/91 because of the inclusion of objectives and principles in the legislative text, through the introduction of titles and article headings and by bringing together related provisions (e.g. general farm and conversion rules).

The total revision which included the repealing of the previous legislation is a recasting effort. By setting out objectives of the Regulation and the objectives and principles of organic production, Regulation (EC) 834/2007 has contributed to transparency and the codification of the legislative framework.

However, this is partly undermined by the structure of the new regulatory regime, whereby the implementation rules are presented separately from the main Regulation. As a result several articles in different sections need to be consulted when interpreting specific rules which has contributed to the observed practise of reading and applying specific implementing rules without due consideration of objectives and principles. Also, there is lack of precision and lack of clarity of some terms (such as 'irregularities and infringements' or 'high quality') making a common interpretation, and consequently implementation, across the Member States difficult (see also Chapter 7). This has created uncertainty and requires more time to be spent on trying to clarify interpretations. This is particularly the case for control bodies and competent authorities. Also, there appears to lack of clarity regarding the surveillance procedures between Regulation (EC) 882/2004 and Regulation (EC) 834/2007.

### *The approval process of permitted substances*

As confirmed by stakeholders and experts, the process of approval of substances permitted for use in organic farming and processing has become more transparent through the inclusion of criteria (but not necessarily easier). The Expert Group for Technical Advice on Organic Production (EGTOP) develops evidence-based recommendations for approval, but this cannot and should not replace the need for a political process. The current approval process at EU level has not (yet) led to substance removal. It does not fulfil all expectations of operators in terms of how quickly substances are approved. According to views of experts and European Commission, the process is also labour intensive in its present form and systems may not be able to perform, should the volume of approval requests increase.

The current approval process at EU level covers only generic substances. No change was made to the approval process for permitted products that can be used by operators. This is handled either nationally or by control bodies, but in some case study countries there is a lack of guidance to operators regarding what products can be used.

*Reduction of red tape for operators and authorities*

According to the views of stakeholders, new regulatory regime has not significantly reduced bureaucracy (administration and management) for operators, control bodies or competent authorities, e.g., because of the need for interpretation. Red-tape is a barrier for operators to be organic, particularly for small-holders in respect of control systems. Many of the detailed provisions in the production rules (except derogations) that required administration were transferred with only minor changes to the new implementing rules, implying that no reduction in administration could be expected. New areas covered and sector growth may be contributing factors to the overall administrative burden, at least for control bodies and competent authorities.

*Simplification through introduction of exceptional rules*

Stakeholders were split in their opinion of whether or not the inclusion of exceptional rules and adaptation to local conditions rather than derogations has overall simplified administration or reduced management and bureaucracy. Some limited improvements were noted for farmers (due to the removal of exceptional rules for feeding ruminants) and for control bodies (due to reduced need to grant the exceptions). However, any reductions on the side of the control are balanced out by increases in workload for competent authorities who are now responsible for granting the authorisations under the exceptional rules and for the Commission which has to approve the use of exceptional rules in specific Member States.



## Chapter 12

# The EU-added value of the organic farming legislation

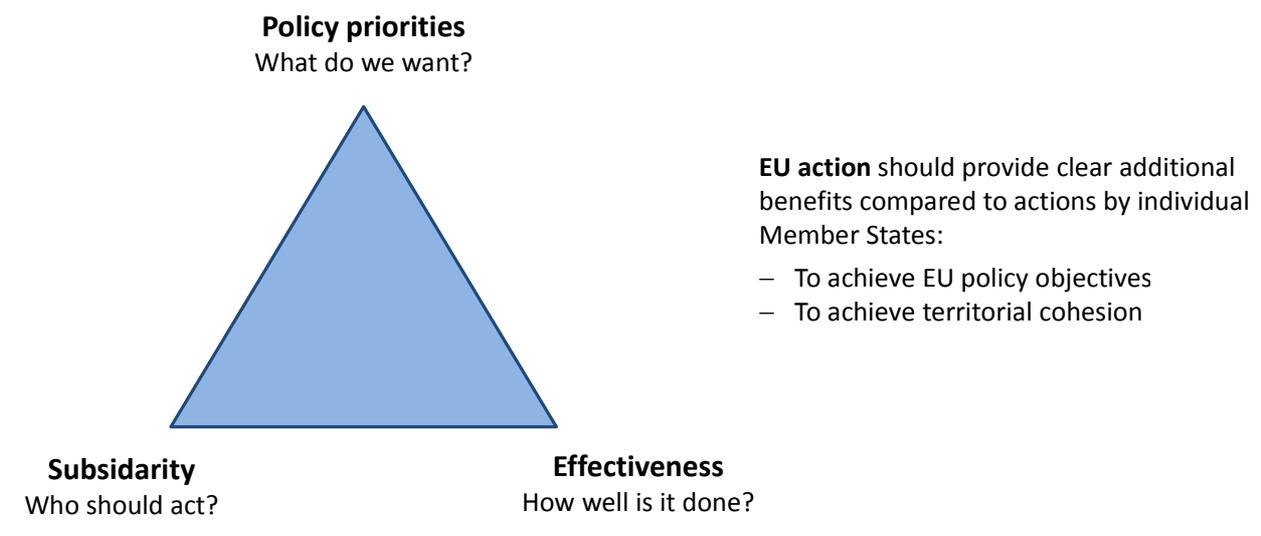
## 12.1 Introduction

### Evaluation Question 7

*To what extent has the EU legislative framework for organic farming created EU added value, notably by introducing common rules on the internal market?*

The EU added value (EAV) is the value resulting from an EU activity which is additional to the value that would have resulted from a similar activity at regional or national level by public authorities and the private sector (Yellow Window, 2000). The principle of EAV has long been used for assessing different policy options before seeking political agreement. A range of methodological and political interpretations have been put forward to define the EAV principle, most commonly in relation to EU spending programmes (Medarova-Bergstrom et al., 2012). This study uses a theoretical concept of an 'added value test' to determine if EU action will provide clear additional benefits compared to actions by other EU policies or actions by individual Member States, using three simple criteria as depicted in Figure 12.1.

**Figure 12.1:** EU added value test



Source: Adapted from European Parliament (2011).

These three EAV criteria are defined for the purpose of this evaluation question as follows:

**'Policy priorities'** (What do we want?) are defined not just as the objectives of Regulation (EC) 834/2007 itself but also the key EU priorities to which these objectives are directly related. This definition was chosen because organic production operates within the broader context of EU agricultural and food policy. Moreover, the three global objectives of the Regulation (ensuring the effective functioning of the internal market, guaranteeing fair competition and thereby deliver public goods for the environment, animal welfare, and rural development, and ensuring consumers' confidence) clearly impinge upon other EU priorities.

In addition to the EU priorities which directly relate to these objectives (and thereby to common rules for the organic market), certain priorities are also considered to be indirectly related to the common rules for the organic market. This is because they have a clear knock-on effect on the organic sector, and requires policy coherence at an EU level.

**'Effectiveness'** (How well is it done?) is defined as the extent to which the objectives and the EU priorities pursued by the intervention are achieved. Following the theory of EU added value in Medarova-Bergstrom et al. (2012) the assessment of 'effectiveness' has to be supplemented by the assessment of **'complementarity'** with public funding instruments; i.e. the extent to which organic farming legislation provides a sufficient legal basis for ensuring the effective use of the portion of the EU budget which could be regarded as supporting the organic sector. This assessment is made only briefly as its full development is outside the scope of the study.

**'Subsidiarity'** (Who should act?) means that action at the EU level should be undertaken only when the objective of the proposed action cannot be sufficiently achieved by the Member States acting at national, regional or local level. Rather, the action can be better achieved at the Union level, for example, due to the scale involved and possible economies of scale, or the need for territorial cohesion (EU Treaty, Article 174).

The aim of Evaluation Question 7 is therefore to assess whether the Regulation has delivered its own and related EU policy priorities to an extent that would not have been achieved by independent action of Member States. This will be addressed through the following sub-questions:

- Are the global objectives of the Regulation and the common rules coherent with key EU policy priorities?
- To what extent is the Regulation effective in achieving its own objectives and the key EU policy priorities these objectives are related to?
- To what extent is the Regulation effective in ensuring subsidiarity in delivering its general objectives across the EU?

The chapter first provides an overview of the approach used, outlining the evaluation criteria, the indicators and the information sources. It then presents the results of the evaluation for each criterion. Finally, it summarises the results from the Evaluation Question 7 and presents a judgment of the extent to which EU added value is achieved through the organic legislation framework.

## 12.2 Approach

Evaluation Question 7 was answered using judgement criteria deduced from the model of the intervention logic, the background of the evaluation question and the interpretation of the EU added value test described above. These judgement criteria included:

- (1) **Regulation (EC) 834/2007 is designed (or is not designed) in a way that is coherent with the key EU priorities**
- (2) **The design and implementation of Regulation (EC) 834/2007, and in particular the common rules, are (or are not) effective in:**
  - achieving EU level objectives for fair competition, consumer confidence and the functioning of internal market in organic products;
  - supporting key EU priorities;
  - providing complementarity with funding instruments
- (3) **Regulation (EC) 834/2007 ensures (or does not ensure) subsidiarity by allocating actions to the EU only where the objectives would not be achieved by giving responsibility for these actions to Member States acting individually**

The available literature on policy implications of the organic farming legislation is limited (Padel et al., 2007a; Padel et al., 2007b; Schmid et al., 2007; Dabbert, 2001). The literature tends to focus on the relative merits of private, national and EU standards, on achievements and issues in the gradual refinement of the legal definition from the core organic principles, and on regulatory aspects of individual rules. There are few evaluations that justify the EU added value of the overarching policy framework, compared to the absence of an EU framework or other counterfactual policy scenarios. Due to the limited availability of such comprehensive data, findings have been gathered on individual policy issues based on a review of EU policy documents, policy studies and grey literature from the 13 case study countries. It is of note that the answers collected from the case study stakeholders vary significantly in quality and usefulness, particularly for questions requiring a broad EU-wide knowledge. Therefore discretion has been used in processing the case study information and when commenting on the limitations and quality issues in this evidence. The results presented here largely focus on the aggregate outcomes of qualitative scoring.

## 12.3 Results

### 12.3.1 Coherence with key EU priorities

This section focuses on the degree of coherence between the Regulation and relevant key EU priorities. The key EU priorities have been identified in legal acts and policy documents which are contemporary with the Regulation (EC) 834/2007, i.e. applying largely to the same period covering year 2007 until now. The typology used to structure the key EU priorities distinguishes several different types of policy related to Regulation (EC) 834/2007. These are:

- **Strategic and horizontal priorities** such as
  - enhancing innovation and promoting level playing field on the internal market<sup>1</sup>;
  - improving availability of EU-wide data and encouraging research<sup>2</sup>;
  - ensuring food safety<sup>3</sup>;
  - promoting better regulation<sup>4</sup>;
- **Agricultural and rural development priorities** such as
  - stabilising farm income and preventing land abandonment<sup>5</sup>;
  - improving competitiveness, improving environment and the countryside, and enhancing quality of life<sup>6</sup>;
  - encouraging adaptation of agriculture to climate change<sup>7</sup>;
  - adding value to quality products<sup>8</sup>;
- **Environment and climate priorities** such as
  - improving protection of water, biodiversity, soil<sup>9</sup>;

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<sup>1</sup> Lisbon strategy, Strategy EU2020 (COM(2010) 2020).

<sup>2</sup> European Statistical Programme 2008-2012; EU FP6 and FP7 research programmes, replaced by Framework programme for research and innovation 2014-2020 ("Horizon 2020") COM(2011)809.

<sup>3</sup> Regulation (EC) 178/2002 on general principles and requirements of food law, Regulation (EC) 767/2009 on the placing on the market and use of feed; Regulation (EC) 882/2004 on official controls along the food chain, to be amended by the proposed regulation COM(2013) 265.

<sup>4</sup> Communication on better regulation for growth and jobs in the European Union (COM(2005)97), replaced by Communication on EU Regulatory Fitness (COM(2012) 746).

<sup>5</sup> Regulation (EC) 73/2009 on direct payments.

<sup>6</sup> Regulation (EC) 1698/2005 on rural development.

<sup>7</sup> White paper - Adapting to climate change: towards a European framework for action (COM(2009)147).

<sup>8</sup> Regulations (EC) 509/2006 on PGI and (EC) 510/2006 on PGO; replaced by Regulation (EC) 1151/2012 on quality schemes for agricultural products and foodstuffs; Communication on agricultural product quality policy (COM(2009)234).

<sup>9</sup> Water Framework Directive 2000/60/EC; Nitrates Directive 91/676/EEC; Pesticides Regulation 91/414/EEC; (replaced by replaced by the Sustainable Use of Pesticides Directive EC 1107/2009, in force since 2013); Habitats Directive 92/43/EEC; Communication on halting the biodiversity loss (COM (2006)216); Communication on a thematic strategy for soil protection (COM(2006)231), Regulation (EC) 1698/2005 on rural development.

- mitigating climate change and improving air protection<sup>10</sup>;
- enhancing sustainable production and consumption by improved resource and energy use, and improved waste management<sup>11</sup>;
- incentivising sustainable production and consumption through the promotion of EU Ecolabel and the use of green public procurement)<sup>12</sup>;
- **Animal welfare priorities**<sup>13</sup>;
- **Consumer priorities** such as regulating labelling of products; ensuring consumer protection and health.<sup>14</sup>

Coherence has been assessed in two steps. First, explicit linkages have been examined between the global objectives of the Regulation and the EU priority outputs as specified in the key legal acts and policy documents. Second, it has been considered whether specific rules exist in the Regulation which can help to achieve the EU priorities. The results have been scored qualitatively on a scale of **good**, **good with issues** and **no linkage**. The results of the scoring for the category of EU priorities that are directly related to the Regulation are presented in some detail in Table 12.1.

Where good linkages exist between the global objectives of the Regulation, specific rules and the EU priority outputs, it is concluded that **good coherence** exists. This underpins a potential positive effect on EU added value. To determine whether such positive effect occurs in practice, one needs to further consider the other two criteria of EU added value (effectiveness and subsidiarity).

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<sup>10</sup> Commission staff working document on a low-carbon roadmap (SEC(2011)288); Decision on the effort of Member States to reduce their greenhouse gas emissions (406/2009/EC); Communication on a thematic strategy for soil protection (COM(2006)231); Regulation 74/2009 on rural development.

<sup>11</sup> Communication on sustainable production and consumption (COM(2005)666); Waste framework directive (2008/98/EC).

<sup>12</sup> Communication on green public procurement (COM(2008)400); Regulation (EC) 68/2010 on Ecolabel.

<sup>13</sup> EU Treaty; Animal health strategy 2007-2013 (COM(2007)539); Proposal for Regulation on Animal Health (COM(2013) 260).

<sup>14</sup> Various labelling directives (Directive 90/496/EEC, Directive 1999/10/EC, Directive 2000/13/EC, Directives 2002/67/EC and 2008/5/EC and Regulation (EC) 608/2004 on labelling of foods and food ingredients (all replaced by Regulation (EC) 1169/2011 with a new requirement on environmental labelling, in force from 2014); EU Consumer Strategy 2007-2013; EU Health Strategy 2008-2013 (COM(2007) 630).

**Table 12.1:** EU priorities directly related to common rules in Regulation (EC) 834/2007 on internal market with organic products

EU policy area	EU priority <sup>a)</sup>	Global objective of the Regulation directly related to EU policy area (PG = public goods)	Specific rule provided in the regulation (Yes/No)	Assessment of the coherence
<b>Strategic and horizontal priorities</b>	Innovation and the internal market	Functioning of the market; Fair competition; Consumer confidence	Yes	Good
			Yes - indirect	Good with issues
	Food safety, Health	Consumer confidence	Yes - but with some inconsistencies	Good with issues
<b>Agricultural and rural development</b>	Competitiveness	Fair competition including Public goods (PG) for rural development	Yes - indirect	Good with issues
	Agri-environment	Fair competition including PG for environment	Yes	Good
	Agricultural product quality	Functioning of the market; Consumer confidence; Fair competition	Yes - indirect	Good
<b>Environment and climate</b>	Water policy	Fair competition including PG for environment; Consumer confidence	Yes - Water quality	Good
			No - Water use	No linkage
	Biodiversity	Fair competition including PG for environment; Consumer confidence	Yes	Good
	Soil	Fair competition including PG for environment; Consumer confidence	Yes	Good
	Climate change mitigation and air policy	Fair competition including PG for environment; Consumer confidence	Yes – indirect and not fully covering the priority	Good with issues
	Sustainable production and consumption (SPC): Resource and energy use; waste	Fair competition including PG for environment; Functioning of the market; Consumer confidence	Yes – indirect and not covering energy use and waste	Good with issues
<b>Animal welfare</b>	Animal welfare	Fair competition including PG for animal welfare; Consumer confidence	Yes	Good
<b>Consumers</b>	Labelling	Consumer confidence; Functioning of the market	Yes	Good
	Consumer protection	Consumer confidence	Yes	Good

a) The inventory comprises priority areas as defined in legal acts and policy documents contemporaneous with the Regulation 834/2007. Full references are provided in the immediately preceding section.

Source: Own presentation based on the review of Regulation (EC 834/2007 and EU policy priorities).

In certain instances, the linkage between the global objective of Regulation (EC) 834/2007 and the EU priority can be clearly traced, but there is no relevant rule in the Regulation. In these cases it is hard to see how the linkage could lead to achieving these priorities on different farms in different regions. In other instances, the linkage between objectives and rules are rather weak or inconsistent. All such cases have been judged as presenting **good coherence with issues**, thus indicating a shortcoming in the proposed EU added value.

If no global objective is set out in the Regulation, when a directly related EU priority exists, this has been classified as an issue with **no linkage**, where the opportunity to add value has been missed.

**Good coherence** has been identified between the global objectives of the organic farming legislation and several directly related EU priorities. There is a good potential for delivering EU added value in the following policy priority areas, however the actual outcomes might not reflect this potential (see Chapter 7 for details):

- **Innovation** in the group of horizontal EU priorities;
- **Agricultural product quality** and **agri-environment** in the group of agricultural priorities;
- **Biodiversity, water quality** and **soil** in the group of EU environmental priorities;
- **Animal welfare**;
- **Consumer protection** and **labelling**.

**Good coherence with issues** has been identified in the linkage between the Regulation and the directly related EU priority areas regarding internal market, food safety, EU climate policies, sustainable production and consumption and competitiveness. Linkages exist between the global objectives and the EU priorities; however, the potential for delivering EU added value could be strengthened as described below:

- **Internal market:** The subordination of the public good benefits for the environment and rural development to the objective of fair competition - with strong private rather than public good aspects for operators – may reduce the coherence between objectives and priorities. There can be a risk of simply duplicating general market and competition policies if the public goods, foreseen in the legal definition of the organic farming, are not effectively delivered on the ground.
- **Food safety:** Issues are noted in the inconsistent linkage between Regulation (EC) 834/2007 and the framework for Official Food and Feed Controls (Regulation (EC) 853/2004). It is acknowledged that these inconsistencies may be largely overcome by the proposed

amendment to Regulation (EC) 882/2004<sup>15</sup> and amendment to Regulation (EC) 889/2008 with a view to reinforcing controls.<sup>16</sup>

- **Competitiveness:** Some inconsistency is noted between the global objective of fair competition and the absence of specific provisions to overcome barriers for smaller farms<sup>17</sup> and processors in accessing organic markets, such as group certification for EU farmers.
- **EU climate policies:** Certain issues are observed in the relative lack of requirements on sustainable energy use in processing and packaging and lack of accompanying measures to address the transport footprint.<sup>18</sup>
- **Sustainable production and consumption:** Certain issues are noted due to the lack of relevant quantitative rules for energy use and waste reduction in the processing and packaging phases.

**No linkage** between the Regulation and a related EU priority has been identified in only one key policy area. The definition of the organic method refers to ‘water protection’, and some of the effects of organic production on reducing water pollution can be directly related to the rules, as described in Chapter 7. In contrast there is no quantified or specific provision under the rules in the Regulation for sustainable use of water, for example in organic crop production under glass or polytunnels which requires high levels of water use (see Chapter 7). This gap is particularly apparent against the backdrop of a long-standing EU commitment to improve the status of surface and underground water bodies, formulated in 2000 in the Water Framework Directive<sup>19</sup>.

In addition to the identification and assessment of the key policy priorities, several other EU priorities have been identified as indirectly relevant to the common rules in the EU legislation on organic farming. Although there is no explicit linkage between them and the intervention logic, they have knock-on effects for stakeholders in the organic sector and are important for ensuring policy coherence at an EU level. Table 12.2 provides an overview of this, but without scoring levels of coherence.

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<sup>15</sup> The proposed regulation COM(2013) 265 final.

<sup>16</sup> Commission Regulation (EC) 392/2013.

<sup>17</sup> The definition of a ‘small farm’ varies depending on the criteria used.

<sup>18</sup> Explicit rules with potential benefits for climate change mitigation and adaptation are provided for soil management on farms but not for energy use and transport.

<sup>19</sup> The commitment to improved sustainability of water use in particular has been reinvigorated more recently by the publication of the Blueprint to safeguard Europe’s waters, COM(2012) 673, which puts a particular emphasis on reducing agricultural water use and water use for irrigation.

**Table 12.2:** EU priorities indirectly related to common rules in EU organic farming legislation on internal market with organic products

EU policy area	EU priority	Global objective of the regulation	Specific rule provided in the regulation
<b>Horizontal priorities</b>	Better regulation <sup>a)</sup>	N/A	N/A
	Research <sup>b)</sup>	N/A	N/A
	Data <sup>c)</sup>	Functioning of the market	Yes – partial <sup>d)</sup>
	Information <sup>e)</sup>	N/A	N/A
<b>Agricultural and rural development</b>	Stabilise income <sup>f)</sup>	Fair competition	Yes - indirect <sup>g)</sup>
	Preventing land abandonment <sup>h)</sup>	PG for environment; PG for rural development	No
	Rural development policy/quality of life <sup>i)</sup>	PG for rural development	No
	Adaptation of agriculture to climate change <sup>j)</sup>	PG for environment; Functioning of the market	Yes – indirect
	CAP simplification <sup>k)</sup>	N/A	N/A
<b>Environment</b>	Sustainable production and consumption: Green public procurement, ecolabel <sup>l)</sup>	PG for environment	N/A
<b>Consumers</b>	Health <sup>m)</sup>	Consumer confidence	Yes – indirect

a) COM(2005) 97; COM(2012) 746.

b) EU FP-6 and FP-7 Research Programme (replaced by Horizon 2020).

c) European Statistical Programme 2008-2012.

d) 'Partial' denotes that the rule is not fully covering the needs identified in the EU priority, with a potential negative effect on the global objective 'functioning of the market'.

e) Regulation 3/2008.

f) EU Treaty; Regulation 73/2009.

g) 'Indirect' denotes that there is a whole set of rules pursuing other goals specified in the regulation that can potentially contribute to this EU priority.

h) Regulation 73/2009.

i) Regulation 1698/2005.

j) COM(2009)147; Regulation 74/2009.

k) COM(2005)509.

l) COM(2008)400; Regulation on eco-labelling 1980/2000 (replaced by Regulation 68/2010); new EU guidelines on environmental footprinting introduced by COM/2013/0196.

m) EU Health Strategy 2008 – 2013; EU Treaty.

Source: Own presentation.

The previous evaluation questions draw attention to two of these 'indirectly related' EU priorities, which merit special note for the coherence analysis. Firstly, regarding simplification and better regulation, although not explicitly stated in the EU legislation on organic farming, Chapter 11 demonstrates that these priorities were among the central drivers for drafting the Regulation and for the significant review of the previous legislative framework. Therefore one can note a coherence benefit for this EU priority area. Secondly, regarding data and information, Chapters 6, 7, 8, and 13 point out the salience of unavailable statistical data on the organic market for the implementation of the framework and the evaluation of intra-EU impacts, and this

appears to be linked to the missing objective in the Regulation.<sup>20</sup> It therefore appears that data and information are in fact priorities directly related to organic farming legislation.

### 12.3.2 Effectiveness of the design and implementation of the Regulation

This section focuses on synthesising the assessments that were carried out in Chapter 6 – 11. Previous chapters have underlined a number of achievements as well as issues in the design and implementation of Regulation (EC) 834/2007. The summary of these findings is complemented by information from a brief literature review.

#### **Achieving the global objectives of functioning of internal market, fair competition and consumer confidence at an EU level**

Regulation (EC) 834/2007 sets out these three global objectives in justifying the existence of the EU framework for common rules on the organic production method. The assessment of achieving these objectives is therefore set against the backdrop of the core EU policies focusing on the market, competition, agriculture and consumers.

Regarding the objective of **smooth functioning of the internal market**, certain benefits have been achieved by the introduction of the new logo, the implementation of an EU-wide control system, and the harmonisation and simplification of the production rules under Regulation (EC) 834/2007, but there are some shortcomings that prevent operators having access to all EU consumers. The aggregate outcome for achieving the objective of a functioning internal market is therefore good with issues. The main shortcomings result from:

- The ambiguous allocation of control responsibilities due to the vague linkage of the control system for Regulation (EC) 834/2007 to official controls in the food and feed sector under Regulation (EC) 882/2004, although this may be improved by the proposed regulation on food safety and hygiene<sup>21</sup>;
- Issues in the interpretation and harmonised implementation of rules by Member States (Chapter 7), a low level of familiarity of consumers with the new EU organic logo and with some aspects of the concept of organic farming (Chapter 10), which indicates a need to raise public awareness of the content and scope of standards and of the EU logo;
- The lengthy process and lack of clarity regarding approval of non-organic products for operators which might limit access to approved inputs in some Member States (Chapter 11);

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<sup>20</sup> There is a clear reference to statistical information necessary for the implementation and follow-up of the Regulation at Article 36 of the Regulation however its implementation does not lead to sufficient data to analyse and understand the whole organic sector.

<sup>21</sup> COM(2013) 265.

- The lack of state-of-art electronic tools for documentary evidence for EU products and inspection; and lack of a legal basis for collecting comparable and comprehensive statistical data on the organic market Europe wide (Chapter 2)<sup>22</sup>; and
- The need for improved communication between and within the control system (Chapter 8).

Regarding the objective of **fair competition**, all evaluation questions unequivocally note the considerable benefits of having a unified EU framework for organic legislation. In particular, positive impacts are reported to occur due to the common framework for the production rules and the control system, which have increased transparency and the protection of organic farmers against false and misleading organic claims. However there are some issues that negatively affect aggregate outcomes for achieving the objective of fair competition. These arise from:

- varying interpretations of certain production rules, due to: a) the lack of detailed rules such as for greenhouse production, b) lack of definition of certain terms at EU level, such as ‘region’ in the origin of feed, stocking densities in housing for poultry, and use of non-organic manure from factory farming; c) issues that are left to the discretion of EU Member States, such as the definition of slow growing strains and access to non-organic seed; and, d) issues arising from national rules, namely licensing of plant protection agents. All these differences can involve varied levels of costs to organic producers thereby potentially affect fair competition (Chapter 7);
- the fact that the existence of exceptional rules has hampered the development of organic supplies (Chapter 7);
- differences in the control procedures between Member States, in particular with regard to issuing of sanctions for similar severity of infringement, residue sampling, testing and analysis, risk-based approaches and share of unannounced controls (Chapter 8);
- some smaller producers in the EU have difficulty in paying certification costs, in countries where these costs are not covered by support offered in the RDP<sup>23</sup>. Furthermore, EU producers have no access to group certification, despite the latter being allowed to producers in third countries under equivalency standards (European Court of Auditors, 2012);

The legal definition of organic production methods in the Regulation also provides a basis for the provision and remuneration of associated public goods. Thus, achievements in fair competition can also be linked to EU environmental priorities.

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<sup>22</sup> ORGANICDATANETWORK [http://www.organicdatanetwork.net/dw-news-detail.html?&tx\\_ttnews%5Btt\\_news%5D=1027&cHash=edbb4e9fb529775034605e3697bf2c27](http://www.organicdatanetwork.net/dw-news-detail.html?&tx_ttnews%5Btt_news%5D=1027&cHash=edbb4e9fb529775034605e3697bf2c27).

<sup>23</sup> Many countries include certifications costs as part of CAP Pillar 2 support for organic farming, only CZ, EE, FI, HU, LU, PT and SK have not offered support for certification. See [http://www.bfafh.de/bibl/lbf-pdf/landbauforschung-sh/lbf\\_sh339.pdf](http://www.bfafh.de/bibl/lbf-pdf/landbauforschung-sh/lbf_sh339.pdf) (page 31).

In relation to EU environmental priorities, a wide range of benefits have been achieved by defining organic production principles and rules. Based on the detailed evidence in Chapter 7, there is sound scientific evidence that organic production practices have a positive impact on biodiversity some of which can be directly related to the production rules (e.g. no use of fertilisers and crop protection products, using multi-annual crop rotations including legumes, and limited stocking density) whereas others result of frequently used production practices (e.g., shallow tillage, higher presence of hedges, trees or grass strip corridors, higher prevalence of spring sown crops). Some of the concerns are linked with the incomplete translation of some objectives into operational rules for example in relation to habitat management for biodiversity, and the sustainable use of energy and water use.<sup>24</sup> This has to be interpreted in the context of the Cardiff process initiated in 1998 which requires the full integration of agreed environmental priorities in other EU policies. The aggregate assessment of outcomes of the design and implementation of organic production rules for climate change mitigation in particular is very complex<sup>25</sup>. The EU animal welfare priorities have been supported with generally good outcomes, although improvement is possible and certain issues exist, for example, in relation to the tethering of animals on small farms.

In relation to the objective of **consumer confidence**, evidence demonstrates that it has been one of the key drivers of the expansion of the organic sector (European Commission, 2010; 2012). Chapter 10 underlines that consumers have a general awareness of the main concept of organic production, but poor knowledge of the details. Other data show that consumers express preferences for standards higher than those in Regulation (EC) 834/2007, increased levels of food safety and authenticity and that they tend to be generally confused by the different environmental and geographic claims on added-value food products (European Commission, 2009a; 2010; 2012; Sengstschnid et al., 2010). Disentangling the effect of the organic legislative framework from the effect of these other factors is difficult. Taking account of this uncertainty, the aggregate outcome for achieving the objective of consumer confidence is found to be generally good, although certain issues have been noted that can be detrimental to achieving this objective. These can be to some extent ascribed to Regulation (EC) 834/2007, but not always fully, as noted below. They include:

- Knowledge of and trust in the EU logo is limited, but it only became mandatory in 2010, with a transition period until July 2012. There is a need to promote both the logo and what it means. Also, one needs to bear in mind that the prevention of deceptive organic claims is a

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<sup>24</sup> One may expect that the basic management for these issues is enforced through the standards for good agricultural and environmental condition (GAEC) which apply to all farmland. However, the implementation of the GAEC framework is often weak, and in intensively managed areas the standards are likely not to prevent agricultural practices affecting sustainability thresholds for soil and water resources and biodiversity (Diaz-Chavez et al., 2013; Poláková et al., 2013).

<sup>25</sup> Available studies focus on carbon sequestration in organic soils (LaSalle and Hepperly, 2008; Gattinger, 2012a; Gattinger et al., 2012b; Niggli et al., 2009), N<sub>2</sub>O emissions, energy use efficiency in the organic sector (Ziesemer, 2007; Sengstschnid et al., 2010), productivity issues and GHG intensity of organic products (Tuomisto et al., 2012; Seufert et al., 2012). For climate change adaptation, the issues already mentioned for soil and water use priorities apply.

core responsibility of main consumer policies.<sup>26</sup> The requirements on the labelling of provenance do not meet consumer preference for a more specific geographic indication of the country of origin than 'EU/non-EU agriculture' (Chapter 10);

- Although consumers largely have confidence in the organic control system, this trust is built upon perceptions and not on factual knowledge (Chapter 8).

### Other key EU priorities

The previous sections note achievements and issues in the delivery of benefits toward the global objectives of the Regulation, and their effect on the related EU priorities. This section provides an overview of achievements and issues in the design and implementation of Regulation (EC) 834/2007 in relation to other key EU priorities, as listed in Tables 12.1 and 12.2.

In the group of strategic and horizontal priorities, ensuring food safety, promoting innovation and encouraging better regulation are an explicit focus of core EU policies. For **food safety**, a range of rules in Regulation (EC) 834/2007 ensure that organic products have consistent standards that are clearly higher than the EU legal baseline. Chapter 7 sets out the relevant organic production rules, related mainly to the much lower number of permitted inputs compared with conventional agriculture including the prohibition of chemical pesticides, limited allopathic treatment for animals, and restricted use of inputs in processing. A recent systematic review concluded that organic food consumption may reduce exposure to pesticide residues and antibiotic resistant bacteria (Smith-Spangler et al., 2012). Therefore, the area of food safety is a strong asset for EU added value, particularly if the stringency of the control system is improved.

**Enhancing innovation**, initially introduced with the adoption of the Lisbon Strategy in 2000, is an EU priority that has drawn only anecdotal evidence in the organic sector. While only little evidence exists on the benefits to the innovation of social and human capital through the implementation of Regulation (EC) 834/2007 (Chapter 13), still fewer consolidated results exist for technological innovation (Padel et al., 2010; European Commission, 2012). On the positive side, one can reasonably expect that restrictions on the use of conventional farming methods, and the implementation of alternative crop protection and disease management would lead to benefits from technological innovation on the ground. On the other hand, lengthy approval process for the inputs and substances to be authorised by the Regulation is observed as one of the inhibiting factors for innovation (Chapter 11).

In relation to the EU priority of **promoting better regulation**, Chapter 11 demonstrates the improved structure of objectives, better codification, more transparent approvals of substances, and a clearer separation of tasks between EU institutions, in comparison with the pre-2007 framework. However, previous sections also identify issues in the production rules relating to the

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<sup>26</sup> Notably Regulation (EU) 1169/2011 which replaced several sets of previous EU rules. It includes a new requirement on environmental labelling, in force from 2014.

administrative burden and red tape. Of note, similar issues tend to arise in other young policy areas and a learning curve is generally needed at all governance levels before a robust regulatory framework is developed and reliable enforcement is ensured.

### **Complementarity with funding instruments**

The assessment of complementarity with funding instruments falls within the 'effectiveness' criterion of EU added value. Accordingly, one has to examine whether the common rules provide a sufficient legal basis to ensure that the EU funds supporting organic producers and the organic sector are used effectively. This involves on the one hand examining whether the benefits provided by organic farming are coherent with the nature of benefits targeted by the EU funds; and on the other hand whether the control system is sufficiently rigorous to ensure these benefits are achieved on the ground. The sources of EU funding are described in Chapter 4.<sup>27</sup>

In relation to the CAP funding, there is **generally good complementarity** for achieving synergistic benefits for the global objectives of Regulation (EC) 834/2007 that support **the functioning of the internal market for organic products and the effective use of CAP funds**. In particular, these findings relate to the CAP Pillar 2 support for access to organic markets, organic producer groups, the development of new products and the development of business skills. These support measures are essential, firstly in helping to overcome barriers that these producers may experience when accessing organic markets (Eurobarometer, 2012). Overcoming these barriers and creating short supply chains is a necessary step for linking organic producers to consumers where lack of such linkages hampers growth of organic markets. Secondly, these support measures can promote innovative improvements in the technological, social and human capital needed for further enlargement of EU organic markets (Daugbjerg and Sønderskov, 2012; OECD, 2007; Sanders et al., 2011).

There is also **generally good complementarity with funding instruments** in achieving benefits **for EU environmental priorities in synergy with the effective use of the CAP funds**. The introduction of a strict control system considerably improved conditions for the effective disbursement of funds for organic land management compared to the previous EU framework. As pointed out in Chapter 4, the eligibility criteria for organic support under the agri-environment measure in the 2007-2013 period varies hugely between different RDPs. Some of these differences, such as those in stocking rates, may simply reflect the varying environmental needs based on the need analysis undertaken by Member States in relation to the particular local and regional conditions (as noted in Chapter 4). However, in the light of findings from the previous evaluation questions, such divergences may also potentially mask weak implementation and uneven interpretation of the production rules in Regulation (EC) 834/2007.

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<sup>27</sup> This support is governed by general eligibility criteria aimed at rural development, and is not dedicated to organic production per se.

The shortcomings in the organic control system, as identified in Chapter 8 and by the European Court of Auditors (2012), further indicate that the delivery of actual environmental outcomes which are targeted by the CAP Pillar 2 support might be undermined in individual cases. This could weaken complementarity between the organic farming legislation framework and the objective for the effective use of the CAP funds. Additional shortcomings in the complementarity between Regulation (EC) 834/2007 and CAP funds, further discussed in Chapter 13, are the lack of additional supportive measures in RDPs to facilitate and encourage organic certification of High Nature Value (HNV) farms, and the barriers to organic certification for smaller producers, indicated by the mid-term evaluation of the 2007-13 RDPs and other sources (OIR, 2012; Dwyer et al., 2012). This suggests that an opportunity has been missed to deliver EU priorities for HNV farmland (and the associated rural communities) by increasing the level of organic certification among HNV farms that already manage land in ways close to the organic standard, or need improvement only in certain aspects of management such as animal welfare.

The concerns regarding the effectiveness and rigorousness of the organic farming framework does not act as a hindrance to the complementarity of funds supporting information campaigns and research.

### 12.3.3 Extent to which Regulation ensures subsidiarity

According to the EU Treaty, action at the EU level should be undertaken only when the objective of the proposed action cannot be sufficiently achieved by the Member States, for example due to the scale involved or the need for territorial cohesion. This criterion therefore examines the allocation of responsibilities between EU and national levels from both perspectives. On the one hand, the assessment examines whether the Regulation enables actions at EU level that have clear added value over what would have been achieved by national policies. On the other hand, it examines whether the allocation of responsibilities at a national level is sufficient in relation to the subsidiarity needed at the national level. A questionnaire to stakeholders in 13 case studies has provided a limited number of answers, varying both in quality and rates of response, and the assessment based on these is necessarily brief and focuses on principles rather than details.

#### **The extent to which the design of Regulation (EC) 834/2007 enables actions at EU level that have clear added value over what would have been achieved by national policies**

Since the 1980s, several European countries have developed policies for organic farming, in conjunction with private organic certification schemes (Sanders et al., 2011; Daugbjerg and Sønderskov, 2010). Organic farming policies in the EU-15 during the 1980s and 1990s promoted highly divergent approaches, with some Member States focussing on interventions to stimulate the supply side of the organic market (e.g. Sweden), others either on the demand-side or both sides of the market simultaneously (e.g. Denmark), while the UK, for example, promoted only passive intervention in organic markets (Daugbjerg and Sønderskov, 2010). The introduction of the first EU organic farming regulation in 1991, and the unified framework for the land-based organic payments under the agri-environment measure through the MacSharry reform in 1992,

created conditions for the convergence of these various types of organic policy across the EU. Although it is difficult to extricate causalities about the interaction between supply and demand factors, the EU organic market did experience continuous growth, with both types of factor playing a role. This growth coincided with the conjoint development of the unified legal framework for organic farming and a steady shift towards increasingly more focussed support for organic farming as goal in itself, under three policy reforms (1992, 2000, and 2007). This long-standing political commitment at high level has given expression to EU citizens' interest in maintaining consumer confidence in products labelled as organic. The underlying conviction has been that organic products are linked to guarantees of food integrity from seed through to sale, and to guarantees that production and processing are managed under a holistic system which promotes the environment, sustainable resource use, animal welfare, food safety, nutrition and human health, financial viability of agricultural holdings and rural development across the EU (Sanders et al., 2011). Santacaloma (2007) indicates that common rules for certification also give EU buyers the confidence that a product meets organic quality and process standards, thus enabling both the EU and non-EU organic producers to access new export and domestic market opportunities and premium prices.

#### **The extent to which the competent authorities are satisfied with the level of discretion afforded to them in the Regulation**

The results of the assessment of this criterion are based on the interviews in the case study countries. There was a high response rate from competent authority interviewees on whether or not they were happy with the level of discretion afforded Member States. Although a relatively large number maintain that they are happy with the level of discretion, there appears to be a degree of ambivalence on this issue. Almost an equal number responded positively as negatively. A key issue to emerge from the responses is a great uncertainty between the stakeholders within the organic sector about the allocation of responsibilities between the EU and national levels on the interpretation of certain rules, in particular, the extent to which the organic farming legislation should regulate residue testing and analysis, and the extent to which national authorities should be responsible for interpretation themselves. Other areas of uncertainty about the allocation of responsibilities relate to the interpretation of the exceptional rules on non-organic chickens, non-organic feed and non-organic seed; certain confusion between the responsibilities for exceptional rules on the use of tethering in small-holdings and the transitional rules. One case study respondent suggests that there too much responsibility rests with the national authorities, and that operators should have more responsibility.

#### **Any specific provision currently set in the Regulation at an EU level that should instead be delegated to the national/regional level**

Only a moderate number of competent authority stakeholders responded. There appears to be a high degree of ambivalence on this issue, with almost an equal number responding positively as negatively (5:4). On the one hand, the reasons most often cited for maintaining the present balance of responsibilities at the EU and national levels refer to the high importance of the EU common framework and the need for harmonised rules. A few respondents also emphasised that public surveillance over private control bodies requires strict EU-wide rules. On the other hand,

the respondees who wish to have more provisions set at national level refer to the need for flexibility. Examples are the production processes affected by local climatic and agricultural conditions (e.g. the rule on housing conditions for outdoor poultry) or consumer expectations influenced by social and cultural values (e.g. animal welfare rules). Alternatively, respondents refer to the need for enforcing control at national level, such as determining aspects of risk analysis and the intensity of checks.

## 12.4 Judgement and conclusions

Based on the results presented in the section above, **it is concluded that the organic farming legislation provides EU added value, notably by defining the common rules for the organic market**, taking the following into account:

- There is particularly good coherence between the legislation and EU priorities for innovation, agricultural product quality, agri-environment, biodiversity, water quality, soil conservation, animal welfare as well as consumer protection and food labelling; and there is good coherence with issues related to the EU priorities for the internal market, climate change mitigation, sustainable production and consumption, food safety and competitiveness. Furthermore, there are some opportunities to improve coherence through improved linkages between the legislation and specific elements of EU priorities for sustainable use of water and market data collection.
- The legislation is effective in creating EU added value for environmental, climate mitigation and animal welfare priorities, and there is a generally good complementarity with EU funding instruments, particularly the CAP and the funds for research and information. The effectiveness could be improved by making clearer links between objectives, general principles and detailed rules, and by translating objectives for water quantitative management, energy use and habitat management into operational rules. The legislation is only moderately effective in achieving the EU priority of better regulation.
- The framework achieves clear added value at EU level going beyond what could be achieved by national policies alone. Little evidence is available to judge the allocation of responsibilities according to the principle of subsidiarity, and it was found that the views of competent authorities differ on this issue.

### Detailed considerations

This evaluation question has addressed the extent to which the EU legislative framework for organic farming has created EU added value, notably by introducing common rules on the internal market. To determine if the legislation provides clear additional benefits compared to actions by other EU policies or actions by individual Member States, the concept of an 'added value test' was used by addressing the following three questions: a) whether the global objectives of the regulation and the common rules are coherent with key EU policy priorities; b) whether the Regulation is effective in achieving its own objectives and those of key related EU

policy priorities; and c) whether the Regulation is effective in ensuring subsidiarity in delivering its objectives across the EU.

The judgment is based on a review of EU policy documents, policy studies and grey literature from the 13 case study countries and, to a more limited extent, on the survey responses of case study stakeholders. Furthermore,

#### *Coherence with related EU policy priorities*

There is good coherence between global objectives of the Regulation and key EU priorities related to which these objectives are related, although opportunities exist to improve linkages with specific aspects of some key policies. Particularly good coherence is noted in relation to EU priorities for innovation, agricultural product quality, agri-environment, biodiversity, water quality, soil conservation, animal welfare as well as consumer protection and food labelling. Good coherence with issues is observed in relation to a number of other key EU priorities, such as the internal market, climate change mitigation, sustainable production and consumption, food safety and competitiveness. Furthermore, linkages with key policies could be improved where there is an absence of objective or specific rules under Regulation (EC) 834/2007 on sustainable water use and collection of market data.

#### *Effectiveness in achieving the objectives of the Regulation and supporting key EU priorities*

The legislative framework is generally effective in achieving global objectives and supporting EU priorities. In particular, the effectiveness in achieving fair competition and smooth functioning of the internal market has been judged as good with issues. Important benefits for EU added value have been created by the creation of minimum common rules for the EU-27; the introduction of a strict control system; and the recent introduction of an EU logo. There are certain concerns with achieving the EU priority of better regulation, due to sometimes varied interpretation of production rules, certain exceptional rules established in the Regulation and the lengthy process of inputs authorisation which may inhibit innovation and development. There are opportunities to improve the effectiveness of implementation of the EU priority for data and information, which is limited by the lack of an objective and specific requirements on collection and reporting of market data in a comparable and consistent manner. The conclusions are largely positive about the effectiveness of the Regulation (EC) 834/2007 for creating added value for EU environmental, climate and animal welfare priorities. There is a wide range of benefits delivered by the implementation of the organic farming framework at EU level, and these are discussed in Chapter 7. However, Chapter 7 concludes that the links between objectives, general principles and detailed rules should be made clearer, and a consideration should be given that the objectives for water and energy use, and for habitat management are translated into operational rules.

For the objective of consumer confidence, it is concluded that the design and implementation of Regulation (EC) 834/2007 has been effective in contributing to European added value, albeit with certain issues. This overall good contribution is a consequence of sustained consumer confidence throughout the implementation of the Regulation and its steady role in underpinning the

successful development of the organic sector. However, the contribution to EU added value for consumer confidence could decrease unless there is improved consumer knowledge and understanding of both the logo and the scope of the control system.

Complementarity with funding instruments has been assessed as part of the criterion of effectiveness. There is a generally good complementarity between the organic farming framework and the EU funding instruments. The organic farming framework has improved the legal basis for payments provided from the CAP funds, especially the second pillar of the CAP. There are opportunities to increase complementarity between the legislation and EU rural development objectives for HNV farming and the competitiveness of small farms, by extending the use of a range of Pillar 2 measures. Also there are synergistic benefits delivered by the organic farming framework and the funds for research and information.

### *Ensuring subsidiarity*

Relating to the criterion of subsidiarity, outstanding benefits are provided by the Regulation for enabling actions at EU level. These are actions that have clear added value over what would have been achieved by national policies, as well actions that are necessary for maintaining coherence with related EU priorities. It is noted that common rules for certification give EU buyers the confidence that a product meets organic standards, thus enabling both EU and non-EU organic producers to access new market opportunities and premium prices associated with the added value of organic products and processes. Responses to survey questions about the allocation of specific responsibilities between actors according to the principle of subsidiarity reveal varying attitudes amongst competent authorities, with some calling for a more 'command-and-control' oriented approach, and others seeking more flexibility.



## Chapter 13

# Contribution of the organic farming legislation to the sustainable development of the organic farming sector

### 13.1 Introduction

#### Evaluation Question 8

*To what extent has the EU legislative framework for organic farming contributed to the sustainable development of the organic farming sector?*

The overarching objective of Council Regulation (EC) 834/2007 is to provide *"the basis for the sustainable development of the organic farming sector"* (Article 1), alongside the effective functioning of the internal market, guaranteeing fair competition, ensuring consumer confidence and protecting consumer interests. Despite this overarching objective, the concept of the sustainable development in the context of organic farming remains somewhat elusive. It is not defined in the Regulation, although the legislation does make clear the 'dual societal role' of the organic production method that *"on the one hand provides for a specific market responding to a consumer demand for organic products, and on the other hand delivers public goods contributing to the protection of the environment and animal welfare, as well as to rural development"* (Recital 3). It also makes reference to the contribution made by organic livestock production to sustainable agriculture (Recital 14). The main focus of the Regulation is on defining more explicitly the objectives, principles and rules applicable to organic production. It sets out very clearly that organic production should pursue the objective of establishing *"a sustainable management system for agriculture that respects nature's systems and cycles and sustains and enhances the health of soil, water, plants and animals and the balance between them; contributes to a high level of biological diversity; makes responsible use of energy and the natural resources, such as water, soil, organic matter and air; [and] respects high animal welfare standards and in particular meets animals' species-specific behavioural needs"* (Article 3).

The Regulation thus makes clear that organic production covers both market goods and public goods, and that these should be produced through sustainable agricultural management. In answering Evaluation Question 8a definition of 'sustainability' has been chosen to suit this broad scope, covering the economic, environmental and social aspects of development as used by the

2006 EU Strategy on Sustainable Development<sup>1</sup>, which recognises that these three aspects can reinforce each other.

Against this background, the aim of Evaluation Question 8 is to establish the extent to which the EU legislative framework has contributed to the sustainable development of the organic farming sector. This will be addressed through the following sub-questions:

- Has the EU legislative framework for organic farming contributed to the development of the organic farming sector and, if so, to what extent? Was the resulting development of the organic farming sector (if confirmed) economically, environmentally and socially sustainable?

The evaluation of the first sub-question focuses on the aim of *“providing conditions under which this sector can progress in line with production and market developments”* (Recital 3). The Regulation sets this aim in both policy and market contexts, pointing out first that *“the legislation on organic production plays an increasingly important role in the agricultural policy framework”* and second that it is *“closely related to developments in agricultural markets”* (Recital 2). Both aspects are considered here.

The evaluation of the second sub-question focuses on the economic, environmental and social sustainability of the resulting development, particularly in the context of rural development, provision of environmental public goods and animal welfare.

The chapter first provides an overview of the approach used, outlining the judgement criteria and the information sources. It then presents the results of the evaluation for each criterion. Finally, it presents the results from the Evaluation Question 8 and a judgment of the extent to which the EU legislative framework has contributed to the sustainable development of the organic farming sector.

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<sup>1</sup> The 2006 Renewed EU Sustainable Development Strategy, adopted by the European Council, refines the initial sustainability goals of the 2001 Goteborg Strategy. It defines economic prosperity under the first sustainability pillar as aiming at *‘a prosperous, innovative, knowledge-rich, competitive and eco-efficient economy which provides high living standards and full and high-quality employment throughout the EU’*. ‘Environmental protection’ is defined as *‘the capacity to support life in all its diversity, respect the limits of the planet’s natural resources and ensure a high level of protection and improvement of the quality of the environment; prevention and reduction of environmental pollution and promotion of sustainable consumption and production to break the link between economic growth and environmental degradation’*. Further, the Strategy defines social equity and cohesion as the way of *‘promoting a democratic, socially inclusive, cohesive, healthy society’*. The recently adopted EU2020 Strategy has brought further refinement into these basic goals (European Council, 2006).

## 13.2 Approach

Evaluation Question 8 was answered using judgement criteria deduced from the model of the intervention logic, the background of the evaluation question and the definition of sustainable development described above. The judgement criteria include:

- (1) **The legislative framework helps (or does not help) the development of the sector by structuring a specific market in response to consumer demand**
- (2) **The legislative framework helps (or does not help) the development of competitive organic businesses within the wider agricultural context**
- (3) **The development of the sector is (or is not) economically sustainable as a result of requirements set within the legislative framework**
- (4) **The development of the sector provides (or does not provide) a sustainable supply of environmental public goods and benefits for animal welfare as a result of requirements set within the legislative framework**
- (5) **The development of the sector contributes (or does not contribute) to sustainable socio-economic benefits for rural areas as a result of requirements set within the legislative framework**

Due to the breadth of the topic, only a brief review of relevant EU-wide literature and selected national literature has been carried out. Certain elements of information gathered in 13 Member States, based on interviews with authorities and stakeholders in the sector, have been a complementary source. Where relevant, reference is made to the judgements of Evaluation Questions 2 and 5 about the production rules and consumer understanding, respectively.

In terms of the contribution of EU organic farming framework to socio-economic aspects of rural development such as rural diversity, rural employment and for development of human capital, consolidated evidence is missing. For these types of assessments evidence of incidental benefits has been collected from an array of examples in the EU Rural Review publications from 2010 to 2013 which were produced by the European Network for Rural Development (ENRD) under the Commission's auspices.<sup>2</sup> Additional information has been collected from a pool of recent FAO reports on organic agriculture that include empirical case studies for eight EU Member States.

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<sup>2</sup> A total of 26 examples across 14 Member States have been identified which discuss benefits and potential issues relating to rural diversity, rural employment and other aspects of social sustainability, whilst highlighting the role of organic farming. To distil the appropriate criteria for analysing examples, recommendations in recent pan-European studies have been used on sustainable competitiveness (Dwyer et al., 2012), biodiversity and green growth in rural areas (Lobley et al., 2009; Mills et al., 2009; Poláková et al., 2011; ICF GHK et al., 2012). For simplicity, all examples are referenced in the text as EU Rural Review database (2010-2013). The full references to all issues of the EU Rural Review that have been reviewed to produce the database are provided in the reference list.

## 13.3 Results

### 13.3.1 Contribution of the legislation by structuring a specific market in response to consumer demand

The development of the sector depends on meeting consumer requirements now and in the future. This requires a closely defined market which distinguishes clearly between organic and other food, while meeting the varied demands of organic consumers which will differ between places and will change over time. The role of the legislative framework is to define the scope of the market whilst allowing sufficient flexibility to satisfy consumer needs, and to help consumers in identifying produce which meets those needs. Regulation (EC) 834/2007 has maintained the impetus created by the previous legislative framework in supporting a strong EU domestic and import market for thus defined organic food, principally by providing detailed rules for organic production and processing, introducing a unified and strict control mechanism, and thus unifying a previously fragmented policy area.

Pan-European statistics show that there is an unmet demand for organic food (European Commission, 2010; Chapter 7), which could to some extent be met by production within the EU. Thus the overall **level of demand** does not appear to be a barrier to development of the market, although there are likely to be substantial regional differences in demand growth. Organic consumption represented around 2 % of total food expenditure in the EU-15 in 2007. A much lower level was reached in the EU-12, affected by lower purchasing power of consumers in general (European Commission, 2010), and where production, consumption and trade have grown much faster but from a far lower base. Growing disposable income has been an important factor for growth in the EU-15 and more recently also in the Czech Republic and Slovenia (Santacoloma, 2007a). On the other hand, there have been low or negative growth rates in Portugal, Hungary, the Netherlands, Italy and the UK, but national figures hide considerable differences in uptake between specific regions within the country (Chapter 2). It is apparent that predicting future levels of demand by consumers, and the role of the legislative framework in such development is not straightforward. Furthermore, there are multiple non-policy factors involved and regional differences which will affect organic stakeholders in different ways.

The legislative framework, by defining common standards, has played an important role in enabling the market to develop through domestic production, intra-European trade and imports. Where domestic organic production is insufficient to meet demand, organic retailers have relied on substantially increasing **intra-EU trade and imports** from outside the EU (European Commission, 2010). The import regime established under the EU legislation played a role in the rapid increase in imports from third countries in the EU-15, while intra-EU trade increased in EU-12 markets in particular (European Commission, 2010). However, there are many contributing factors, and diverse needs developed in individual countries in relation to the types of organic products missed by local consumers.

There are indications that **local food markets** are important to the sector, reflecting consumer preference for short supply chains and the role of SME suppliers and processors. Member State support measures, rather than the Regulation itself, seem to have had a key effect here by promoting enhanced information exchange, particularly between producers and consumers, aimed at stimulating innovation, growth in markets and enhanced competitiveness for the organic farm sector (Santacoloma, 2007a and 2007b; Edwardson and Santacoloma, 2013). It is of note that the regulatory basis provided by Regulation 834/2007 was an essential legal precondition for the implementation and administration of the funded support measures. All of this has had a knock-on effect on creating well-established organic markets in Northern Europe and Germany in particular, and on local sustainability issues in rural development (Håring et al., 2001; Darnhofer, 2005; Kratochvil, 2006; Dwyer et al., 2012). A majority of examples in the EU Rural Review database (ENRD 2010a et seq.) report that organic production has resulted in improved competitiveness of local food products (20 of the 26 examples). This is quite often due to marketing initiatives taken by individual producers, who use opportunities offered by the legislative framework, rather than being a direct effect of the Regulation per se. Such initiatives can result in a multiplier effect for rural employment through growth in processing, markets and farm diversification. On the other hand, the FAO case studies illustrate that improved competitiveness of organic farmers in the Czech Republic and Hungary was associated with packages of policy measures indirectly associated with the legislative framework which aimed to develop marketing skills, short food chains and knock-on effects on increasing local demand for quality produce (Santacoloma, 2007a; Edwardson and Santacoloma, 2013).

### 13.3.2 Contribution of the legislation to the development of competitive organic businesses within the wider agricultural context

The judgement of Evaluation Question 2 and 7 (see Chapters 7 and 12) concludes that distortion of competition may occur if **differing interpretations** of the Regulation affect production costs, giving competitive advantage to operators in some countries. There is room for interpretation of EU rules, in some cases Member States have responsibility for definitions, in a range of situations including greenhouse substrates and fertilisers, the meaning of 'region' in the rule on the origin of feed, and of 'factory farming' for the use of non-organic fertiliser in organic crops, housing conditions for poultry, slow growing strains, and minimum slaughter age of broilers and the use of conventional seeds).

Chapter 11 also notes concerns about the **length of the product approval process** and the lack of guidance to operators about approved products in some Member States. These issues may cause problems for the development of the sector, for example if the lack of organic protein feed is an obstacle to maintaining or developing an organic livestock business, or if innovative approaches serving the development of the sector are slowed down or inhibited.

Another line of argument taken by some commentators and interviewees in the case study countries is that Regulation (EC) 834/2007 does not give sufficient room for the organic sector to develop where necessary to address new opportunities (IFOAM, 2012). Concern has been voiced by certain Member States about the **flexibility** needed for development in well-established markets where growth reached a plateau for a period of time.<sup>3</sup> Possible stimuli could for example be given by extending the scope and use of substances, implementing stricter standards for livestock comparable to Regulation (EEC) 2092/91, or introducing higher standards to address full life cycle impacts (FAO, 2011; Halberg, 2008; IFOAM, 2012; Sengstschmid et al., 2011).

Access to suitable **processing facilities** is a vital link in the organic supply chain, and the requirements for the processing sector are set out in the Regulation. There is no available evidence on the positive or negative effect of the legislative framework on the relative importance of organic processing in individual Member States. In a majority of Member States, about a quarter of organic farms are engaged in processing (e.g. of cheese) but this is not so common in other parts of the European Union (European Commission, 2008). The vast majority of processors are still found in the EU-15, and between 2003 and 2011 the number of processors grew by 29 % in the EU-15 compared to only 7% in the EU 12.<sup>4</sup> It would be a threat to the development of the sector if organic farmers who comply with the legislative and certification requirements were to lose some of the added value of their produce because of a lack of suitable processing facilities.<sup>5</sup> Barriers to establishing new processing facilities have not been systematically researched; however, the lack of data on the EU organic market clearly makes it difficult to take informed decisions about market opportunities, and is likely to be a contributing factor. There are a number of additional factors which are likely to coincide with other barriers to SMEs entering green markets, including legislative complexity, costs associated with meeting higher standards, red tape, and lack of extension services (Eurobarometer, 2012).

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<sup>3</sup> Interviewees from Denmark argued e.g. that growth of the organic sector continues up to a certain plateau level where it becomes difficult to attract new consumers and increase number of organic producers by conversion because the legislative and economic conditions together limit further improvement in the profitability of producers.

<sup>4</sup> Own calculation based on data for registered processors for selected Member States for which information is available: Belgium, Netherlands, Sweden, Denmark, Finland, United Kingdom, Greece, France, Spain, Germany and Italy (EU-15); and for Czech Republic, Latvia, , Hungary, Poland, Slovenia and Slovakia (EU-12) from [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=food\\_act2&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=food_act2&lang=en).

<sup>5</sup> For example when organic milk is sold on conventional markets, or organic farm output is transported for processing from the EU-12 countries to the EU-15 and thus some value-added for the local economy is lost (European Commission, 2010). The lack of processing observed on mountain farms and is one of the main threats to improving their viability by added value products across the majority of EU Member States (Santini et al., 2013).

### 13.3.3 Contribution of the legislation to the economic sustainability of the sector

The economically sustainable development of the sector requires not just a relatively stable market that meets consumer requirements, but also actors along the whole supply chain able to maintain profitable organic businesses within the wider food sector that is dominated by conventional agricultural production and processing. The analysis therefore focuses on the links between the requirements of the Regulation and the drivers of the decisions made by farmers and other organic businesses to join and remain in the sector.

During the lifetime of Regulation (EC) 834/2007, farm conversion across the EU-27 has continued, albeit at a slower rate than that seen in EU-15 from 2000 to 2005. Since 2011 overall development has largely stabilised across the EU, with 5.4 % all EU farmland certified as organic, concentrated mainly in Spain, Italy, Poland, France, Germany, Austria and Greece (Chapter 2). The main effect of the Regulation on this development is the **stable policy framework** which makes it possible for farms and businesses to estimate the impact of organic production and processing requirements on their profitability, compared to conventional production. For the sector to grow, a sufficient number of farmers must be convinced that conversion to organic takes place in a stable investment environment and can be an economically viable option. In addition, a high proportion of those farmers must be able to maintain their organic business for the longer term. The organic legislative framework appears to have created some opportunities in less intensive conventional farming systems, such as mixed livestock crop farms, extensive livestock systems or dryland crop systems<sup>6</sup>, although exact data for the rates of these conversions are missing, causalities are uneasy to extricate and the effects vary across EU regions.

It is of note that stability of environment for certain type conversions, such as to organic horticulture, is affected by the fact that they requires fairly advanced technologies and may involve heavy investment in skills and management know-how (glasshouses, use of approved substances for crop protection<sup>7</sup>). Some of these methods are governed by the production rules in Regulation (EC) 834/2007, with certain issues debated in the sector and differing interpretations, as discussed in previous sections. Unless these ambiguities in the interpretation of the framework are resolved, it can be expected that a potential expansion of organic horticulture

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<sup>6</sup> Of note, in low intensity systems, the loss in productivity compared to conventional agriculture will be lower or will not take place at all. There is also potential to improve organic product competitiveness and farm income (Dwyer et al., 2012), and targeting regional or local markets may reduce comparative economic disadvantage in globalised food markets (European Parliament, 2010).

<sup>7</sup> The basic production rules require the use of crop rotations and biological control as a key practice to prevent pest and pathogen risk. However use of certain organic protection substances is approved in accordance with Regulation (EC) 834/2007. These are authorised by the Commission. Novel substances that may be developed to enhance protection and improve yields will have to be authorised as well.

will have a knock-on effect at an EU level on the increasing amount of guidance needed for the interpretation of the rules and the increasing number of applications for approval of substances.

A key role of Regulation (EC) 834/2007 has been in **setting the regulatory basis for other policy tools** that were indispensable in creating favourable economic conditions for the organic sector<sup>8</sup>. Supply-side policy tools facilitated by the detailed regulatory basis in the Regulation include e.g. the funded measures for organic management and promotion, financial support to facilitate access to markets and set up new producer groups, the development of quality products, extension services, and training (European Commission, 2010; Sanders et al., 2011). The demand side of the market benefitted from funds for promotion, information, market research and the use of a unified publicly operated organic logo, which are tools that also could not be used without the EU-wide definition of organic food in the Regulation (Daugbjerg and Sønderskov, 2012; Sanders et al., 2011). Available studies do not quantify the extent to which a clear regulatory basis enabled the rapidity of developing such supporting environment. However, research including FAO concurs on the fact that the combination of varied policy tools and funding has been one of the key factors that made the EU organic sector increasingly competitive and viable (Nemes, 2009; Sanders et al, 2011)<sup>9</sup>.

The positive effect of these policy measures, partly enabled by the organic legislation framework, cannot always overcome **other agricultural drivers**, such as commodity markets, re-structuring and technology change. These continue to pose a range of barriers to organic conversion or start-up organic processing<sup>10</sup>. In addition, the recent development of specialised and intensified organic production systems may also be a barrier for some potential organic farmers, due to poor access to knowledge and technology, or because they see this as a dilution of organic principles, and therefore a societal and environmental disincentive.

The **administrative burden** on organic operators in relation to certification and record keeping requirements, and the additional red tape with the applications for approval of non-organic inputs and substances, has been cited by case study interviewees as a deterrent, concurring with

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<sup>8</sup> This outcome coincides with the recommendation by the OECD on the irreplaceable role of mix of policy instruments in achieving improved environmental management, compared to the use of any single instrument alone (OECD, 2007).

<sup>9</sup> Support payments to organic farming account for only 4-6% of gross farm income, however, they represent a very significant proportion of farm family income, varying from 13% in Austria to 28% in Germany, 47% in the UK and 72% in Denmark (Nieberg et al., 2007). Besides funding and supporting policy measures, other main factors for the competitiveness of EU organic sectors include comparatively high prices compared to conventional produce, and lower production costs from reduced inputs (Nemes, 2009).

<sup>10</sup> Other barriers pertain to the specificities of organic agriculture unrelated to the formal regulatory framework, such as slow development of organic supply chains for certain organic sub-sectors, long production cycles and crop rotations that require a longer time to take environmental and economically favourable effect, higher technical risks (pest management, climatic conditions) and more difficult management planning than in conventional agriculture.

the generic finding on the EU-wide obstacles to SMEs entering the green markets.<sup>11</sup> Stolze et al. (2012) found that the total costs of organic certification represent up to 0.4 % of the raw income of a farm and up to 1 % of the organic turnover of processors (against the background of an estimated average net margin for processors of around 3 %). Together with another weakness in the organic legislation framework, lack of access to group certification for smaller farms, these are potentially important issues that are likely to have diminished opportunities for organic conversion in certain EU regions. Where the loss of uneconomic mixed family farms and semi-subsistence farms to either intensification or land abandonment is a major trend, it has been attributed partly to prevailing agricultural drivers and partly to a failure of EU and Member State agricultural and rural development policies (Keenleyside et al., 2011; Dwyer et al., 2012; Keenleyside et al., forthcoming). Unavailability of group certification for these farms in the organic legislation framework thus means not only reduced opportunities for the development of the sector but also a reduced chance to help safeguard some of the social and environmental benefits currently provided by these farms, particularly in areas of High Nature Value farming (Keenleyside et al., 2011; Dwyer et al., 2012; Keenleyside et al., forthcoming).

The **reversion of organic units** to conventional farming is another potential brake on the development of the sector. While the sector is regarded as quite stable in eight Member States where less than 5 % farmers leave the sector annually, in several Member States the rates of farmers quitting were as high as 9-13 % between 2005 and 2007 (European Commission, 2010)<sup>12</sup>. This indicates a considerable degree of vulnerability within the sector. It is of note that the decision to revert is usually a result of several factors of which the Regulation is just one. Scientific studies revealed that for most farmers economic reasons were the most important followed by difficulties with certification, control and organic production techniques (Kuhnert et al., 2013; Sahm et al., 2013). Reasons which relate directly to provisions in the Regulation are, for example, the obligation to feed beef cattle with 100 % organic feed, the need to keep a wide range of records, or the prohibition of tethering of livestock.

Although there is no suggestion that the Regulation as a whole is a barrier to economic sustainability several groups of stakeholders indirectly emphasise the issue of **scarce supply** of organic inputs and ingredients as an important cause of an array of challenges to the development of the sector. The smooth functioning of the rules that govern the use of inputs and substances is therefore an essential pre-condition for the predictable and reliable development

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<sup>11</sup> Stolze et al (2012) provide the most complete quantitative evidence available to date on comparative certification costs. It is of note that the empirical information comes from six member states with relatively very large farms compared to EU average (CH, CZ, DE, DK, IT and the UK). In none of these countries are the HNV farming systems or the organic sector characterised by small family and semi-subsistence farms partly outside current CAP support, and none of them have only an embryonic organic sector. Therefore certain discretion is needed in interpreting the evidence in relation to examples in other Member States in the EU-12 with prevailing small farm ownership.

<sup>12</sup> Bulgaria has seen much higher rates of loss up to 35 % of farmers leaving the organic sector annually between 2005 and 2007 for reasons including both the cessation of farming activity and reversion to conventional agriculture.

of the organic sector. Particular issues in the production rules and the exceptional rules that are difficult for producers to comply with, as discussed in previous sections, create an obstacle to conversion and play a role in reversion to conventional farming. Organic producers interviewed underline that they need reliable rules, certitude about the way these are interpreted and a timely approval processes to have the confidence to make a long-term business investment.

### 13.3.4 Contribution of the legislation to a sustainable supply of environmental public goods and benefits for animal welfare

The analysis in Chapters 7 and 12 concludes that organic production has beneficial environmental impacts, generally good animal welfare impacts and contributes fairly well to wider EU objectives. It is also noted that the environmental role of the Regulation could be strengthened by additional guidance on biodiversity conservation and habitat management, and on the sustainable use of energy and water. However, the environmental sustainability of development of the sector relies partly on the way in which Member States, private schemes, and individual farmers have implemented the rules and interpreted the organic concept, rather than being wholly attributable to the legislation. This section provides an analysis of some key-issues of how development of the sector affects the supply of environmental public goods particularly for climate change and biodiversity, and examines the extent to which the legislation can secure a sustainable supply of these.

At a first glance, it is obvious to assume that the supply of environmental public goods has increased as a result of the increase of organic land area in the EU and that the Regulation has contributed to this by providing a regulatory framework and defining production rules for organic farming. There is however an ongoing discussion in scientific literature to what extent average **lower yields** from organic systems and potentially higher land use requirements may reduce the aggregated supply of environmental public goods, which in turn could also be related to the production rules (e.g. on the use of pesticides or nutrient management).<sup>13</sup>

According to a recent meta-review by Seufert et al. (2012), the performance of organic systems varies substantially across different farming systems and environmental and climatic situations, while only generic differences in yields between organic and conventional agriculture have been studied. However, there is sound evidence that soils in organic systems have better water holding

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<sup>13</sup> A meta-review by Tuomisto et al (2012) concludes, corresponding to the evidence discussed in Chapter 7, that organic farming practices generally have positive impacts on the environment per unit of area, for example higher soil organic matter content and lower nutrient losses (nitrogen leaching, nitrous oxide emissions and ammonia emissions); however, they generally have higher land use requirements per product unit. The finding is based on a meta-review including 71 studies that address EU agriculture only, comparing organic and conventional farming and providing quantitative results on at least one of the range of environmental impacts.

capacity and infiltration rates; therefore organic agriculture appears to have higher yields than conventional systems under conditions of drought and excessive rainfall (Seufert et al., 2012).

Data for organic farming is generally insufficient to estimate yield trends (Offermann, 2003, quoted in Nieberg, 2007). To be able to examine the relationship between the organic farming legislation and the overall productivity trends, not only accurate data but also better understanding of counterfactual scenarios would be needed. It is of note that the majority of studies under the meta-review by Seufert et al. compare organic systems to commercial high-input conventional systems with above average yields. This comparison therefore has limitations for illustrating the potential impact of organic conversion, particularly on medium or lower-intensity farms, since the counterfactual scenario involves the depletion of natural resources for the production of mineral fertilisers (Malingreau, 2012), as well as affecting water, soil and biodiversity (Poláková et al., 2013, 2011; Underwood et al, 2013). Furthermore, FAO (2011), Seufert et al. (2012) and Tuomisto et al. (2012), all point to the potential to increase productivity in organic systems through improved nutrient management, research and innovation. As indicated, there are also climate adaptation opportunities associated with the maintenance of yields in organic systems in extreme climatic conditions.

The turnover of **organic producers leaving the sector** may affect the environmental sustainability of development of the sector, because organic management requires time to take effect on soils, water and biodiversity. Thus environmental benefits may not be realised on the ground if organic management is quickly abandoned. Carbon sequestration in soil is a particular example of a benefit that is reversible and can be easily lost by changes in soil management after reversion to conventional methods. Another potential concern is the lack of environmental safeguards when EU agricultural land which is currently abandoned or subject to minimum cultivation is brought into crop production, whether organic or conventional (Hart et al., 2013) or when semi-natural pastures are agriculturally improved, for example for organic livestock system<sup>14</sup>. It is important to emphasise that no evidence of such environmental damage exists relating to organic conversion so far and that such practices would contradict the objectives of organic production as defined in Article 3(a)(ii) of the Regulation (contribution to a high level of biodiversity). However, there are no specific requirements in the Regulation that would prohibit such practices.

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<sup>14</sup> The first ploughing and re-seeding of semi-natural grasslands, with loss of highly valuable habitat and release of soil carbon, is not banned by CAP rules on permanent pasture (Beaufoy, 2011; Díaz-Chavez et al., 2013; Poláková et al., 2011; Tucker and Poláková et al., 2013). It could possibly take place as part of conversion to organic farming if farm profitability is at stake, without being accounted for in official statistics.

### 13.3.5 Contribution of the legislation to sustainable social benefits for rural areas

Consolidated evidence of the contribution of the EU organic farming framework to socio-economic aspects of rural development is missing, and where studies highlight actual benefits to rural development provided by the organic farming sector, they most often assume that the EU organic farming legislation indirectly created a facilitative policy environment (Häring, 2001; Pommer, 2001; Pugliese, 2001; IfLS, 2004a and 2004b; Darnhofer, 2005; IFOAM 2006; Münchhausen et al., 2006; Schäfer, 2007). The assessments here have therefore used evidence of incidental benefits identified in examples produced by the Commission's European Network for Rural Development (ENRD)<sup>15</sup>, recent FAO reports that include empirical case studies on organic agriculture in eight EU Member States and a brief review of key EU-wide sources on food supply chains, small farms and SMEs.

The development of added value organic products often has knock-on effects on revitalising **short food supply chains** in rural areas, for example through direct sales by individual farmers (e.g. farm shops); collective direct sales (e.g. farm shops or sale points for many farms; co-operative shops); and co-operation (e.g. between urban and rural partners via organic box schemes); specialist organic shops selling more directly to consumers than via supermarkets; localised partnerships around organic retail; and formally organised groups who offer organic catering services (EU Rural Review database, 2010-2013). Several examples also illustrate certain benefits of the emerging organic sector for improved competitiveness of smallholdings. This can be attributed to the opportunity for selling their organic produce to a cooperative and thus strengthening the local food chain (Belgium, Greece, Spain, and Italy) (EU Rural Review database, 2010-2013). FAO case studies underline that emerging organic farms in the Czech Republic and Hungary rely largely on such short supply chains (Santacoloma, 2007a). Furthermore, diversification on organic farms can provide additional sources of income, for example through developing on-farm processing facilities for organic produce or through linkages with local eco-tourism.

The examples in the ENRD database and the FAO case studies make little reference to the development of **human skills** on organic farms, but this may reflect the lack of extension and training services to develop these skills rather than a lack of effect. Santacoloma (2007a) does note that organic production in the Czech Republic and Hungary is developing new skills among farmers, particularly in terms of record keeping and marketing. Nemes (2009) points out that organic farmers often need more time and greater managerial efforts to acquire the necessary knowledge of organic practices, prices and marketing opportunities. The same study observes

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<sup>15</sup> All examples are referenced in the text as EU Rural Review database (2010-2013). The full references to all issues of the EU Rural Review that have been reviewed to produce the database are provided in the reference list.

that in the EU there generally tends to be much better access to extension services and cutting-edge academic research for conventional farmers than organic ones. It is notable that in EU-12 the provision of technical assistance, advisory services and marketing support to organic farmers (particularly for conversion from conventional to organic) has often relied on not-for-profit organisations, as demonstrated in FAO case studies (Santacaloma, 2007a, 2007b).

It is important to note that no direct correlation has been found in evidence collected between the organic legislative framework and the effects on social sustainability. On the basis of the reviewed literature, it is however clear that the development of the organic sector could potentially bring socio-economic benefits, particularly to disadvantaged rural areas, but achieving this will require improved provision and careful targeting of policy support measures.

### 13.4 Judgement and conclusions

Based on the results presented in the section above, **it is concluded that the EU legislative framework for organic farming has contributed to the development of the organic farming sector**, taking the following into account:

- Regulation (EC) 834/2007 has maintained the impetus created by the previous legislative framework to support a strong EU domestic and import market for organic food, principally through defining detailed rules for organic production and processing; unifying a previously fragmented policy area, and introducing a unified and strict control mechanism. Of note are many other factors beyond the EU legislative framework that influence the development of the organic sector commodity markets, EU support policy for conventional and organic farming, national policies, and consumer demand for organic products).

**It is further judged that the EU legislative framework has contributed to the economic and environmental sustainability of this development, and that there are opportunities to increase this and social sustainability of future development**, because:

- In general the Regulation provides a clear basis for the development of new organic businesses. However varying proportions of organic farmers leave the sector each year, and the development of processing facilities lags behind the needs of certain organic sub-sectors in some EU regions, in particular in mountain areas. This indicates a degree of economic vulnerability for some organic operators.
- Since the Regulation came into force the EU organic sector has continued to grow. Nevertheless, barriers to organic conversion continue to exist and therefore the provision of the regulatory basis by the organic legislative framework is an essential pre-condition for a mix of measures to create a supportive policy environment for the actors in the sector (advice, training, information, land based organic payments, promotion, research).
- Neither the legislative framework nor the implementation of supporting policies appear to have been wholly effective in developing organic production for small and semi-subsistence

low-intensity farms as well as small-scale processors who could benefit economically from organic conversion. Development of these parts of the sector has the potential to deliver associated socio-economic and environmental benefits in some parts of the EU.

- The Regulation has contributed to the environmental sustainability of the sector but this relies partly on the way in which Member States, private schemes, and individual farmers have implemented the rules, not just on the legislation itself. Some environmental benefits of organic farming, particularly for arable land, take effect over a considerable period of time, and thus growth in the sector will be most sustainable where there is stability of conversion rather than rapid turnover.
- Development of the organic sector has potential to bring socio-economic benefits and hence deliver public goods. Realising this potential requires clearer targeting of supportive EU policies, particularly those in RDPs, or considering group certification for small EU producers.

### **Detailed consideration**

The overarching objective of the Regulation is to provide the basis for the sustainable development of the organic farming sector. This evaluation question has addressed the achievements towards this objective in two stages. Firstly the assessment addresses the extent to which the EU legislative framework for organic farming has contributed to the development of the organic farming sector, focusing on the aim of providing conditions under which this sector can progress in line with production and market developments. Secondly, it addresses the extent to which the resulting development is economically, environmentally and socially sustainable and the contribution of the legislation to this.

The judgement is based on a brief review of relevant EU-wide literature and selected national literature, and information gathered from interviews with authorities and stakeholders in the 13 case study countries, plus selected socio-economic examples from the database maintained by the Commission's European Network for Rural Development.

#### *Contribution to the development of the organic farming sector*

Regulation (EC) 834/2007 has maintained the impetus created by the previous legislative framework in supporting a strong EU domestic and import market for organic food, principally through defining detailed rules for organic production and processing. The Regulation unified a previously fragmented policy area and introduced a unified and strict control mechanism, which is an important improvement for the fair competition and smooth functioning of the market. The market underpins the supply chain and hence plays a key role in achieving growth of the sector.

The contribution to market development may be somewhat weakened because some production rules allow a broader interpretation and thus may have adverse effects on fair competition between actors in different parts of the EU (for example the definition of 'region' for feed and 'factory farming' for manure).

### *Economic sustainability of the development of the organic farming sector*

The economic sustainability of organic development depends on the ability of many thousands of individual producers to create and maintain economically viable organic businesses on the basis of the rules. In general the Regulation provides a clear basis for development of new organic businesses and also a justification and basis for key supporting policies, particularly those funded under Member States' RDPs. There is however significant variation between Member States in the proportion of organic farmers leaving the sector each year, for reasons that are rarely studied in depth. Supporting policies clearly have a beneficial role but may not be always sufficient to overcome external pressures. Strengthening the rules may have an impact on the one hand, by enforcing the interest of consumers as well as the transparency and consistency of the organic concept; on the other hand, by increasing the requirements put on organic farms.

Some of the barriers to organic conversion could be reduced by filling gaps in the mix of EU and national measures that are needed to create a supportive policy environment, including the provision of technical advice, extension services and training; accessibility to attractive CAP agri-environment and other RDP support; and improved institutional capacity to design and deliver appropriate policy packages with supporting measures.

### *Environmental sustainability of the development of the organic farming sector*

There is sound scientific evidence that the Regulation has established a framework which guides farmers to the practices beneficial for the environment. Still, the environmental sustainability of development of the sector relies partly on the way in which Member States, private schemes, and individual farmers have implemented the rules and interpreted the organic concept, rather than being wholly attributable to the legislation. The environmental opportunities for the future, where the organic production rules could play a role, include: the potential to close the productivity gap between organic and conventional systems through improved nutrient management, research and innovation; and the opportunities for increased organic conversion of low-intensity farming systems, with associated potential for adding value to farm products and for securing the continuation of existing beneficial management of key semi-natural habitats and species, especially on High Nature Value farmland. While these opportunities merit attention, there needs to be more effort made to examine them together with appropriate counterfactual scenarios for organic yields in a range of farming situations, based on accurate data from the sector.

### *Social sustainability of the development of the organic farming sector*

It is difficult to reach a clear judgement on the social sustainability of development of the sector, but on the basis of the limited evidence available it is clear that the development of the organic sector has the potential to bring socio-economic benefits. However, additional effort will be needed to achieve economically sustainable sector development in disadvantaged rural areas with small farms and a need to develop organic SMEs. For example, this may require considering group certification for small farmers under the legislative framework while ensuring access to the

CAP support for low intensity farming systems and provision of targeted packages of support in Member States' RDPs. These could provide careful targeted 'soft' measures for advice, training and facilitation, as well as RDP support for cooperatives and new investment in farm buildings and equipment, processing and marketing.

## **PART C**

### **Overall conclusions and recommendations**



## Chapter 14

# Towards an improved legislative framework for organic farming – Overall conclusions and recommendations

### 14.1 Introduction

The European organic farming sector has been characterised by continuous growth; between 2000 and 2011 the organic area in EU Member States more than doubled. In 2011, more than 9.5 million hectares of agricultural land was managed organically in the European Union, on nearly 240 000 farms. This translates into an average share of 5.4 % of the total agricultural area. An equally dynamic development can be observed with regard to demand for organic food. The total value of the EU-27 organic market was approximately 19.7 billion EUR in 2011. Not surprisingly, from a global perspective, the EU organic farming sector is a key player with a share of 26 % in the global organic area and the second largest market for organic food in the world.

The first EU legislation on organic farming, Council Regulation (EEC) 2092/91 in 1991, has been identified as one important driving force for this development (Dabbert et al., 2002; Stolze and Lampkin, 2009). It provided a legal definition of organic farming through production rules as well as defined control and labelling requirements. This helped to protect organic farmers and consumers against false and misleading organic claims. Following on from the European Action Plan for Organic Food and Farming (European Commission, 2004), the original regulation was substantially revised, resulting in Council Regulation (EC) 834/2007 and its implementing regulations.

The focus of this evaluation has been to explore the adequacy of the current rules (in force since 2009) on organic production, controls, labelling and for trade with third countries, with respect to achieving their objectives. These objectives are laid down in Articles 1 and 3 of the Regulation. The rules aim to *“provide a basis for sustainable development of organic production, while ensuring the effective functioning of the internal market, guaranteeing fair competition, and ensuring consumer confidence and protecting consumer interests”* (global objectives of the Regulation). Furthermore, organic production shall *“establish a sustainable management system for agriculture, aimed at respecting nature’s systems and cycles, contributing to high levels of biodiversity, protecting natural resources, producing products of high quality and a wide variety of foods and other agricultural products that respond to consumers’ demand”* (objectives of organic production).

The global objectives of the Regulation are closely related to specific needs of the organic sector in the EU and its development over the last twenty years. The sector was characterised, for

example, by different national and private organic standards, different logos and the need for the protection of the term 'organic' in the context of agricultural products. The extent to which the objectives of the Regulation are still relevant or whether the Regulation should pursue additional or alternative objectives has not been part of this evaluation.

Besides examining the adequacy of the rules for production, control, trade with third countries and labelling, the evaluation has also addressed a number of other relevant issues, such as a) whether the scope of the Regulation is adequate to meet the current needs both of the organic sector and consumers of organic products; b) whether the current legislative framework has contributed to achieving a simplified administration and management of the legislative measures; and c) the extent to which the legislation has created EU-added value and contributed to a sustainable development of the organic farming sector.

In the following sections, and in line with the structure of the Regulation, conclusions and recommendations are made, firstly regarding the scope of the legislation and secondly regarding the rules for production, controls, trade with third countries and labelling. These are based on the descriptive part and the replies to the evaluation questions. Subsequently, conclusions and recommendations are made with respect to the link between the EU legislation on organic farming and other EU policy areas. In the final section of this chapter, the individual recommendations are grouped into six types of measures within two fields of action.

## **14.2 Conclusions and recommendations in relation to the scope of the EU legislation on organic farming**

When conceiving the Regulation, the Council pointed to the dynamic evolution of the organic farming sector and stressed the need to examine the adequacy of the current scope (see Article 41 of Regulation (EC) 834/2007). In relation to this, particular attention has been paid in recent years to the areas of mass catering and non-food products (e.g. textiles, cosmetics).

The analysis has shown that the scope of the Regulation is mostly adequate to match current needs of organic farming supply and distribution chains, but not fully adequate to meet the needs of consumers of organic products, taking the following into account:

- Lack of clarity exists mainly with regard to non-food products closely related to organic agriculture, such as wool, beeswax, some essential oils and herbs for medicinal use.
- In some Member States national and/or private provisions exist for organic mass catering. There is limited evidence of intra-community trade, so the absence of a uniform EU standard does not impact on the fairness of competition among operators in catering services. There is some support among stakeholders for the inclusion of mass catering under the scope of the Regulation to improve clarity for consumers and to increase potential for recognition of organic farming within green public procurement. However, inclusion could increase the

regulatory burden on the sector and therefore has the potential to hinder rather than the support the development of this sector.

- Various non-food products (such as body care products and cosmetics, household cleaning products and textiles) using organic claims are found in retail outlets. This is likely to cause confusion for consumers and could undermine trust in the organic label for food products. However, the labelling requirement of a minimum of 95 % of organic ingredients that applies to organic food is not transferable to cosmetics and textiles. Private standards and international initiatives exist which are developing harmonised and accepted minimum criteria for the regulation of such products.

Based on this judgement, the following recommendations are made that aim to ensure the adequacy of the legislation with respect to achieving its objectives.

#### *Clarifying the scope*

The analysis showed that the current scope of the EU Regulation is generally understood by consumers, but a lack of clarity exists with regard to non-food products closely related to organic agriculture. **It is therefore recommended that the legal situation is clarified as to how an organic claim can be communicated on such non-food products if they are produced in accordance with Regulation (EC) 834/2007.**

#### *Mass catering*

Stakeholders remain concerned that the increased regulatory burden entailed by the inclusion of organic mass catering could stifle potential growth of the sector. However, greater clarity would make it easier to promote the use of organic raw materials in public procurement, encourage intra-EU trade in this area and improve clarity for consumers, particularly in Member States where no national rules on organic mass catering exist. **It is therefore recommended not to extend the scope to include mass catering, but to encourage Member States to explore possibilities for encouraging the use of organic products in the context of green public procurement, in particular in the area of mass catering.**

#### *Non-food products*

To include non-food products, their specific characteristics need to be considered, which risks making the Regulation more complicated. However, consumer confusion with regard to non-food products using organic claims should be addressed. **It is therefore recommended not to extend the scope of the Regulation to cover cosmetics and textiles, but to explore (taking existing initiatives into account) what constitutes a legitimate organic claim and whether this provides opportunities for an organic claim and/or logo to be used on such products.**

## 14.3 Specific conclusions and recommendations in relation to the rules of the EU legislation on organic farming

### 14.3.1 Production rules

Organic production is an integrated farm management system which aims to preserve natural resources, apply high animal welfare standards and produce high quality food. The objectives and principles of organic production are operationalized through production rules in the Regulation and the related implementing rules which provide the legal definition of organic farming in the EU.

The analysis has shown that the production rules are generally in terms of achieving the global objectives of the Regulation and the objectives of organic production, as laid down in Council Regulation (EC) 834/2007, taking the following into account:

- There is sound scientific evidence that the Regulation has established a framework which guides farmers to adopt practices supporting the aims of organic agriculture of contributing to higher levels of biodiversity, increased soil fertility and minimizing water and air pollution. Some of these effects can be directly linked to the rules laid down in the Regulation, and some are derived from stricter national and private standards of certain Member States.
- However, the production rules do not fully limit the intensification of some production sectors, such as housing conditions for poultry (despite the existence of detailed rules) or greenhouse production (with no common implementing rules at EU level). Also, some objectives stated in the Regulation addressing the whole sector (e.g. responsible use of natural resources) and some terms (e.g. 'sustainable development', 'respect for nature systems and cycles', 'sustainable use', 'region' or 'factory farming' in relation to input use), which could have a potential impact on intensification, are not further defined.
- The production rules form a good basis for producing products of high quality and satisfying consumer demand for a variety of food products.
- The system of exceptional rules, established to allow regional differences in climate, stage of sector development and specific husbandry practices to be taken into account, seems to be not fully adequate. A definitive judgement is difficult because of a lack of reliable data on the availability of organic supplies, but for some sectors the present system appears to hinder rather than support development and increased use of organic supplies.
- The GMO provisions are adequate to ensure the lowest possible adventitious presence of GMOs in organic products. Very few cases of contamination were reported over the past years. However, stakeholders are concerned about the constraints and additional burdens if the labelling thresholds were to be lowered further (mainly due to higher costs for separating and analysis). There are concerns about future availability of GMO-free ingredients (in particular some enzymes and vitamins B2, B12 and ascorbic acid), as well as the reliability of GMO-free vendor declarations.

- The common framework of production rules appears to provide generally a good basis for fair competition among producers. The analysis of provisions and other information indicates however for some areas (such as definition of 'region' in relation to feed use or 'factory farming' for manure use) the absence of precise definitions has a potential negative impact on fair competition, but the lack of data does not allow firm conclusions to be drawn. Further market analysis and the collection of comparative data of costs of production in different Member States would be necessary to carry out an objective assessment.

Based on this judgement, the following recommendations are made with a view to ensuring the adequacy and increasing the effectiveness of the legislation in achieving its objectives.

#### *Structure and scope of the production rules*

The production rules provide a system-based framework relying on principles with emphasis on the need for prevention instead of direct intervention against certain problems (pests, diseases, weeds), restricting the use of external inputs (with some prohibitions), and defining practices that contribute to a variety of beneficial outcomes. Scientific literature confirms that the systems approach delivers on many aspects of the overall objective of organic production. Stating objectives and principles in the main Regulation has contributed to a common understanding of the concept of organic agriculture, but some uncertainty for some control bodies and control authorities as to whether these are legally binding was observed. Also, the link between specific production rules and the objectives they are designed to support is not always clear. **It is therefore recommended that the legal text is simplified to clarify the legal status of the objectives and principles of organic production. It is also recommended that further guidance is provided on how specific rules link to the objectives of organic production and that there is further clarification of ambiguous terms. Dialogue on the interpretation of the rules is to be encouraged at all levels between the Commission, national authorities and control bodies.**

#### *Adequacy of the production rules to achieve the objectives of organic production*

The organic rules already have a strong, positive influence on high levels of biodiversity and soil and water protection, but practices that have a direct positive impact (e.g. instructions on habitat management, ecological focus areas, etc.) are not clearly defined. There are, for example, no detailed rules on the responsible use of energy and water. In the case of water, however, such rules would be useful only in those regions where water is a scarce resource. **It is therefore recommended that ways to address the issues of the sustainable use of energy and water and biodiversity conservation and habitat management are explored.**

Whilst the organic production rules already contain many good provisions with potential impact on animal welfare, the objective of 'respecting high animal welfare' cannot be achieved by rules alone, but further improvement in animal welfare could be achieved through better monitoring of existing rules to raise farmers' awareness. **It is therefore recommended that adequate well-targeted output-based criteria are developed for the monitoring and enforcement of animal**

**welfare outcomes that can be used by operators in self-assessment and also as part of control visits.***Adequacy of the production rules to ensure fair competition*

The current rules appear to provide a good basis for fair competition, but some problems arise from different implementation in the Member States, which may have implications for production costs. This could be caused by lack of detail in the EU Regulation, by issues that are left to the discretion of EU Member States or by issues arising from national rules that also apply to organic producers. Providing more guidance on the definition of certain terms (see above) would help to reduce the amount of differences in interpretation and implementation across the Member States.

The availability of comparable data on costs of production or intra-EU trade, which would be required to assess the quantitative impact of various rules on potential distortion of competition, is very limited. For example, only rough estimates are currently possible to assess the impact of varying definitions of the term 'region' on feeding costs and the competitiveness of organic farmers. **It is recommended that a consistent EU-wide approach is taken to the definition, collection and publication of statistics and market data for the organic sector.**

*Exceptional rules*

Exceptional rules were provided for in the basic legislation in order to encourage and facilitate conversion at the beginning of the entry into force of this legislation when harmonisation had not yet been attained. It is the nature of exceptional rules that they are an exception from the norm and should be time limited. The evaluation examined three of them that allow for the use of non-organic inputs (young poultry, feed for monogastrics and seeds). Each case is different regarding the extent of use of the exception and the availability of organic inputs.

The exceptional rules for the use of non-organic young poultry consist of two parts: a) use of non-organic chicks (less than 3 days old, currently not time limited) and b) use of part-organic reared pullets (complying with rules on feeding and veterinary treatment inputs but not with those on origin of animals and housing; due to expire on 31 December 2014). Both exceptional rules are extensively used in all of the case study countries except in Denmark, where national rules have been introduced. In the other countries, no data on the level of undersupply and progress made were available. According to stakeholders, the existence of the exceptional rule itself and the lack of an EU standard for pullet-rearing have hampered the development of supplies of entirely organic pullets. **It is therefore recommended that provision is made for organic pullet rearing and hatchery at EU level, followed by a phasing out of the exceptional rule on the use of part-organic pullets.**

There are insufficient data regarding the use of the exceptional rules for use of non-organic protein feed for monogastrics or the availability of organic supplies, consequently no quantitative analysis of the justification of this rule could be made. Stakeholders and experts believe that

most monogastrics breeders feed 5 % conventional high protein crops and by-products (such as potato protein, maize gluten products). The organic (and general) production of pulses in the EU is insufficient to meet the demand of the European livestock sector, but there may be promising early stage development of alternative feed products for monogastrics. Moving quickly to 100 % organic feed could result in a high reliance on extra-EU imports used to balance rations, rather than stimulating EU supplies of high quality protein. This may conflict with consumers' preference for local production and for feed from the farm or region. It might also result in further pressure to allow synthetic amino acids as feed ingredients. Although this could compromise the credibility of organic farming which generally tries to avoid synthetic inputs, it is also likely that some pressure is needed to stimulate change. **It is therefore recommended that the development of organic high protein feed supplies in the EU is supported through research and knowledge exchange as well as specific CAP measures, and that the development of supply and demand (supply balance) of organic high protein feeds supplies in Europe is monitored.**

The exceptional rule for non-organic seed is also widely used. Of the case study countries, Austria, Denmark, France, and Germany were able to develop (for some species) an organic supply to meet national needs. However, at EU level the current system did not lead to significant improvements in the supply of organic seeds. In countries where the organic seed supply for some species is reaching satisfactory levels, phasing out the exceptional rules may restrict access to locally adapted and traditional varieties as required by the organic principles and crop production rules. This is particularly the case for sectors where many different species and varieties are grown, such as fruit and vegetables and forage production. The seed database appears to be a useful tool for managing the exceptional seed rules system, but some shortcomings were observed. **It is therefore recommended that the use of the seed database is harmonised and improved through regular updating of lists of available species and varieties and that further exchange of information between countries is facilitated in order to broaden the market.**

Overall, the analysis led to the conclusion that monitoring of supply balances is necessary to make a sound judgement on the justification of such exceptions. For the cases evaluated, there is a clear indication that the existence of exceptional rules has impeded the development of organic supplies in the EU, partly because of higher costs of organic supplies which act as a disincentive for their use.

### 14.3.2 Rules on controls

Since 1991, organic farming in the EU has been regulated to ensure that consumer confidence in organic products is justified, that fair competition is guaranteed and that the internal market is functioning. To this end, Council Regulation (EC) 834/2007 foresees a two-fold control system of competent authorities delegating control measures to control authorities and control bodies, which implement audits specific to organic production. Against the background of a continuously

expanding organic sector, after two decades of regulation of organic farming at EU level, this evaluation examines, among other things, whether the current control system is adequate to achieve the global objectives of the Regulation as mentioned above.

The overall control system of organic farming was judged to be largely adequate in terms of achieving the global objectives of the Regulation, but with some shortcomings in implementation, taking the following into account:

- Annual inspection requirements are adequate to ensure fair competition and consumer confidence, although risk-based approaches could achieve the same aims at lower costs. However, guidance at EU level may be necessary to ensure a harmonised approach.
- Additional risk-based inspections required by the Regulation are in general an adequate tool to ensure fair competition and consumer confidence. However, they are implemented differently across the Member States and in several countries only to a limited extent. At present, the full potential of risk-based approaches is not exploited. Further development of risk-based approaches is necessary so that they can be applied to the organic control system.
- Exemption from the control system for operators who sell products directly to the final consumer or user are adequate and justified in cases where such operators only sell packed and labelled food. In such cases, the upstream actors of the organic supply chain were already subject to the control system. However, there is an indication that this exemption is only justified if the supervision system ensures that such retail businesses are notified to the respective competent authorities and that the conditions for the exemption are periodically verified.
- Not all elements of the control system are consistently implemented across the Member States. This leads to a situation whereby, between Member States and even within one Member State, organic operators and products could be differently evaluated with respect to residues, and also operators could receive different sanctions for committing the same infringement. Thus for these areas, fair competition among organic operators and among control bodies cannot be not guaranteed.
- There is no robust indication that the distribution of responsibilities among the main actors involved in the control system is inadequate.
- The national supervision systems are not fully adequately and effectively implemented in some Member States due to insufficient procedures for supervision and limited resources of competent authorities to fulfil the supervisory role.
- There are some deficiencies in the exchange of information illustrated by the analysis of the recent organic fraud case.
- Consumers largely have confidence in the organic control system. But this trust is built upon perceptions and not on factual knowledge.

Based on this judgement, the following recommendations are made which aim to ensure the adequacy and increase the effectiveness of the legislation with respect to achieving its objectives.

#### *Organic control system based on risk-assessment*

To avoid opportunistic behaviour on the part of organic operators and to ensure that control measures are not overly predictable, the control system should adopt a toolbox approach whereby control measures can be applied according to risk, operator type and context. The core element of such an approach is therefore risk-based. This would allow for the identification of low-risk and high-risk operators, thereby creating a more targeted and dynamic approach to the control process. Such a system needs to be developed as a learning system which is able to adapt to changing influences on and challenges for the integrity of organic farming. It is important to bear in mind that such a dynamic approach is not compatible with the static approach of the mandatory annual control visits as currently implemented in the Regulation. **To improve the effectiveness of the organic control system, it is therefore recommended that the organic control system is based on risk-assessment.**

In particular it is recommended that:

- risk-classification tools are used to determine 'low and high risk' operators as well as type of control (announced/unannounced), control frequency, control depth and a selection of additional control measures. The intention of risk-based approaches is not to reduce the total number of controls, but to base the control frequency on risk assessment. Furthermore, given that regular annual controls can be communicated easily to consumers to ensure consumer confidence, risk-based approaches could be used to adjust control duration and control depth of annual, on-the-spot visits depending on the risk classification of operators. However, to maintain the random nature of the control procedure for organic operators, dynamic changes in the control frequency and depth are required;
- the use of a set of control measures embedded in the overall risk approach is enforced to be applied dynamically; for example, consisting of inspection of animal welfare parameters, use of residue sampling, testing and analysis during the production process, use of cross-checks along the entire organic supply chain, risk-based and detailed review of bookkeeping accounts, and prompt follow-up in case of non-conformities;
- the use of new technological devices and analysis techniques for on-site controls should be explored;
- specific training for control bodies and inspectors on risk-based controls at EU and national level should be introduced taking into account that a risk-based approach requires additional knowledge and competences (compared to an annual control approach) to address adequately different risk cases.

*Supervision systems of the Member States over control bodies and control authorities*

The supervisory system of the Member States should aim to prevent opportunistic behaviour on the part of control bodies and control authorities. So far the notion of supervision of control bodies as implemented in some Member States is that of focusing too much on formal requirements involving extensive reporting. The supervisory systems of Member States should consist of a variety of tools and procedures to be applied dynamically in order to make the process more efficient.

Competent authorities are required to ensure that the control tasks delegated to control bodies or control authorities are carried out properly. To monitor the work of these bodies, competent authorities use audits and other supervision measures. The effectiveness of supervision could be improved by strengthening guidance so that a common understanding of the organic farming legislation among control bodies/control authorities exists. Guidance is particularly important, since a risk-based approach is not a static system but requires additional skills as described above. As competent authorities are in direct contact with the control bodies and control authorities, they could take particular responsibility to convey the key concepts of organic farming and the EU organic farming legislation to control bodies and control authorities. **It is therefore recommended that the knowledge, skills and capabilities of the competent authorities is increased through adequate capacity building and training.**

*Information exchange between the actors inside and outside the control system*

Effective information exchange should be quick and efficient for all control bodies, control authorities and competent authorities in order to speed up reaction times. Furthermore, in order to increase the effectiveness of on-site controls, it would be useful to give control bodies access to existing operator data so that such information does not need to be collected again during the control visit. This would allow inspectors to focus more on the actual inspection during an inspection visit. **It is therefore recommended that the Organic Farming Information System (OFIS) is improved and that the Commission considers whether it is appropriate to extend its application to other actors in the control system.**

Irregularities and non-compliances may be detected not only by the actors of the organic control system, but also through tax and customs investigations or other authorities. This is a key lesson learned from the recent fraud case 'Gatto con gli stivali' which highlighted deficiencies in information exchange between different public authorities. **It is therefore recommended that the awareness of Member States be raised in this respect and that Member States are advised to explore whether and to what extent interfaces between the organic control system and customs or tax authorities could be established.**

### 14.3.3 Rules for trade with third countries

In the last two decades, organic supply and distribution chains have become increasingly globally organised and a large number of products sold on the EU market are imported. For farmers and consumers in the EU, it is important that organic products from third countries are produced in accordance with equal requirements and that the control systems guarantee the same level of assurance of conformity as within the EU. Furthermore, it is relevant that administrative procedures allow for timely delivery of the products at a reasonable cost.

The import regime was judged to be largely adequate in terms of achieving the global objectives of the Regulation but with some shortcomings in implementation, taking the following into account:

- Procedures of the import regime are generally adequate to assure conformity of organic products imported from third countries. However some shortcomings were identified with regard to the working resources required to assess the equivalence at the Commission and varying interpretation of equivalency by the control bodies. Furthermore, importers complain that procedures for issuing certificates of inspection implemented by some third country control bodies are slow and that they are paper-based;
- Control systems implemented in some third countries displayed shortcomings in particular as regards the application of specific preventive measures (e.g. training for operators) and risk-orientated controls. There are also concerns about the supervision of control bodies operating in third countries, in particular whether supervision is sufficient. Furthermore, stakeholders have indicated that procedures to follow up on irregularities are not always satisfactory; and
- Consumers have some reservations towards organic products not produced in their country. This attitude does however not differ substantially between organic products from other EU-countries and organic products from third countries.

Based on this judgement, the following recommendations are drawn that aim to ensure the adequacy and increase the effectiveness of the legislation with respect to achieving its objectives.

Considering that the control system on imports has to provide equivalent effectiveness with the EU rules, it is clear that many recommendations for the rules on controls (see Chapter 14.3.2.) are also applicable for the import rules. One example of this is risk-based approaches, which allow for an adequate response to situations where there is a higher risk of irregularities due to deficient knowledge of organic agriculture standards or techniques.

#### *Administration of equivalence assessments*

The import system applied in the EU does not require full compliance with EU rules but rather with equivalent rules and procedures for standards and control systems adapted to the specific framework. Ensuring equivalence is vital to guarantee fair competition with European producers

and to maintain organic integrity and subsequently consumer trust. The evaluation results revealed concerns about the administration of equivalence assessment because the growing number of recognised third countries and control bodies has led to an increasing administrative workload, in particular, for the Commission. **It is therefore recommended that bodies involved in the administration of the equivalence assessment have sufficient working capacities to deal with the growing number of recognised third countries and control bodies.**

The current system of recognised control bodies requires control bodies to issue a standard equivalent to the EU Regulation for their operations in third countries, which also needs to be submitted with the application for recognition. Furthermore, existing standards, once approved to be equivalent, need to be continuously refined and further developed in line with any changes to the EU Regulation. This in turn requires a continuous re-assessment of the equivalence. **It is therefore recommended that possibilities to simplify the recognition and assessment procedures (e.g. by separating the recognition of control bodies from the recognition of technical standards) are explored.**

#### *Import authorisation system*

The current system of import authorisations will be phased out by July 2014. Considering the administrative burden associated with this system and the challenges it has faced in achieving harmonised implementation, the disadvantages of this option are obvious and thus the phasing out of the import authorisation is justified. In view of the relatively high number of authorisations requested in 2013 and uncertainty as to whether the market will function properly, **it is however recommended that the supply development is monitored and adequate action taken if severe market failures are observed resulting from the phasing out of import authorisations.**

#### *Strengthening supervision of control bodies*

Supervision of control bodies plays a key role in ensuring an effective control system. It guarantees a level playing field among control bodies and helps to prevent possible unfair competition among operators which could result from varying interpretation of standards. Under the system of recognised control bodies, supervision is carried out by the Commission, competent authorities and accreditation bodies. The findings from the analysis of provisions revealed that there is no direct link between accreditation bodies and the Commission. **It is therefore recommended that consideration is given to establishing direct communication between accreditation bodies and the Commission especially with respect to complaints and irregularities.**

### **14.3.4 Rules on labelling**

Labelling rules for organic products provide a legal basis for the use of terms referring to organic production and contribute to the functioning of the internal market. A key element of the labelling rules is the EU organic logo, which aims to increase recognition of organic products in all

EU countries and to provide consumers with confidence that organic food is produced entirely in line with the Regulation.

The analysis has shown that the concept of organic farming is largely understood by most consumers in the EU, taking the following into account:

- The majority of the respondents were familiar with the main issues of organic farming, such as growing without the use of synthetic chemicals, production by methods protecting the environment or grown without the use of genetically modified seeds; but
- A large share of consumers surveyed also agreed with ‘incorrect’ statements as being part of the legal definition, such as ‘needs to be produced on small farms’ and ‘needs to be produced locally’; and
- A quarter of respondents to the consumer survey recognise the new EU organic logo which was introduced in 2010 and became compulsory without exception in July 2012.

Based on this judgement, the following recommendations are made which aim to increase the effectiveness of the legislation with respect to achieving its objectives.

#### *Consumers’ knowledge of organic farming*

Consumers’ knowledge and understanding of the concept of organic farming is essential for consumers’ confidence and purchasing decisions. The analysis has shown that consumers’ knowledge is high regarding some basic principles of organic farming (such as the ban of synthetic chemicals) but a large proportion of consumers surveyed mistakenly believe that organic food ‘needs to be produced on small farms’ and ‘needs to be produced locally’ neither of which are requirements of the Regulation. Knowledge of the core concept of organic agriculture could be enhanced and confidence in the independent certification system could be strengthened through information campaigns. This will require joint efforts from the EU and Member States and the organic sector. **It is therefore recommended that there is continued support for well-targeted information and awareness raising campaigns which explain the common concept of organic farming, the certification system, the EU organic logo and the additional compulsory indications.**

#### *Organic EU logo*

The specific challenge for the EU organic logo is that various organic logos had already been established in many Member States prior to the introduction of the EU organic logo in 2010. Some countries had longstanding national logos (e.g. Estonia, France and Germany); some had primarily well-established private logos (e.g. United Kingdom). In other countries foreign national logos (the German Biosiegel) and the old EU logo were and still are important in the market (Italy and Poland). However, organic logos (apart from the EU logo) do not exist in all Member States. The new EU logo itself is not self-explanatory because it does not use any specific term referring to organic farming. Due to language differences, no single term could be found to suit all

Member States. Six months after it became fully mandatory, the new EU logo is recognised by about a quarter of consumers. Recognition is higher in France, where it has been clearly associated with the well-established French national AB logo. The logo has to be accompanied by the code number of the control body which includes BIO, ECO, EKO, ORG, ÖKO or ØKO, but consumers do not necessarily link this indication with the logo. **It is therefore recommended that options are explored to associate or connect terms referring to organic farming more closely with the logo.**

Additional compulsory indications such as the origin of raw materials (EU and non-EU agriculture) were introduced in order to increase the level of information and to reduce consumer confusion at the point of sale. According to the Regulation, products can be labelled with the name of the country if 98 % of all raw materials have been farmed only in one country. By allowing only 2 % of the ingredients to come from outside the country in question, very few products can be labelled with an indication of the country of origin. At the moment, the rules for organic food are in this respect stricter than provisions for some products with geographic indications (e.g. products can be labelled as Protected Geographical Indication, if among others the production and/or processing and/or preparation of a product takes place in the defined geographical area). **More flexibility concerning geographic indication may be useful to allow regional organic food to compete with other regional food in many markets.**

### 14.3.5 Simplified administration and management

As part of the European Action Plan for Organic Food and Farming (European Commission, 2004) the EU Council called on the Commission to review the legal framework regarding simplification and overall coherence. Simplification in the context of the CAP framework should have the goal of reducing red tape for both farmers and administrations by making rules more transparent, easier to understand and less burdensome to comply with (European Commission, 2005).

The analysis has shown that the current legislative framework for organic farming has significantly improved the transparency of the legislative measures applicable before 2009, but has not resulted in simplified administration and management, taking the following into account:

- Objectives, principles and production rules are now defined at the level of Council Regulation (EC) 834/2007. The structure of the new regulations, whereby the implementing rules are contained in separate Commission Regulations, runs the risk that not all relevant sections are considered by operators. There is a lack of clarity of some terms (e.g. region, irregularities and infringements, high quality).
- The approval process of permitted substances and practices has been clarified and criteria have been laid down, but there are concerns about the length of the approval process.
- The new Regulation and the replacement of derogations with exceptional rules have not overall resulted in reduced red tape and administration.

Based on this judgement, the following recommendations are made that aim to increase the effectiveness of the legislation with respect to achieving its objectives.

#### *Transparency of the legal framework*

In setting out objectives of the Regulation and the objectives and principles of organic production, Regulation (EC) 834/2007 has contributed to transparency of the legislative framework. However, the structure of the implementing rules (Regulation (EC) 889/2008) still requires an operator to consult a high number of articles when interpreting particular issues. There is also a lack of definition or clarity of some terms preventing a unified and harmonised EU wide interpretation. **It is therefore recommended that the Commission maintains a consolidated version of the whole regulatory framework for organic food and farming on its website, with a table of contents and an index, which links the objectives and principles more directly with the detailed rules.**

#### *Simplification of the approval process of substances*

The approval process of permitted substances has become more transparent through laying down criteria, but there are concerns about the length of time it takes for a decision to be granted and the ability of the procedure to cope with greater volume of applications. As yet, there has been no action on reviewing and potentially removing substances from the Annexes of Regulation (EC) 889/2008. The EU level process needs to focus on generic substances and strategic issues (including potential reduction of lists), building on the clear improvements that have been made with the technical advice experts through the EGTOP process. Since the approval of products is usually carried out by national authorities and control bodies, guidance to operators about products varies among Member States. **It is therefore recommended that ways are explored to improve both the approval process for products used in organic farming and the information available to operators in all Member States, including in those countries where no such information exists at present.**

## **14.4 Conclusions and recommendations in relation to the links between the EU legislation on organic farming and related EU policies**

### **14.4.1 EU added value**

Organic production operates not just within the context of wider EU agricultural, food and rural development policy, but also other EU policies. EU added value is judged by the existence of a European dimension for the policy in question, the coherence of legislation with key EU priorities, the achievement of both the global objectives of Regulation (EC) 834/2007 and the objectives of related EU policies, and the extent to which these achievements would not have been possible through national policies alone.

The analysis has shown that the organic farming legislation provides EU added value, notably by defining the common rules for the organic market, taking the following into account:

- There is particularly good coherence between the legislation and EU priorities for innovation, agricultural product quality, agri-environment, biodiversity, water quality, soil conservation, animal welfare as well as consumer protection and food labelling; and there is good coherence with issues related to the EU priorities for the internal market, climate change mitigation, sustainable production and consumption, food safety and competitiveness. Furthermore, there are some opportunities to improve coherence through improved linkages between the legislation and specific elements of EU priorities for sustainable use of water and market data collection.
- The legislation is effective in creating EU added value for environmental, climate mitigation and animal welfare priorities, and there is a generally good complementarity with EU funding instruments, particularly the CAP and the funds for research and information. The effectiveness could be improved by making clearer links between objectives, general principles and detailed rules, and by translating objectives for water quantitative management, energy use and habitat management into operational rules. The legislation is only moderately effective in achieving the EU priority of better regulation.
- The framework achieves clear added value at EU level going beyond what could be achieved by national policies alone. Little evidence is available to judge the allocation of responsibilities according to the principle of subsidiarity, and it was found that the views of competent authorities differ on this issue.

Based on this judgement, the following recommendations are made to improve the adequacy and effectiveness of the legislation in providing EU added value:

#### *Supporting related EU policy priorities*

The organic legislation is directly relevant to strategic and horizontal EU priorities and to key EU priorities and funding instruments for agriculture, rural development, environment, climate, animal welfare and consumers. The legislative framework is generally effective in supporting these EU priorities. There are, however, some gaps in the linkage to climate and environmental priorities related to sustainable use of water and energy, as well as the potential vulnerability of grazed semi-natural pastures and landscape features on High Nature Value (HNV) farmland to changes in management because these are not currently addressed by specific organic requirements. **Investigating possibilities to address the issues of the sustainable use of energy and water, biodiversity conservation and habitat management was already recommended above.**

There is generally good complementarity between the legislation and the related EU funding instruments. The organic legislation has improved the legal basis for payments provided from the CAP funds, especially the second pillar of the CAP, by the introduction of a strict control system.

There are opportunities to further improve complementarity between the legislation and EU rural development objectives for the competitiveness of small farms in HNV farming systems. These can be realised by providing advice to farmers through rural development policy on the available measures to support conversion of existing High Nature Value and semi-subsistence farms to organic production. **It is therefore recommended that RDP managing authorities are provided with information on the potential socio-economic and environmental benefits of organic farming, in particular in HNV farming systems and semi-subsistence farms, and guidance on using RDP measures to achieve this.**

#### 14.4.2 Sustainable development of the organic farming sector

Sustainable development is a key EU priority. The stage of organic sector development varies considerably between Member States, from those in the early stages of development to well established, maturing markets. Development of the sector requires growth in production, processing and markets. The legislation is only one factor among many that influence this development. Others include commodity markets, support payments for conventional and organic farming and consumer demand for organic products. Sustainability is understood in terms of the inter-related concepts of economic, environmental and social sustainability.

The analysis has shown that the EU legislative framework for organic farming has contributed to the development of the organic farming sector, taking the following into account:

- Regulation (EC) 834/2007 has maintained the impetus created by the previous legislative framework to support a strong EU domestic and import market for organic food, principally through defining detailed rules for organic production and processing; unifying a previously fragmented policy area, and introducing a unified and strict control mechanism. Of note are many other factors beyond the EU legislative framework that influence the development of the organic sector (e.g. commodity markets, EU support policy for conventional and organic farming, national policies, and consumer demand for organic products).

Furthermore, the analysis has shown that the organic farming legislation has contributed to the economic and environmental sustainability of this development and that there is potential to improve the social sustainability of future development, taking into account:

- In general the Regulation provides a clear basis for the development of new organic businesses. However varying proportions of organic farmers leave the sector each year, and the development of processing facilities lags behind the needs of certain organic sub-sectors in some EU regions, in particular in mountain areas. This indicates a degree of economic vulnerability for some organic operators.
- Since the Regulation came into force the EU organic sector has continued to grow. Nevertheless, barriers to organic conversion continue to exist and therefore the provision of the regulatory basis by the organic legislative framework is an essential pre-condition for a

mix of measures to create a supportive policy environment for the actors in the sector (advice, training, information, land based organic payments, promotion, research).

- Neither the legislative framework nor the implementation of supporting policies appear to have been wholly effective in developing organic production for small and semi-subsistence low-intensity farms as well as small-scale processors who could benefit economically from organic conversion. Development of these parts of the sector has the potential to deliver associated socio-economic and environmental benefits in some parts of the EU.
- The Regulation has contributed to the environmental sustainability of the sector but this relies partly on the way in which Member States, private schemes, and individual farmers have implemented the rules, not just on the legislation itself. Some environmental benefits of organic farming, particularly for arable land, take effect over a considerable period of time, and thus growth in the sector will be most sustainable where there is stability of conversion rather than rapid turnover.
- Development of the organic sector has potential to bring socio-economic benefits and hence deliver public goods. Realising this potential requires clearer targeting of supportive EU policies, particularly those in RDPs, or considering group certification for small EU producers.

Based on this judgement, the following recommendations are made to improve the adequacy and effectiveness of the legislation in supporting economically, environmentally and socially sustainable development of the EU organic sector.

#### *Economic sustainability of the development of the organic farming sector*

Economic sustainability of organic development depends on many thousands of individual producers and processors creating and maintaining economically viable organic businesses on the basis of the rules. In general the legislation provides a clear basis for development of new organic businesses and also for key supporting policies which have an important role. Since the Regulation was introduced the EU organic sector continued to grow. However, there is significant variation between Member States in the proportion of organic farmers leaving the sector each year for reasons that are poorly understood. High turnover rates are not economically sustainable and reduce the efficiency of supporting policies and funding. **It is recommended that research covering all EU-27 Member States is carried out to examine the role of the production and control rules for organic operators when deciding to enter or leave the sector.**

#### *Environmental sustainability of the development of the organic farming sector*

The evidence of environmental sustainability of organic development reveals that this relies partly on the way in which Member States, private schemes, and individual farmers have implemented the rules and interpreted the organic concept, rather than being wholly attributable to the legislation. Future organic development will take place in the context of pressure to maintain net EU food production, and the generally lower yields of the organic sector compared to conventional production. Opportunities to improve environmental sustainability

include: exploiting the climate resilience of organic yields in extreme weather conditions; encouraging organic conversion of land that already has limited productive capacity; and closing the productivity gap between organic and conventional systems through improved nutrient management, research and innovation. **It is recommended that Member State agricultural and environmental authorities are provided with research-based information on the benefits of specific types of organic production for climate adaptation and resource protection.**

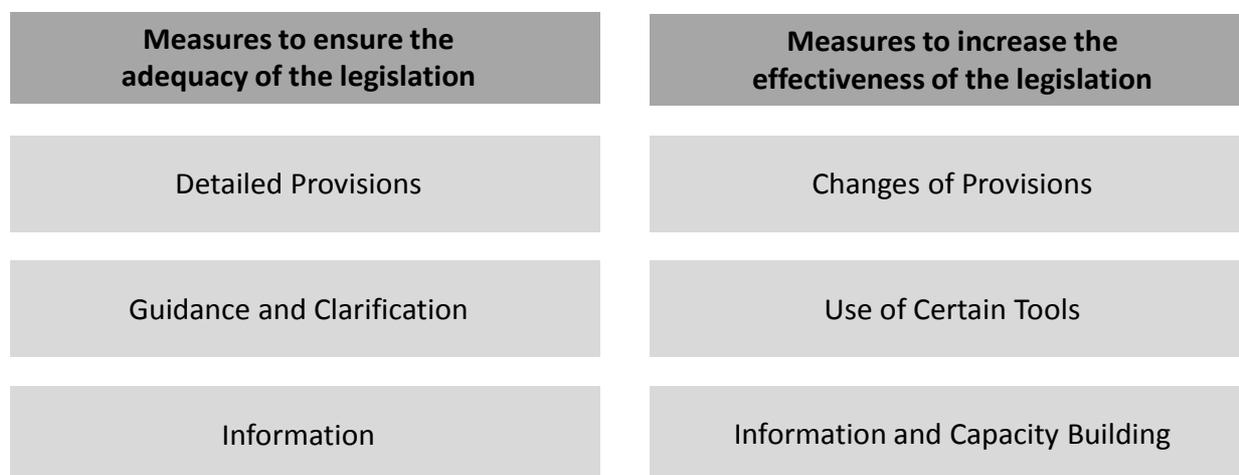
*Social sustainability of the development of the organic farming sector*

On the basis of the limited evidence available, it is clear that the development of the organic sector has the potential to bring social benefits, but effort will be needed to achieve socially sustainable sector development, especially among farming communities with little experience in organic requirements. In some cases conversion in the EU is hampered by the lack of an option for group certification which is available to producers outside the EU. **It is therefore recommended that the introduction of group certification for small producers is considered.**

## 14.5 Concluding remarks

The replies to the evaluation questions show that the EU legislation on organic farming generally provides a sound basis for a sustainable development of organic production in the European Union. However the conclusions and recommendations draw attention to a number of areas where the regulatory framework could be improved. The individual recommendations presented above can be grouped into six types of measure addressing two different fields of action: a) ensuring the adequacy of the legal provisions, and b) increasing the effectiveness of the legal provisions. The proposed measures are briefly described in the following paragraphs (see also Figure 14.1).

**Figure 14.1:** Overview of measures to ensure the adequacy and increase the effectiveness of the legislation



Source: Own illustration.

### Measures to ensure the adequacy of the legislation

The first field of action encompasses three measures (Detailed Provisions, Guidance and Clarification, Information) to ensure the adequacy of the legislation, i.e. that the regulated state is sufficient in relation to the objective laid down in the Regulation. Very few areas have been identified, where **more detailed rules** should be considered at EU or Member State level. This refers mainly to provisions with respect to:

- organic pullet rearing and hatchery at EU level which should be followed by a phasing out of the exceptional rule on the use of part-organic pullets;
- sustainable use of energy and water;
- protection and management of semi-natural habitats and features for biodiversity.

In many cases the rules themselves are adequate but there is a lack of a harmonised enforcement in Member States. For this reason, it is recommended that **more guidance and clarification** is provided to

- the organic industry on the legal situation with regard to how to communicate an organic claim on non-food products closely linked to organic agriculture, when they are produced according to Regulation (EC) 834/2007;
- the organic industry and Member State authorities on how the organic mass catering sector can be regulated through national or private provisions;
- the organic industry on what constitutes legitimate organic claims on non-food products (such as textiles and cosmetics) and whether this provides opportunities for an organic claim and/or logo to be used on such products;
- control bodies and Member State authorities on the legal status of the objectives and principles of organic production, how specific rules link to the objectives of organic production and clarification of ambiguous terms within them (e.g. sustainable use of natural resources, high animal welfare).

Furthermore, there are areas where more guidance or harmonised enforcement is difficult because sufficient information is not available. For this reason, it is suggested that **more information** is provided to support the Commission and Member State authorities in streamlining the rules and monitoring their implementation, including

- improving the collection of statistical data on the organic market and costs of production;
- supporting further research and knowledge exchange about the development of organic high protein feed supplies to monitor the development of supply and demand (supply balance) of organic high protein feeds supplies in Europe;
- harmonising and improving the seed database through regular updates of lists of available species and varieties and exchange of information between countries to broaden the market.

### Measures to increase the effectiveness of the legislation

The second field of action includes three measures (Changes of Provisions, Use of Certain Tools, Information and Capacity Building). It encompasses rules that are judged to be adequate but whose desired impact could be increased, i.e. the extent to which objectives pursued by an intervention are achieved.

This could be realised by **adaptation of the provisions** as regards

- a shift from annual controls to a risk-based control system;
- direct communication between accreditation bodies and the Commission especially with respect to complaints and irregularities;
- group certification of small producers;
- additional indications associated more closely with the EU organic logo (such as common terms referring to organic farming);
- more flexible rules with respect to the indication of the place of origin of agricultural raw material;
- simplified recognition and assessment procedures (e.g. by separating the recognition of control bodies from the recognition of technical standards);

or the use of specific **procedures and tools** such as

- well-targeted, output-based criteria for the enforcement and monitoring of animal welfare outcomes that can be used by operators in self-assessment and also as part of control visits;
- monitoring of supply development to observe the effects of the phasing out of import authorisations;

or by providing **more information**, including

- improving the Organic Farming Information System (OFIS) and enlarging its application to other actors of the control system where appropriate;
- supporting or launching well-targeted information and awareness raising campaigns which explain the common concept of organic farming, the certification system, the EU organic logo and the additional compulsory indications;
- publishing a consolidated version of the whole regulatory framework for organic food and farming on the internet, including a table of contents and an index, which links the objectives and principles more clearly with the detailed rules;
- improving the information available on approved products used in organic farming to operators in all Member States, including in those countries where no such information exists at present;

- providing RDP managing authorities with information on the potential socio-economic and environmental benefits of organic farming, in particular in the High Nature Value farming systems and semi-subsistence farms, and guidance on using RDP measures to achieve this;
- carrying out research to examine the role of the production and control rules for organic operators when deciding to enter or leave the sector;
- providing Member State agricultural and environmental authorities with research-based information on the benefits of specific types of organic production for climate adaptation and resource protection;

and **capacity building**, including

- increasing at EU level the knowledge, skills and capabilities of the competent authorities through specific training;
- establishing an institutional interface between the organic control system and customs or tax authorities bearing in mind that irregularities and non-compliances may not only be detected by the actors of the organic control system but also by other activities;
- ensuring that bodies involved in the administration of the equivalence assessment have sufficient working capacity to deal with the growing number of recognised third countries and control bodies.

These measures may contribute to ensuring the adequacy and increasing the effectiveness of the Regulation and therewith may improve the basis for a sustainable development of the organic farming sector in the future. When revising the EU legislation on organic farming, it is worth bearing in mind that over the past 20 years, stakeholders have gained a large body of experience on practical implementation of the legislation. Further development of the legislation should take this experience into account.

## List of References



## Bibliography

### Chapter 1

- Alvesson, M. and Sköldbberg, K. (2000): Reflexive Methodology. London: Sage
- Bamberger, M., Rao, V. and Woolcock, M. (2010): Using Mixed Methods in Monitoring and Evaluation. Experiences from International Development. Policy Research Working Paper 5245, Washington: The World Bank, Development Research Group
- Dabbert S (2001): Der Öko-Landbau als Objekt der Politik. In: Reents, H.-J. ed. 6. Wissenschaftstagung zum Ökologischen Landbau Freising-Weihenstephan, 06.-08.03.2001. Berlin: Dr. Köster, pp. 39-43
- European Commission (2004) European Action Plan for Organic Food and Farming. Commission Staff Working Document. Brussels: European.Commission
- European Commission (2012): EU Regulatory Fitness. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2012) 746, Brussels: European Commission
- Padel S (2010): The European regulatory framework and its implementation in influencing organic inspection and certification systems in the EU. CERTCOST deliverable 11, Newbury, UK. Available at: [http://certcost.org/Lib/CERTCOST/Deliverable/D14\\_D11.pdf](http://certcost.org/Lib/CERTCOST/Deliverable/D14_D11.pdf). (Accessed 8.5.2013)
- Rao, V. and Woolcock, M. (2003): Integrating Qualitative and Quantitative Approaches in Program Evaluation. In: Bourguignon, F.J. and Pereira da Silva, L. eds. The Impact of Economic Policies on Poverty and Income Distribution: Evaluation Techniques and Tools. New York: Oxford University Press, pp. 165-190.
- Silverman, D. (2010): Qualitative Research. London: Sage
- Spiller, A., Lüth, M. and Enneking, U. (2004): Analyse des Kaufverhaltens von Selten- und Gelegenheitskäufern und ihrer Bestimmungsgründe für/gegen den Kauf von Öko-Produkten. Final report BLE-Project 02OE366, Bonn: Geschäftsstelle Bundesprogramm Ökologischer Landbau in der Bundesanstalt für Landwirtschaft und Ernährung
- Zander, K. and Hamm, U. (2010): Consumer preferences for additional ethical attributes of organic food. Food Quality and Preference 21(5): 495-503

### Chapter 2

- Ecozept (2008): The Specialised Organic Retail Report Europe. Freising: Ecozept
- European Commission (2010): An analysis of the EU organic farming sector. Brussels: European Commission
- Sahota A (2013): The Global Market for Organic Food & Drinks. In: Willer H, Lernoud J, Kilcher L eds. The World of Organic Agriculture. Statistics and Emerging Trends 2013. Research Institute of Organic Agriculture (FiBL): Frick: International Federation of Organic Agriculture Movement (IFOAM): Bonn: pp. 131-138
- Schaack D, Rampold C, Willer H, Rippin M, von Koerber H (2011): Analyse der Entwicklung des ausländischen Angebots bei Bioprodukten mit Relevanz für den deutschen Biomarkt. Bonn: Agrarmarkt Informations-Gesellschaft mbH

- Schaack D, Lernoud J, Padel S, Willer H (2013): The Organic Market in Europe. In: Willer H, Lernoud J, Kilcher L (Eds.) (2013): *The World of Organic Agriculture. Statistics and Emerging Trends 2013*, Frick: Research Institute of Organic Agriculture (FiBL), Bonn: International Federation of Organic Agriculture Movement (IFOAM)
- Willer H, Lernoud J, Kilcher L (Eds.) (2013): *The World of Organic Agriculture. Statistics and Emerging Trends 2013*, Frick: Research Institute of Organic Agriculture (FiBL), Bonn: International Federation of Organic Agriculture Movement (IFOAM)
- Zanoli R, Gambelli D, Solfanelli F (2010): Come sopravvivere nel biologico: uno studio delle aziende agricole marchigiane mediante duration analysis. *Rivista di Economia Agraria (REA – INEA)*. Anno LXV – n. 1 – Gennaio- marzo 2010. Edizioni Scientifiche Italiane, Napoli: p. 63-82

### Chapter 3

- European Commission (2012) Organic production in the EU. Presentation at the 1<sup>st</sup> ISSG meeting, 12<sup>th</sup> July 2012, Brussels (Belgium)

### Chapter 4

- Gonzalvez, V., Schmid, O. and Willer, H. (2011): Organic Action Plans in Europe in 2011. In: Willer, H. and Kilcher, L. (eds.) *The World of Organic Agriculture - Statistics and Emerging Trends 2011*. Frick: Research Institute of Organic Agriculture (FiBL), Bonn: International Federation of Organic Agriculture Movement (IFOAM), pp. 160-168
- Sanders J, Stolze M, Padel S (Eds.) (2011): *Use and efficiency of public support measures addressing organic farming*, Braunschweig: Thünen-Institute of Farm Economics

### Chapter 5

- European Commission (2004a): *European Action Plan for Organic Food and Farming* Brussels: European Commission
- European Commission (2004b): *European Action Plan for Organic Food and Farming*. Commission Staff Working Document. Brussels: European Commission
- European Commission (2009): *Agricultural product quality policy* Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Brussels: European Commission
- European Commission (2010): *An analysis of the EU organic farming sector*. Brussels: European Commission
- European Union (2012): Consolidated version of the Treaty of the European Union. *Official Journal of the European Union*, 55(C 326): 13-46
- Lampkin N, Schmid O, Dabbert S, Michelsen J, Zanoli R (Ed.) (2008): *Organic action plan evaluation toolbox (ORGAPET)*. Final output of the ORGAP research project ([www.orgap.org](http://www.orgap.org)) for the European Commission: Aberystwyth: Institute of Biological, Environmental and Rural Sciences, Aberystwyth University (IBER) and Frick: Research Institute of Organic Agriculture (FiBL)
- Padel S (Ed.) (2010): *The European Regulatory Framework and its Implementation in Influencing Organic Inspection and Certification Systems in the EU*, Newbury: The Organic Research Centre - Elm Farm (ORC)

## Chapter 6

- Bundesministerium für Gesundheit (2009): Österreichisches Lebensmittelbuch. Wien: Bundesministerium für Gesundheit
- European Commission (2011): Buying green! A handbook on green public procurement. Brussels: European Commission
- European Commission (2012): Report from the Commission to the European Parliament and the Council on the application of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products. Brussels: European Commission
- GfaW (undated): Raus aus dem Label-Dschungel. Infobroschüre über Naturkosmetik-Label. Bad Soden-Allendorf: Gesellschaft für angewandte Wirtschaftsethik
- Matrix Insight Ltd (2012): Study of the need and options for the harmonisation of the labelling of textile and clothing products, Final Report for the European Commission DG Enterprise and Industry
- MKULNV (2011): EU-Verordnung Ökologischer Landbau. Düsseldorf: Ministerium für Klimaschutz, Umwelt, Landwirtschaft, Natur- und Verbraucherschutz des Landes Nordrhein-Westfalen
- Soil Association (2013): Organic Market Report. Bristol: Soil Association
- USDA (2011): Labeling of Textiles that Contain Organic Ingredients. Policy Memo 11-14. Washington: United States Department of Agriculture

## Chapter 7

- AGES/BOKU (2006): Machbarkeitsstudie zur Auslobung „gentechnikfrei“ und Vermeidung von GVO bei Lebensmittel aus tierischer Erzeugung, Vienna: Österreichische Agentur für Gesundheit und Ernährungssicherheit GmbH
- AGES (2012): Mitteilung zur Verfügbarkeit von Vitamin B2 aus gentechnikfreier Produktion. [http://www.ages.at/uploads/media/Mitteilung\\_gentechnikfreies\\_Vitamin\\_B2\\_2011\\_02.pdf](http://www.ages.at/uploads/media/Mitteilung_gentechnikfreies_Vitamin_B2_2011_02.pdf) (accessed 01.08.2013)
- Auerswald K, Keinz M, Fiener P (2003): Soil erosion potential of organic versus conventional farming evaluated by USLE modelling of cropping statistics for agricultural districts in Bavaria, *Soil use and Management*, 19: 305-311
- Azeez GSE, Hewellett KL (2008): The comparative energy efficiency of organic farming, in IFOAM organic world congress, cultivate the future? 8-29 June 2008, Modena, Italy
- Batary P, Báldi A, Kleijn D, Tschardt T (2010): Landscape-moderated biodiversity effects of agri-environmental management: a meta-analysis. *Proc. R. Soc. B* 22 June 2011 Vol. 278 No. 1713 1894-1902
- Beck A, Kahl J, Liebl B (Eds.) (2012): Analysis of the current state of knowledge of the processing and quality of organic food and of consumer protection, Frick: FiBL
- Bengtsson J, Ahnström J, Weibull AC (2005): The effects of organic agriculture on biodiversity and abundance: a meta-analysis. *Journal of Applied Ecology*, 42: 261-269
- Bioconnect (2008): GMO-free additives and processing for organic production. An exploratory study on obstacles and solutions. Delft: LIS Consult.

- BÖLW (2013): Eiweissversorgung von Bio-Monogastriern, Stellungnahme des BÖLW-Vorstands zur Position der AG Eiweissfütterung und Vorschlag für eine BÖLW-Position. Bund Ökologische Lebensmittelwirtschaft, position paper, 11.4.2013
- Boutin C, Baril A, Martin PA (2008): Plant diversity in crop fields and woody hedgerows of organic and conventional farms in contrasting landscapes. *Agriculture Ecosystems and Environment*, 123: 185-193
- Caplat J, Mise en place et analyse d'une collecte de données agro-environnementale sur les pratiques de l'agriculture biologique, FNAB, 2006
- Cederberg C., Mattson B. (2000): Life cycle assessment of milk production — a comparison of conventional and organic farming. *Journal of Cleaner Production* 8, 49-60
- Chirinda N, Carter MS, Albert KR, Ambus P, Olesen JE, Porter JR, Petersen SO (2010): Emissions of nitrous oxide from arable organic and conventional cropping systems on two soil types. *Agriculture, Ecosystems and Environment* 136: 199-208
- Coléno FC (2008): Simulation and evaluation of GM and non-GM segregation management strategies among European grain merchants. *Journal of Food Engineering* 88 (3): 306-314
- Condrón LM, Cameron KC, Di HJ, Clough TJ, Forbes EA, McLaren RG, Silva RG (2000): A comparison of soil and environmental quality under organic and conventional farming systems in New Zealand, New Zealand: *Journal of Agricultural Research*, 43: 443-466
- Crowder DW, Northfield TD, Strand M, Snyder WE (2010): Organic agriculture promotes evenness and natural pest control. *Nature*, 46:109-112
- Dalgaard T, Halberg N, Porter JR (2001): A model for fossil energy use in Danish agriculture used to compare organic and conventional farming. *Agriculture, Ecosystems & Environment* 87, 51-65
- Dangour A, Dohia S, Hayter A, Allen E, Lock K, Uauy R (2009): Nutritional quality of organic foods: a systematic review. *American Journal of Clinical Nutrition* Vol 90 (3) 680-685
- De Backer E, Aertsens J, Vergucht S, Steurbaut W (2009): Assessing the ecological soundness of organic and conventional agriculture by means of life cycle assessment – a case study of leek production. *British Food Journal*, 111 (10): 1028-1061
- Degré A, Debouche C, Verhé D (2007): Conventional versus alternative pig production assessed by multicriteria decision analyses. *Agron. Sustain. Dev.* 27 (9): 185-195
- Diacono M, Montemurro F (2011): Long-term effects of organic amendments on soil fertility. *Sustainable Agriculture Volume 2*. Springer, pp. 761-786
- Edwards CA, Lal R, Madden P, Miller RH, House G (1990): Research on integrated arable farming and organic mixed farming in the Netherlands, *Sustainable agricultural systems*, Ankeny, Iowa, Soil and Water Conservation Society, pp. 287-296
- EGTOP (2012): Report on Poultry. EGTOP/4/2012. Brussels: Commission of the European Communities
- El-Hage N, Scialabba N, Müller-Lindenlauf M (2010): Organic agriculture and climate change. *Renewable Agriculture and Food Systems* 25 (Special issue2): 158-169
- Eltun R (1995): Comparisons of nitrogen leaching in ecological and conventional cropping systems', *Biological Agriculture and Horticulture*, 11, pp. 103-114
- Eriksen J, Hermansen JE, Strudsholm K, Kristensen K (2006): Potential loss of nutrients from different rearing strategies for fattening pigs on pasture. *Soil Use and Management* 22: 256-266
- Eriksen J, Petersen SO, Sommer SG (2002): The fate of nitrogen in outdoor pig production. *Agronomy* 22: 863-867

- Ermakov (2012): Ergebnisse der Fleischuntersuchung bei Puten aus ökologischer und konventioneller Haltung. Leipzig: University of Leipzig
- European Commission (2003): Commission Recommendation of 23 July 2003 on guidelines for the development of national strategies and best practices to ensure the coexistence of genetically modified crops with conventional and organic farming. Official Journal L 189, 29.07.2003: 36-47
- European Commission (2009): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on Agricultural Product Quality Policy Communication from the Commission COM (2009) 234 final. Brussels: Commission of the European Communities
- European Commission (2010): Commission Recommendation of 13 July 2010 on guidelines for the development of national co-existence measures to avoid the unintended presence of GMOs in conventional and organic crops. Official Journal C 200, 22.7.2010: 1-5
- Fall N, Emanuelson U, Martinsson K, Jonsson S (2008): Udder health at a Swedish research farm with both organic and conventional dairy cow management. Preventive Veterinary Medicine 83 (2): 186-195
- Ferrari P et al. (2010): Report on (dis-) advantages of current animal welfare standards for animals, based on the main findings of EU and national research projects. EconWelfare project report D2.3. [www.econwelfare.eu](http://www.econwelfare.eu)
- Flessa H, Ruser R, Dörsch P, Kamp T, Jimenez MA, Munch JC, Beese F (2002): Integrated evaluation of greenhouse gas emissions from two farming systems in southern Germany: Special consideration of N<sub>2</sub>O emissions. Agriculture Ecosystems and Environment 91:175-199
- Flessa H, Müller D, Plassmann K, Osterburg B, Techen A-J, Nitsch H, Nieberg H, Sanders J, Meyer zu Hartlage O, Beckmann E, Anspach V (2012): Studie zur Vorbereitung einer effizienten und gut abgestimmten Klimaschutzpolitik für den Agrarsektor. Landbauforschung, Sonderheft 361
- Fliessbach A, Oberholzer H-R, Gunst L, Mäder P (2007): Soil organic matter and biological soil quality indicators after 21 years of organic and conventional farming. Agriculture, Ecosystems and Environment, 118: 273-284
- Flysjö A, Cederberg C, Henriksson M, Ledgard S (2012): The interaction between milk and beef production and emissions from land use change – critical considerations in life cycle assessment and carbon footprint studies of milk. Journal of Cleaner Production 28: 134-142
- Freibauer A, Rounsevell MDA, Smith P, Verhagen J (2004): Carbon sequestration in the agricultural soils of Europe. Geoderma 122, 1-23
- Fuller RJ, Norton LR, Feber RE, Johnson PJ, Chamberlain DE, Joys AC, Mathews F, Stuart RC, Townsend MC, Manley WJ, Wolfe MS, MacDonald DW, Firbank LG (2005): Benefits of organic farming to biodiversity vary among taxa. Biology Letters, 1: 431-434
- Gabriel D, Roschewitz I, Tschardt T, Thies C (2006): Beta diversity at different spatial scales: plant communities in organic and conventional agriculture. Ecological Applications 16: 2011-2021
- Gabriel D, Sait SM, Hodgson JA, Schmutz U, Kunin WE, Benton TG (2010): Scale matters: the impact of organic farming on biodiversity at different spatial scales. Ecology Letters 13 (7):858-869
- Gabriel D, Tschardt T (2007): Insect pollinated plants benefit from organic farming. Agriculture, Ecosystems and Environment 118: 43-48
- Garwes D (2009): Grazed Livestock are Good news for the UK. Practice with Science Extract 2: Reducing Emissions from Livestock

- Gattinger A, Müller A, Haeni M, Oehen B, Niggli U (2010): Klimaleistungen des Biolandbaus - Fakten und Hintergründe. Frick: FiBL.
- Gattinger A, Muller A, Haeni M, Skinner C, Fliessbach A, Buchmann N, Mader P, Stolze M, Smith P, Scialabba NE-H (2012): Enhanced top soil carbon stocks under organic farming. *Proceedings of the National Academy of Sciences* 109, 18226-18231
- Gattinger A, Muller A, Haeni M, Skinner C, Fliessbach A, Buchmann N, Mader P, Stolze M, Smith P, Scialabba NE-H, Niggli U (2012): Enhanced top soil carbon stocks under organic farming. *Proc Natl Acad Sci U S A*
- Gomiero T, Pimentel D, Paoletti MG (2011): Environmental Impact of Different Agricultural Management Practices: Conventional vs. Organic Agriculture, *Critical Reviews in Plant Sciences*, 30(1): 95-124
- Goulding KWT (2000): Nitrate leaching from arable and horticultural land', *Soil Use and Management*, 16: 145-151
- Greene C, Smith K (2010): Can Genetically Engineered and Organic Crops Coexist? <http://farmdoc.illinois.edu/policy/choices/20102/2010214/2010214.pdf>
- Grönroos J, Seppälä J, Voutilainen P, Seuri P, Koikkalainen K (2006): Energy use in conventional and organic milk and rye bread production in Finland. *Agriculture, Ecosystems and Environment*, 117(2-3): 109-118
- Haas G, Wetterich F, Köpke U (2001): Comparing intensive, extensified and organic grassland farming in southern Germany by process life cycle assessment. *Agriculture, Ecosystems and Environment* 83: 43-53
- Halberg N, Hermansen JE, Kristensen IS, Eriksen J, Tvedegaard N, Petersen BM (2010): Impact of organic pig production systems on CO<sub>2</sub> emission, C sequestration and nitrate pollution. *Agronomy for Sustainable Development* 30:721-731
- Haskell M, Langford F, Jack M, Sherwood L, Lawrence A, Rutherford K (2009): The effect of organic status and management practises on somatic cell counts on UK dairy farms. *Journal of Dairy Science*, 180: 3775-3780
- Hodgson JA, Kunin WE, Thomas CD, Benton TG, Gabriel D (2010): Comparing organic farming and land sparing: optimizing yield and butterfly populations at a landscape scale. *Ecology Letters* 13(11): 1358-1367
- Hoepfner JW, Entz MH, McConkey BG, Zentner RP, Nagy CN (2005): Energy use and efficiency in two Canadian organic and conventional crop production systems. *Renewable Agriculture and Food Systems* 21(1): 60-67
- Hole DG, Perkins AJ, Wilson JD, Alexander IH, Grice PV, Evans AD (2005): Does organic farming benefit biodiversity? *Biological Conservation*, 122: 113-130
- Holzschuh A, Stefan-Dewenter I, Kleijn D, Tscharrntke T (2007): Diversity of flower-visiting bees in cereal fields: effects of farming system, landscape composition and regional context. *Journal of Applied Ecology* 44: 41-49
- Holzschuh A, Stefan-Dewenter I, Tscharrntke T (2008): Agricultural landscapes with organic crops support higher pollinator diversity. *Oikos* 117: 354-361
- Hörtenhuber S, Lindenthal T, Amon B, Markut T, Kirner L, Zollitsch W (2010): Greenhouse gas emissions from selected Austrian dairy production systems—model calculations considering the effects of land use change. *Renewable Agriculture and Food Systems* 25 (04): 316-329

- Hörtenhuber S, Lindenthal T, Zollitsch W (2011): Reduction of greenhouse gas emissions from feed supply chains by utilizing regionally produced protein sources: the case of Austrian dairy production. *Journal of the Science of Food and Agriculture* 91(6): 1118-1127
- Jørgensen U, Dalgaard T, Kristensen ES (2005): Biomass energy in organic farming—the potential role of short rotation coppice. *Biomass and Bioenergy* 28, 237-248
- Kilbride AL, Mason SA, Honeyman PC, Pritchard DG, Hepple S, Green LE (2012): Associations between membership of farm assurance and organic certification schemes and compliance with animal welfare legislation. *Veterinary Record* 170 (6): 152-158
- Kirchmann H, Bergström L (2001): Do organic farming practices reduce nitrate leaching? *Communications in Soil Science and Plant Analysis* 32(7): 997-1028
- Knudsen M, Hermansen J, Halbert N, Andreassen L, Williams A (2011): Life Cycle Assessment of Organic Food and Farming Systems: Methodological Challenges Related to Greenhouse Gas Emissions and Carbon Sequestration. *Organic Agriculture and Climate Change Mitigation: A Report of the Round Table on Organic Agriculture and Climate Change*
- Korsaeth A, Eltun R (2008): Nitrogen mass balances in conventional, integrated and ecological cropping systems and the relationship between balance calculations and nitrogen runoff in an 8-year field experiment in Norway. *Agriculture, Ecosystems and Environment*, 79 (2-33): 199-214
- Kragten S, De Snoo GR (2008a): Field-breeding birds on organic and conventional arable farms in the Netherlands. *Agriculture, Ecosystems and Environment*, 126 (3-4): 270-274
- Kragten S, Trimbos KB, De Snoo GR (2008b): Breeding skylarks (*Alauda arvensis*) on organic and conventional arable farms in The Netherlands. *Agriculture, Ecosystems and Environment*, 126 (3-4): 163-167
- Krauss J, Gallenberger I, Steffan-Dewenter I (2011): Decreased functional diversity and biological pest control in conventional compared to organic crop fields. *Plos One* 6: 1-9
- Kristensen T, Mogensen L, Knudsen MT, Hermansen JE (2011): Effect of production system and farming strategy on greenhouse gas emissions from commercial dairy farms in a life cycle approach. *Livestock Science* 140, 136-148
- Lampkin NH (1990): *Organic Farming*. Ipswich: Farming Press Books
- Lampkin NH (2007): Organic farming's contribution to climate change and agricultural sustainability. Paper presented at the Welsh Organic Producers Conference, 18th Oct 2007
- Langford FM, Rutherford KMD, Sherwood L, Jack MC, Lawrence AB, Haskell MJ (2011): Behaviour of cows during and after peak feeding time on organic and conventional dairy farms in the United Kingdom. *Journal of Dairy Science* 94 (2): 746-753
- Leinonen I, Williams AG, Wiseman J, Guy J, Kyriazakis I (2012a): Predicting the environmental impacts of chicken systems in the United Kingdom through a life cycle assessment: Broiler production systems. *Poultry Science* 91: 8-25
- Leinonen I, Williams AG, Wiseman J, Guy J, Kyriazakis I (2012b): Predicting the environmental impacts of chicken systems in the United Kingdom through a life cycle assessment: Egg production systems. *Poultry Science* 9: 26-40
- Lotter D-W (2003): *Organic Agriculture*, *Journal of Sustainable Agriculture*, 21 (4): 59-128
- Lovett DK, Shalloo L, Dillon P, O'Mara FP (2006): A systems approach to quantify greenhouse gas fluxes from pastoral dairy production as affected by management regime. *Agricultural Systems* 88, 156-179

- Lovett DK, Stack LJ, Lovell S, Callan J, Flynn B, Hawkins M, O'Mara FP (2005): Manipulating Enteric Methane Emissions and Animal Performance of Late-Lactation Dairy Cows Through Concentrate Supplementation at Pasture. *Journal of Dairy Science* 88, 2836-2842
- Lunzer E (2009): Investigation of organic farming on saturated hydraulic conductivity of the soil. Dissertation BOKU, Vienna: Austria
- Mäder P, Fliessbach A, Dubios D, Gunst L, Fried P, Niggli U (2002): Soil fertility and biodiversity in organic farming. *Science* 296: 1694-1697
- Magdelaine P, Riffard C (2010): Analyse comparée des dynamiques des filières avicoles biologiques au sein de l'Union Européenne, Rapport de synthèse, projet avibio: ITAVI
- Mahe T, Portet F (2012): Les enjeux de la production d'agriculture biologique en France, Centre d'études et de Prospectives, No.50. Available at: <http://www.agreste.agriculture.gouv.fr/IMG/pdf/analyse501207.pdf>
- Mondelaers K, Aertsens J, Van Huylenbroeck G (2009): A meta-analysis of the differences in environmental impacts between organic and conventional farming, *British Food Journal* 111 (10): 1098-1119
- Muller A, Olesen JE, Davis J, Dyrtrtova K, Gattinger A, Lampkin N, Niggli U (2012): Reducing Global Warming and Adapting to Climate Change: The Potential of Organic Agriculture. Working Paper. Frick: Forschungsinstitut für Biologischen Landbau (FiBL)
- Müller U, Sauerwein H (2010): A comparison of somatic cell count between organic and conventional dairy cow herds in West Germany stressing dry period related changes. *Livestock Science*, 127: 30-37
- Nayet (2012) Indicateurs techniques et économiques en poulets de chair bio. [www.bio-provence.org/IMG/pdf/Presentation\\_N11\\_CA26\\_Poulets\\_de\\_chair.pdf](http://www.bio-provence.org/IMG/pdf/Presentation_N11_CA26_Poulets_de_chair.pdf), (accessed 09.09.2013)
- Nemecek T, Huguenin-Elie O, Dubois D, Gaillard G (2005): Ökobilanzierung von Anbausystemen im schweizerischen Acker- und Futterbau, FAL Schriftenreihe, Vol. 58. Reckenholz: Eidgenössische Forschungsanstalt für Agrarökologie und Landbau (FAL)
- Niggli U, Fliessbach A, Hepperly P, Scialabba N (2009): Low Greenhouse Gas Agriculture: Mitigation and Adaptation Potential of Sustainable Farming Systems'. Rome: Food and Agriculture Organization of the United Nations (FAO)
- Niggli U, Fliessbach A, Stolze M, Sanders J, Schader C, Wyss G, Balmer O, Pfiffner L, Wyss E (2008): Gesellschaftliche Leistungen der biologischen Landwirtschaft. Frick: Forschungsinstitut für Biologischen Landbau (FiBL)
- Norton L, Johnson P, Joys A, Stuart R, Chamberlain D, Feber R, Firbank L, Manley W, Wolfe M, Hart B (2009): Consequences of organic and non-organic farming practices for field, farm and landscape complexity. *Agriculture, Ecosystems and Environment* 129 (1-3): 221-227
- Novak SM, Fiorelli JL (2009): Greenhouse gases and ammonia emissions from organic mixed crop-dairy systems: a critical review of mitigation options. *Agronomy for Sustainable Development*, 22
- Olesen JE, Schelde K, Weiske A, Weisbjerg MR, Asman WAH, Djurhuus J (2006): Modelling greenhouse gas emissions from European conventional and organic dairy farms. *Agriculture, Ecosystems and Environment*, 112 (2-3): 207-220
- Organic Market Info (2013): Organic breeding versus CMS hybrids. Available at: [http://www.organic-market.info/web/Know\\_How/hybrids/219/0/0/14600.html](http://www.organic-market.info/web/Know_How/hybrids/219/0/0/14600.html) [Last accessed 6.6.2013]
- Osterburg B, Runge T (eds.) (2007): Maßnahmen zur Reduzierung von Stickstoffeinträgen in Gewässer - eine wasserschutzorientierte Landwirtschaft zur Umsetzung der Wasserrahmenrichtlinie. Braunschweig: Forschungsanstalt für Landwirtschaft.

- Pacini C, Wossink A, Giesen G, Vazzana C, Huirne R (2003): Evaluation of sustainability of organic, integrated and conventional farming systems: a farm and field-scale analysis, *Agriculture, Ecosystems and Environment*, 95(1): 273-288
- Pfiffner L, Luka H (2003): Effects of low-input farming systems on carabids and epigeal spiders – a paired farm approach. *Basic and Applied Ecology* 4: 117-127
- Pfiffner L, Luka H (2007): Earthworm populations in two low-input cereal farming systems. *Applied Soil Ecology* 37: 184-191
- Pimentel D, Berardi G, Fast S (1983): Energy efficiency of farming systems: Organic and conventional agriculture. *Agriculture, Ecosystems and Environment* 9: 359-372
- Pimentel D, Hepperly P, Hanson J, Doude D, Seidel R (2005): Environmental, Energetic, and Economic Comparisons of Organic and Conventional Farming Systems', *Bioscience*, 55 (7): 573-582
- Rahmann G, Godinho (Ed.) (2012): Proceedings of 2nd Organic Animal Husbandry Conference, September 2012, Hamburg: IFOAM, vTI, Senat Bundesforschung and ISO FAR
- Reganold J, Elliott L, Unger Y (1987): Long-term effects of organic and conventional farming on soil erosion. *Nature* 330: 3
- Roschewitz I, Gabriel D, Tschardt T, Thies C (2005): The effects of landscape complexity on arable weed species diversity in organic and conventional farming. *Journal of Applied Ecology* 42:873-882
- Rundlöf M, Bengtsson J, Smith HG (2008): Local and landscape effects of organic farming on butterfly species richness and abundance. *Journal of Applied Ecology* 45: 813-820
- Rutherford KMD, Langford FM, Jack MC, Sherwood L, Lawrence AB, Haskell MJ (2009): Lameness prevalence and risk factors in organic and non-organic dairy herds in the United Kingdom *The Veterinary Journal* 180: 95-105
- Salomon E, Åkerhielm H, Lindahl C, Lindgren K (2007): Outdoor pig fattening at two Swedish organic farms— Spatial and temporal load of nutrients and potential environmental impact. *Agriculture, Ecosystems and Environment* 121 (4): 407-418
- Schader C (2009): Cost-effectiveness of organic farming for achieving environmental policy targets in Switzerland, Dissertation, Institute of Biological, Environmental and Rural Sciences, Aberystwyth, Aberystwyth University, Wales
- Schader C, Pfiffner L, Schlatter C, Stolze AM (2009): Umsetzung von Agrarumweltmassnahmen auf bio- und konventionellen Betrieben der Schweiz. In: Mayer J, Alföldi T, Leiber F et al. (eds) *Werte – Wege - Wirkungen: Biolandbau im Spannungsfeld zwischen Ernährungssicherung, Markt und Klimawandel. Beiträge zur 10. Wissenschaftstagung Ökologischer Landbau*, 11-13
- Schader C, Stolze M, Gattinger A (2012): Environmental performance of organic farming. In Boye, J.I. and Arcand, Y. (eds) *Green Technologies in Food Production and Processing*, pp. 183-210, Food Engineering Series Part 3, Springer New York, Dordrecht, Heidelberg, London
- Schmid O et al (2012): Climate relevance and sustainability of Bavarian agricultural businesses: [http://orprints.org/20986/1/Schmid\\_et\\_al\\_2012\\_Klimawirksamkeit.pdf](http://orprints.org/20986/1/Schmid_et_al_2012_Klimawirksamkeit.pdf)
- Schmid O, Knutti S (2009): Outcome-oriented approaches for regulating animal welfare in organic farming, in 10th European IFSA Symposium, 10th European IFSA Symposium, 1.7.2009, Aarhus, Denmark
- Sehy U (2004): N<sub>2</sub>O-Freisetzungen aus Ackerböden. PhD Thesis. Technical University Munich
- Shepherd M, Pearce B, Cormack B, Philipps L, Cuttle S, Bhogal A, Costigan P, Unwin R (2003): An assessment of the environmental impacts of organic farming', DEFRA, ADAS, Elm Farm, IGER

- Siegrist S, Schaub D, Pfiffner L, Mäder P (1998): Does organic agriculture reduce soil erodibility? The results of a longterm field study on loess in Switzerland. *Agriculture, Ecosystems and Environment* 69: 253-265
- Smith J, Wolfe M, Woodward L, Pearce B, Lampkin N (2011a): *Organic Farming and Biodiversity: A review of the literature*. Aberystwyth: Organic Centre Wales
- Smith L, Padel S, Pearce B (2011b): *Soil Carbon Sequestration and Organic Farming: An overview of current evidence*. Aberystwyth: Organic Centre Wales
- Smith P, Martino D, Cai Z, Gwary D, Janzen H, Kumar P, McCarl B, Ogle S, O'Mara F, Rice C, Scholes B, Sirotenko O (2007): *Agriculture. Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: University Press
- Smith P, Martino D, Cai Z, Gwary D, Janzen HH, Kumar P, McCarl B, Ogle S, O'Mara F, Rice C, Scholes RJ, Sirotenko O, Howden M, McAllister T, Pan G, Romanenkov V, Schneider U, Towprayoon S, Wattenbach M, Smith JU (2008): *Greenhouse gas mitigation in agriculture*. *Philosophical Transactions of the Royal Society*
- Smith-Spangler, C., et al. (2012): Are Organic Foods Safer or Healthier Than Conventional Alternatives? A Systematic Review, *Annals of Internal Medicine* 57(5): 348-366
- Soil Association (2000): *The Biodiversity Benefits of Organic Farming*. Bristol: Soil Association
- Stanhill G (1990): The comparative productivity of organic agriculture, *Agricultural Ecosystems and Environment*, 30 1-26
- Steiner RS (2006): *Landnutzungen prägen die Landschaft*. Dissertation ETH Zürich
- Stolze M, Piorr A, Häring A, Dabbert S (2000): Environmental and resource use impacts of organic farming in Europe. *Organic farming in Europe: Economics and Policy*, Volume 6, Stuttgart
- Stopes C, Lord El, Philipps L, Woodward L (2002). Nitrate leaching from organic farms and conventional farms following best practice. *Soil Use and Management*. Volume 18, Issue Supplement s1, pages 256–263
- Thomassen MA, Van Calker KJ, Smits MCJ, Iepema GL, de Boer IJM (2008): Life cycle assessment of conventional and organic milk production in the Netherlands. *Agricultural Systems* 96: 85-107
- Tscharntke T, Klein AM, Kruess A, Steffan-Dewenter I, Thies C (2005): Landscape perspectives on agricultural intensification and biodiversity– ecosystem service management. *Ecology Letters* 8: 857-874
- Tuomisto HL, Hodge ID, Riordan P, MacDonald DW (2012): Does organic farming reduce environmental impacts?--a meta-analysis of European research. *Journal of Environmental Management* 112: 309-320
- Ulber L, Steinmann HH, Limek S, Isselstein J (2009): An on-farm approach to investigate the impact of diversified crop rotations on weed species richness and composition in winter wheat. *Weed Research* 49:534-543
- Venkat K (2012): Comparison of Twelve Organic and Conventional Farming Systems: A Life Cycle Greenhouse Gas Emissions Perspective. *Journal of Sustainable Agriculture* 36: 620-649.
- Williams AG, Audsley E, Sandars DL (2006): *Determining the environmental burdens and resource use in the production of agricultural and horticultural commodities. Main Report*. Defra Research Project IS0205. IS0205, D.R.P
- Younie D, Watson CA (1992): Soil nitrate-N levels in organically and intensively managed grassland systems', *Aspects of Applied Biology*, No. 30 Nitrate and Farming Systems, pp. 235-238

Zehetmeier M, Baudracco J, Hoffmann H, Heißenhuber A (2012): Does increasing milk yield per cow reduce greenhouse gas emissions? A system approach. *animal* 6, 154-166

Zehnder G, Gurr GM, Kühne S, Wade MR, Wratten SD, Wyss E (2007): Arthropod pest management in organic crops. *Annual Review of Entomology*, 52: 57-80

## Chapter 8

Albersmeier F, Schulze H, Jahn G, Spiller A (2009): The reliability of third-party certification in the food chain: From checklists to risk-oriented auditing. *Food Control* 20: 927-935

Albersmeier F, Schulze H, Spiller A (2010): System dynamics in food quality certifications: development of an audit integrity system. *International Journal on Food System Dynamics* 1: 69-81

Alderman CW, Tabor RH (1989): The case for risk-driven audits. *Journal of Accountancy*, 167(3): 55-61

Dabbert S (2011): Improving the organic certification system - Recommendations from the CERTCOST project. Deliverable 24 of the EU FP7 CERTCOST project, [www.certcost.org](http://www.certcost.org)

Dabbert S, Abay C, Rosi Bellière S, Boyaci M, Compagnioni A, Förster I, Gambelli D, Hamm U, Hartmann M, Huber B, Janssen M, Melby Jespersen L, Lippert C, Moschitz H, Paluan L, Peris L, Miran B, Meinshausen F, Padel S, Pulga A, Rüegg E, Solfanelli F, Stolze M, Karahan Uysal O, Vine J, Zanolli R, Zorn A (2012) :Economic analysis of certification systems in organic food and farming: Synthesis report. Deliverable 23 of the EU FP7 CERTCOST project, [www.certcost.org](http://www.certcost.org)

European co-operation for Accreditation (2013): EA Policy for Accreditation of Organic Production Certification. Available at: [www.european-accreditation.org/publication/ea-3-12-m](http://www.european-accreditation.org/publication/ea-3-12-m) (accessed 30.06.2013).

European Court of Auditors (2012): Audit of the control system governing the production, processing, distribution and imports of organic products. Special Report No 9. European Union

European Union (2010): Charter of Fundamental Rights of the EU. Official Journal of the European Union, 55(C 83/02).

European Union (2012): Consolidated version of the Treaty of the European Union. Official Journal of the European Union 55(C 326): 13-46

FederBio (2012): Operazione "Gatto con gli Stivali". Tutti gli approfondimenti. <http://www.federbio.it/comunicati-stampa.php?nid=595>

Food Standards Agency (2012): Multi-annual national control plan for the United Kingdom January 2007 to March 2013: Progress in 2011 towards implementation - report for the European Commission. York: Food Standards Agency

Gambelli D, Zanolli R, Solfanelli F, Dabbert S, Lippert C, Zorn A (2012): Modelling of certification systems - report on economic modelling results and actions to increase efficiency and cost-effectiveness of inspection procedures. Deliverable 20 of the EU FP7 CERTCOST project, [www.certcost.org](http://www.certcost.org)

Hirschauer N (2004): A model-based approach to moral hazard in food chains. *Agrarwirtschaft* 53 (5): 192-205

Hoogland, CT., de Boer J, Boersema JJ (2007): Food and sustainability: Do consumers recognize, understand and value on-package information on production standards? *Appetite*, 49(1): 47-57

Jahn G, Schramm M, Spiller A (2005): The reliability of certification: quality labels as a consumer policy tool. *Consumer Policy* 28(1): 53-73

- Janssen M, Hamm U (2011): Consumer perception of different organic certification schemes in five European countries. *Organic Agriculture* 1, 31-43
- Janssen M, Hamm U (2012): Product labelling in the market for organic food: Consumer preferences and willingness-to-pay for different organic certification logos. *Food Quality and Preference* 25, 9-22
- Maresca R, Bartels U, Bruckner S, Gitterle J, Schilchegger H, Ssoltysiak U, Neuendorff J (2013): Training needs and existing training concepts for organic inspectors in four member states of the European Union. Deliverable of the WP 2 and WP 3 of the EU Leonardo project IRM-ORGANIC, [www.irm-organic.eu](http://www.irm-organic.eu)
- McEachern M G, Warnaby G (2008): Exploring the relationship between consumer knowledge and purchase behaviour of value-based labels. *International Journal of Consumer Studies*, 32(5): 414-426
- MLRV Baden Württemberg (2012): Jahresbericht 2011 – Überwachung Lebensmittel, Bedarfsgegenstände, Kosmetika, Trinkwasser, Futtermittel. Stuttgart: Ministerium für Ländlichen Raum und Verbraucherschutz Baden Württemberg.
- Moschitz H, Wörner F, Stolze M (2009): Report on the data collection concept and availability of inspection data including the data base for statistical analysis in WP2.2 and 4.1. Deliverable 9 of the EU FP7 CERTCOST project, [www.certcost.org](http://www.certcost.org)
- Neuendorff J (2012): Entwicklung eines Standardkontrollprogramms mit Leitfaden für das Kontrollverfahren in Lebensmittelgeschäften und -verkaufsstellen nach den EG-Rechtsvorschriften zum Ökologischen Landbau. Göttingen: GfRS Gesellschaft für Ressourcenschutz mbH
- Neuendorff J (2013): Biozertifizierung im Einzelhandel - Legal, illegal, ganz egal? *Ökologie und Landbau* 168(4): 42-43.
- Rohrdanz, D (2012): Die EG Öko-Verordnung – Abläufe des Kontrollverfahrens bei Unregelmäßigkeiten. Expert Consultation Federal Ministry of Food, Agriculture and Consumer Protection Germany, 26.3.2012
- Sawyer EN, Kerr WA, Hobbs JE (2009): International marketing of organic foods: Consumers, standards, and harmonization. *Journal of International Food & Agribusiness Marketing*, 21(1), 44-66
- Stolz H, Stolze M, Boland H, Kriege-Steffen A, Morgner M, Hermanowski R, Baumgart L, Schneider F (2011): Bio mit Gesicht - Erfolgchancen einer kundennahen und innovativen Marketingstrategie. Frick
- Stolze M, Hartmann M, Moschitz H (2012): Report on total costs of three organic certification systems in six European countries with particular focus on organic supply chains. Deliverable 21B of the EU FP7 CERTCOST project, [www.certcost.org](http://www.certcost.org)
- Zorn A, Lippert C, Dabbert S (2010): Analyse der Kontroll- und Sanktionshäufigkeiten großer Öko-Kontrollstellen in Deutschland, in: Loy J-P, Müller RAE (Eds.), *Agrar- und Ernährungsmärkte nach dem Boom*. Proceedings 49. Jahrestagung der Gesellschaft für Wirtschaft- und Sozialwissenschaften des Landbaus e.V. Vol. 45: 271-282
- Zorn A, Lippert C, Dabbert S (2012): Supervising a system of approved private control bodies for certification: The case of organic farming in Germany. *Food Control* 25: 525-532
- Zorn A, Lippert C, Dabbert S (2013): An analysis of the risks of non-compliance with the European organic standard: A categorical analysis of farm data from a German control body. *Food Control* 30: 692-699

## Chapter 9

Accredited Certification Bodies (2010): Equivalent European Union Organic Production & Processing Standard for Third Countries. Accredited Certification Bodies.

*<http://organicstandard.com.ua/files/standards/en/eu/EU%20equivalent%20standard.pdf> (accessed 1 August 2012)*

- Abay C, Karahan Uysal Ö, Miran B, Boyaci M, Huber B, Stolze EM (2011): Report on evaluation of the revision of Council Regulation (ECC) no 2092/91, import regime in two exporting non-EU countries (TR, CH) and on an international level. Deliverable 19 of the EU FP7 CERTCOST project
- AFI (2011): Minutes of the AFI 7 meeting – 13 October 2011 in Brussels, Workshop on the European Import Scheme for Organic Products, see [www.organic-integrity.org](http://www.organic-integrity.org)
- Ball (2012): A summary of the different international standards and regulatory systems. In: Szeremeta A, Ball K, Blake F, Schlüter M, Tuszynski L (ed.) European Organic Regulations (EC) No 834/2007, 889/2008 and 1235/2008. An Evaluation of the First Three Years. Looking for Further Development. Brussels: IFOAM EU Group, 29-30.
- BLE (2013): Electronic letter sent by the German Bundesanstalt für Landwirtschaft und Ernährung on 28.03.2013 to German control bodies and authorities
- Coli M (2012): New import regime: experience from ICEA. In: Szeremeta A, Ball K, Blake F, Schlüter M, Tuszynski L (ed.) European Organic Regulations (EC) No 834/2007, 889/2008 and 1235/2008. An Evaluation of the First Three Years. Looking for Further Development. Brussels: IFOAM EU Group, 33-34
- Dabbert S (2011): Improving the organic certification system - Recommendations from the CERTCOST project. Deliverable 24 of the EU FP7 CERTCOST project, [www.certcost.org](http://www.certcost.org)
- EOCC (2012): An evaluation of new EU rules for importing organic products - the viewpoint of certification bodies. In: Szeremeta A, B.K., Blake F, Schlüter M, Tuszynski L ed. European Organic Regulations (EC) No 834/2007, 889/2008 and 1235/2008. An Evaluation of the First Three Years. Looking for Further Development. Brussels: IFOAM EU Group, pp. 32-33.
- European Commission (2012): Review of the political and legal framework for organic production – Preliminary results of the autumn 2012 hearings held in the context of the Impact Assessment. Presentation by DG AGRI/H3 at the meeting of the ENLARGED ADVISORY GROUP ON "ORGANIC FARMING" on Monday 10 December 2012
- European Commission 2008. Guidelines on imports of organic products into the European Union. 15.12.2008. Rev.1. Brussels: European Commission
- European Court of Auditors (2012): Audit of the control system governing the production, processing, distribution and imports of organic products. Special Report No 9. European Union. Luxembourg: European Court of Auditors
- FEDERBIO (2013): Press release to "Green War Inquiry". Available at: [www.federbio.it/comunicati-stampa.php?nid=743](http://www.federbio.it/comunicati-stampa.php?nid=743). Accessed on 22.04.2013
- Halberg, N., Alrøe, H.F., Knudsen, M.T. and Kristensen, E.S. 2006. Global Development of Organic Agriculture: Challenges and Prospects. Wallingford: CABI Publishing.
- Huber B (2012): How to prevent fraud in the organic sector? In: Szeremeta A, Ball K, Blake F, Schlüter M, Tuszynski L. (ed.) European Organic Regulations (EC) No 834/2007, 889/2008 and 1235/2008. An Evaluation of the First Three Years. Looking for Further Development. Brussels: IFOAM EU Group, 24-25
- IFOAM EU Group (2012): Position paper on actions recommended for improving the credibility of organic imports from third countries. Brussels: IFOAM EU Group.

- Kalter A (2012): Import and international trade . maintaining trust among producers and traders. In: Szeremeta A, B.K., Blake F, Schlüter M, Tuszyński L. ed. European Organic Regulations (EC) No 834/2007, 889/2008 and 1235/2008. An Evaluation of the First Three Years. Looking for Further Development. Brussels: IFOAM EU Group, pp. 34-35
- MLRV (2011): 10 Jahre Öko-Monitoring. Stuttgart: Ministerium für Ländlichen Raum und Verbraucherschutz
- Neuendorff J (2006): Food Product Imports from Third Countries into the European Union – A Guide. Göttingen: GfRS Gesellschaft für Ressourcenschutz mbH
- Neuendorff J (2007): Risikomanagement bei Importen von Produkten des ökologischen Landbaus aus Drittländern. Göttingen: GfRS Gesellschaft für Ressourcenschutz mbH
- Neuendorff J (2012): Better safe than sorry – Recommendations of the Anti-Fraud Initiative. In: Conference Proceedings of the 4th conference on organic sector development in Central/Eastern European and Central Asian Countries, 12.-15.04.2012, Izmir/Turkey
- Nicolls A. (2013): Personal communication, 15 March 2013.
- Schaack D, Rampold C, Willer H, Rippin M, von Koerber H (2011): Analyse der Entwicklung des ausländischen Angebots bei Bioprodukten mit Relevanz für den deutschen Biomarkt. Bonn: Agrarmarkt Informations-Gesellschaft mbH
- Twarog S.( 2013): Let the good products grow and flow. Unpublished.
- Willer H, Kilcher L (Eds.) (2012): The World of Organic Agriculture - Statistics and Emerging Trends 2012, Frick: Research Institute of Organic Agriculture (FiBL) and Bonn: International Federation of Organic Agriculture Movements (IFOAM).

## Chapter 10

- AgenceBIO/CSA2012:10eBaromètreAgenceBIO/CSA2012. Press Release. Online at: <http://www.agencebio.org/communiqués-et-dossiers-de-presse>. Accessed: 05.06.2013
- Daugbjerg C, Smed S, Anderson LM (2013): Buying eco-labelled produce? Knowledge of production standards, trust in labels and organic consumption. Working paper. Institute of Food and Resource Economics, University of Copenhagen
- Eurobarometer (2012): Europeans attitudes towards food security, food quality and the country side. Special Eurobarometer 389. Online at: [http://ec.europa.eu/agriculture/survey/2012/389\\_en.pdf](http://ec.europa.eu/agriculture/survey/2012/389_en.pdf). Accessed 25.3.2013.
- EUROSTAT (2013): Farm structure in Estonia. Online at: [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Farm\\_structure\\_in\\_Estonia](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Farm_structure_in_Estonia). Accessed on 15.4.2013
- Golan E, Kuchler F, Mitchell L, Greene C, Jessup A (2001): Economics of food labeling. Journal of Consumer Research 24: 117-184
- Harper GC, Makatouni A (2002): Consumer perception of organic food production and farm animal welfare. British Food Journal 104(3/4/5): 287-299
- Hughner RS et al. (2007): Who are organic food consumers? A compilation and review of why people purchase organic food. Journal of Consumer Behaviour 6(5): 94-110
- Janssen M, Hamm U (2012): The mandatory EU logo for organic food: consumer perceptions. British Food Journal 114(2-3): 335-352
- McEachern MG, Warnaby G (2008): Exploring the relationship between consumer knowledge and purchase behaviour of value-based labels. International Journal of Consumer Studies 32(5): 414-426

- Mesías Díaz FJM, Martínez-Carrasco Pleite F, Martínez Paz JM, Gaspar García P (2011): Consumer knowledge, consumption, and willingness to pay for organic tomatoes. *British Food Journal* 114(3): 318-334
- Meyer-Höfer M v, Spiller A (2013): Anforderungen an eine nachhaltige Land- und Ernährungswirtschaft: Die Rolle des Konsumenten. *KTBL-Schrift* 500. Online at: [www.uni-goettingen.de/de/studie-zu-bekanntheit-und.../430840.html](http://www.uni-goettingen.de/de/studie-zu-bekanntheit-und.../430840.html). Accessed 12.4.2013
- Padel S (2010): The European regulatory framework and its implementation in influencing organic inspection and certification systems in the EU. CERTCOST deliverable 11, Newbury, UK. Online at: [http://certcost.org/Lib/CERTCOST/Deliverable/D14\\_D11.pdf](http://certcost.org/Lib/CERTCOST/Deliverable/D14_D11.pdf). Accessed 8.5.2013
- Sirieix L, Delanchy M, Remaud H, Zepeda L (2011): How do consumers react in front of individual and combined sustainable food labels? A UK focus group study. Working paper MOISA 2011-1. Montpellier. Online at: [http://www1.montpellier.inra.fr/bartoli/moisa/bartoli/download/moisa2011\\_pdf/WP\\_1\\_2011.pdf](http://www1.montpellier.inra.fr/bartoli/moisa/bartoli/download/moisa2011_pdf/WP_1_2011.pdf). Accessed 25.3.2013
- Spiller A, Lüth M, Enneking U (2004) Analyse des Kaufverhaltens von Selten- und Gelegenheitskäufern und ihrer Bestimmungsgründe für/gegen den Kauf von Öko-Produkten. Final report BLE-Project 02OE366. [www document]. URL <http://www.orgprints.org/4201>
- Szeremeta A (2006): Organic farming and market in Poland. ENOAS Summerschool. <http://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&ved=0CE4QFjAC&url=http%3A%2F%2Fwww.enoas.org%2Fpol05t%2Fdoc%2FOrganic%2520farming%2520and%2520market%2520in%2520Poland.pdf&ei=QKpSUcjVH8OdtAbB3YHICg&usg=AFQjCNGueU3fFOVD3e2PS40PloKm1Jp0uQ&bvm=bv.44342787,d.Yms>. Accessed 15.4.2013
- Teisl MF, Rubin J, Noblet C (2008): Non-dirty dancing? Interactions between eco-labels and consumers. *Journal of Environmental Psychology* 29: 140-159
- Zanoli R (ed.) (2004): The European consumer and organic food. Organic Marketing Initiatives and Rural Development series: Volume 4. Aberystwyth, Wales

## Chapter 11

- European Commission (2004a): European Action Plan for Organic Food and Farming Brussels: European Commission
- European Commission (2004b): European Action Plan for Organic Food and Farming. Commission Staff Working Document. Brussels: European.Commission.
- European Commission (2005a): Simplification and Better Legislation for the Common Agricultural Policy. Communication from the Commission of 19 October 2005, COM(2005) 509, Brussels: European Commission.
- European Commission (2005b): A strategic review of better regulation in the European Union. Communication of 14 November 2006 from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, COM(2006) 689, Brussels: European Commission.
- European Commission (2010): Smart Regulation in the European Union Communication from the Commission to the European Parliament, the Council., the European Economic and Social Committee and the Committee of the Regions, COM(2010) 543, Brussels: European Commission.

European Commission 2012. EU Regulatory Fitness. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2012) 746, Brussels: European Commission.

## Chapter 12

Dabbert S (2001): Der Öko-Landbau als Objekt der Politik. In: Reents, H.-J. ed. 6. Wissenschaftstagung zum Ökologischen Landbau Freising-Weihenstephan, 06.-08.03.2001. Berlin: Dr. Köster, pp. 39-43

Daugbjerg C, Sønderskov M (2012): Environmental Policy Performance Revisited: Designing Effective Policies for Green Markets. *Political Studies* 60: 2, 399-418

Diaz-Chavez R, Kunen E, Walden D, Fingerman K, Arya L, Kretschmer B, Poláková J, Farmer A, Bowyer C, Menadue H, Alberici C, Toop G (2013): Study on the operation of the system for the biofuels and bioliquids sustainability scheme. A report for DG Energy. Ecofys, IEEP, Winrock International

Dwyer J, Ilbery B, Kubinakova K, Buckwell A, Menadue H, Hart K, Knickel K, Mantino F, Erjavec E (2012): How To Improve The Sustainable Competitiveness And Innovation Of The EU Agricultural Sector, Directorate General For Internal Policies, Policy Department B: Structural And Cohesion Policies, European Parliament, Brussels.  
<http://www.europarl.europa.eu/committees/fr/studiesdownload.html?languageDocument=EN&file=74955>

Eurobarometer (2012): Europeans' attitudes towards food security, food quality and the countryside, Special Eurobarometer 389/Wave EB77.2 – TNS Opinion & Social, European Commission, FAO (2010) Guidelines for smallholder group management of organic and fairtrade certification. Rome: FAO

European Court of Auditors (2011): Is agri-environment support well designed and managed? Special Report Number 7, Luxembourg: European Court of Auditors

European Court of Auditors (2012): Audit of the control system governing the production, processing, distribution and imports of organic products. Special Report No 9. European Union. Luxembourg: European Court of Auditors

Gattinger AG, Mullera A, Haeni M, Skinner C, Fliessbach A, Buchmann N, Mäder P, Stolze M, Smith P, El-Hage N, Niggli U (2012): Enhanced top soil carbon stocks under organic farming. *PNAS* pp1-6

LaSalle T, Hepperly P (2008): Regenerative organic farming: A solution to global warming. The Rodale Institute, Kutztown, USA

Medarova-Bergstrom K, Volkery A, Baldock D (2012): Criteria for maximising the European added value of EU budget: the case of climate change. Brussels: IEEP

Niggli U, Fliessbach A, Hepperly P, Scialabba N (2009): Low Greenhouse Gas Agriculture: Mitigation and Adaptation Potential of Sustainable Farming Systems', Rome: Food and Agriculture Organization of the United Nations (FAO)

OECD (2007): Instrument Mixes for Environmental Policy. Paris: OECD

OIR, Ecorys, University of Gloucestershire and Polish Academy of Sciences, Institute of Geography and Spatial Organisation (2012): Synthesis of Mid-Term Evaluations of Rural Development Programmes 2007-2013. Final Report

Padel S, Jespersen LM, Schmid O (2007a): Research to support the revision of the EU Regulation on organic agriculture. EEC 2092/91 (Organic) Revision: Danish Research Centre for Organic Food and Farming (DARCOF), University of Aarhus, Faculty of Agricultural Sciences (AU.DJF)

- Padel S, Niggli U, Pearce B, Schluter M, Schmid O, Cuoco E, Willer H, Huber M, Halberg N, Micheloni C (2010): Implementation Action Plan for organic food and farming research. Technology Platform ,Organics' QLIF (2009) Advancing organic and low-input food. QLIF Integrated Research Project
- Padel S, Röcklinsberg H, Verhoog H, Schmid O, de Wit J, Alrøe HF, Kjeldsen C (2007b): Balancing and integrating basic values in the development of organic regulations and standards: proposal for a procedure using case studies of conflicting areas. EEC2092/91 (Organic) Revision (SSPE-CT-2004-502397): Project report D 2.3. Aberystwyth/Tjele: University of Wales, Aberystwyth (UWA) and Danish Research Centre for organic Farming (DARCOF).
- Poláková J, Berman S, Naumann S, Frelth-Larsen A, von Toggenburg J, Farmer A (2013): The sustainable management of natural resources with a focus on water and agriculture. A report to the STOA Panel of the European Parliament. Brussels/London: Institute for European Environmental Policy; Paris: BIO Intelligence Service; Berlin: Ecologic Institute.
- Sanders J, Stolze M, Padel S (2011): Use and efficiency of public support measures addressing organic farming. Braunschweig: Thünen-Institute of Farm Economics.
- Santacoloma, P (2007): Organic certification schemes: managerial skills and associated costs. Synthesis report from case studies in the rice and vegetable sectors. Rome: FAO
- Schmid O, Huber B, Ziegler K, Jespersen L, Hansen J, Plakolm G, Gilbert J, Lomann S, Micheloni C, Padel S (2007): Analysis of EEC Regulation 2092/91 in relation to other national and international organic standards
- Sengstschmid H, Sprong N, Schmid O, Stockebrand N, Stolz H, Spiller A (2011): EU Ecolabel for food and feed products - feasibility study. DG Environment, Brussels: European Commission
- Seufert V, Ramankutty N, Foley JA (2012): Comparing the yields of organic and conventional agriculture. *Nature*, No 485, pp229-232
- Smith-Spangler, C., et al. (2012): Are Organic Foods Safer or Healthier Than Conventional Alternatives? A Systematic Review, *Annals of Internal Medicine* 57(5): 348-366
- Tuomisto HL, Hodge I D, Riordan P, MacDonald DW (2012): Does organic farming reduce environmental impacts? A meta-analysis of European research. *Journal of Environmental Management*, No 112, pp. 309-320
- Yellow Window et al. (2000): Identifying the constituent elements of the European Added Value (EAV) of the EU RTD programmes: conceptual analysis based on practical experience" Final Report
- Zieseemer J (2007): Energy use in organic food systems. Rome: FAO

## Chapter 13

- Beaufoy G, Jones G, Kazakova Y, McGurn P, Poux X, Stefanova V (2011): Permanent Pastures and Meadows: adapting CAP Pillar 1 to support public goods. Report for the European Commission and the Swedish Rural Development Network. EFNCP
- Darnhofer I (2005): Organic Farming and Rural Development: Some evidence from Austria. *Sociologia Ruralis*, No 45, (4)
- Daugbjerg C, Sønderskov M (2012): Environmental Policy Performance Revisited: Designing Effective Policies for Green Markets. *Political Studies* 60: 2, 399-418
- Dwyer J, Ilbery B, Kubinakova K, Buckwell A, Menadue H, Hart K, Knickel K, Mantino F, Erjavec E (2012): How To Improve The Sustainable Competitiveness And Innovation Of The EU Agricultural Sector,

Directorate General For Internal Policies, Policy Department B: Structural And Cohesion Policies, Brussels: European Parliament

- ENRD (2010a): Rural Diversity, ENRD EU Rural Review, Issue 3, January 2010, [http://enrd.ec.europa.eu/app\\_templates/filedownload.cfm?id=3E3F4C22-0331-99A3-AD5F-C25FF369EF68](http://enrd.ec.europa.eu/app_templates/filedownload.cfm?id=3E3F4C22-0331-99A3-AD5F-C25FF369EF68)
- ENRD (2010b): Rural Development and Climate Change, ENRD EU Rural Review, Issue 4, May 2010, [http://enrd.ec.europa.eu/app\\_templates/filedownload.cfm?id=101A386E-C8C0-9369-8912-C42045DDE42D](http://enrd.ec.europa.eu/app_templates/filedownload.cfm?id=101A386E-C8C0-9369-8912-C42045DDE42D)
- ENRD (2010c): Cultivating competitiveness of the EU farm, agri-food and forest sectors, ENRD EU Rural Review, Issue 5, October 2010, [http://enrd.ec.europa.eu/app\\_templates/filedownload.cfm?id=796E8491-F491-EF46-04EC-905DC3E2889F](http://enrd.ec.europa.eu/app_templates/filedownload.cfm?id=796E8491-F491-EF46-04EC-905DC3E2889F)
- ENRD (2010d): Employment and Social Inclusion, ENRD EU Rural Review, Issue 6, December 2010, [http://enrd.ec.europa.eu/app\\_templates/filedownload.cfm?id=09AED062-D99D-0744-062C-2B6F6E4785FB](http://enrd.ec.europa.eu/app_templates/filedownload.cfm?id=09AED062-D99D-0744-062C-2B6F6E4785FB)
- ENRD (2011a): Agricultural product quality: a success factor for EU rural areas, ENRD EU Rural Review, Issue 8, July 2011, [http://enrd.ec.europa.eu/app\\_templates/filedownload.cfm?id=11308F76-9FA8-82A0-C03B-5FE07F98B688](http://enrd.ec.europa.eu/app_templates/filedownload.cfm?id=11308F76-9FA8-82A0-C03B-5FE07F98B688)
- ENRD (2011b): Forestry and rural development, ENRD EU Rural Review, Issue 9, November 2011, [http://enrd.ec.europa.eu/app\\_templates/filedownload.cfm?id=ED57142C-E0C7-3E97-E70E-E40EC9E8CCB1](http://enrd.ec.europa.eu/app_templates/filedownload.cfm?id=ED57142C-E0C7-3E97-E70E-E40EC9E8CCB1)
- ENRD (2012a): Rural Entrepreneurship, ENRD EU Rural Review, Issue 10, January 2012, [http://enrd.ec.europa.eu/app\\_templates/filedownload.cfm?id=ED5808AC-994A-47AD-928F-0D3088716910](http://enrd.ec.europa.eu/app_templates/filedownload.cfm?id=ED5808AC-994A-47AD-928F-0D3088716910)
- ENRD (2012b): Local Food and Short Supply Chains, ENRD EU Rural Review, Issue 12, July 2012, [http://enrd.ec.europa.eu/app\\_templates/filedownload.cfm?id=E8F24E08-0A45-F272-33FB-A6309E3AD601](http://enrd.ec.europa.eu/app_templates/filedownload.cfm?id=E8F24E08-0A45-F272-33FB-A6309E3AD601)
- Edwardson W, Santacoloma P (2013): Organic supply chains for small farmer income generation in developing countries. Case studies in India, Thailand, Brazil, Hungary and Africa. Rome: FAO
- Eurobarometer (2012): SMEs, Resource Efficiency and Green Markets Report, Flash Eurobarometer 342 - TNS Political & Social, European Commission
- European Commission (2008): Guidelines on imports of organic products into the European Union (2008), chapter 8
- European Commission (2010): An analysis of the EU organic sector. Brussels: European Commission
- European Parliament (2010): Report on fair revenues for farmers: A better functioning food supply chain in Europe (2009/2237)
- FAO (2011): Organic agriculture and climate change mitigation. A report on the round table on organic agriculture and climate change. Rome: FAO
- Halberg N (2008): Energy use and greenhouse gas emission in organic agriculture. International conference Organic agriculture and climate change, Enita Clermont, France
- Håring AM, Dabbert S, Offermann F, Nieberg H (2001): Benefits of Organic Farming for Society, in Organic Food and Farming, 2001, Denmark

- Hart K, Allen B, Lindner M, Keenleyside C, Burgess P, Eggers J, Buckwell A (2013): Land as an environmental resource, Report Prepared for DG Environment, London: Institute for European Environmental Policy
- Hrabalová A, Wollmuthová P (2008): Policy instruments for organic farming: central and Eastern European Countries, quoted in European Commission (2010) An analysis of the EU organic sector. Brussels: European Commission
- IfLS (2004a): Ökologischer Landbau und nachhaltige Regionalentwicklung. Frankfurt: Institut für landliche Strukturforchung
- IfLS (2004b): Ökolandbau un Regionalentwicklung - auf die Schnittstellen kommt es an. Frankfurt: Institut für landliche Strukturforchung
- IFOAM (2006): Organic Agriculture and Rural Development. Brussels: IFOAM
- IFOAM (2012): European Organic Regulations (EC) No 834/2007, 889/2008 and 1235/2008, An Evaluation of the First Three Years Looking for Further Development, IFOAM EU Group, Brussels: IFOAM
- Keenleyside C, Allen B, Hart K, Menadue H, Stefanova V, Prazan J, Herzon I, Clement T, Povellato A, Maciejczak M, Boatman N (2011): Delivering environmental benefits through entry level agri-environment schemes in the EU. Report Prepared for DG Environment, London: Institute for European Environmental Policy.
- Keenleyside et al. (forthcoming): The high nature value farming concept throughout EU-27 and its maturity for financial support under the CAP. Institute for European Environmental Policy: London
- Kratochvil R (2006): Biologischer Landbau und nachhaltige Entwicklung: Kongruenzen, Differenzen und Herausforderungen
- Kuhnert H, Behrens G, Hamm U, Müller H, Nieberg H, Sanders J, Strohm R (2013): Ausstiege aus dem ökologischen Landbau: Umfang – Gründe – Handlungsoptionen. Braunschweig: Johann Heinrich von Thünen-Institut, 319 p, Thünen Rep 3
- Malingreau JP, Eva H, Maggio A (2012): NPK: Will there be enough plant nutrients to feed a world of 9 billion in 2050? Foresight and Horizon Scanning Series. JRC, Luxembourg: European Commission
- Münchhausen S von, Knickel K, Gountaras K, Peter S (2006): Beitrag des ökologischen Landbaus zur Entwicklung ländlicher Räume: Fallstudien in verschiedenen Regionen Deutschlands
- Nemes N (2009): Comparative analysis of organic and non-organic farming systems: A critical assessment of farm profitability. Rome: FAO
- Nieberg, H., et al. (2007): Organic farms in a changing policy environment: impacts of support payments, EU-enlargement and Luxembourg reform. Hohenheim: Institut für landwirtschaftliche Betriebslehre.
- OECD (2007): Instrument Mixes for Environmental Policy. Paris: OECD
- Poláková J, Berman S, Naumann S, Frelh-Larsen A, von Toggenburg J, Farmer A (2013): The sustainable management of natural resources with a focus on water and agriculture. A report to the STOA Panel of the European Parliament. Brussels/London: Institute for European Environmental Policy; Paris: BIO Intelligence Service; Berlin: Ecologic Institute.
- Poláková J, Tucker G, Hart K, Dwyer J, Rayment M (2011): Addressing biodiversity and habitat preservation through Measures applied under the Common Agricultural Policy. Report Prepared for DG Agriculture. Brussels/London: Institute for European Environmental Policy.
- Pommer G (2001): Die Stellung des Ökologischen Landbaus in einer multifunktionalen Landwirtschaft. Position of Ecological Farming in Multifunctional Agriculture. Landnutzung und Landentwicklung, No 43, (4) pp180-184

- Pugliese P (2001): Organic farming and sustainable rural development: a multifaceted and promising convergence. *Sociologia Ruralis*, No 41, (1)
- Sahm H, Sanders J, Nieberg H, Behrens G, Kuhnert H, Strohm R and Hamm U (2013): Reversion from organic to conventional agriculture: a review. *Renewable Agriculture and Food Systems* (in press)
- Sanders J, Stolze M, Padel S (2011): Use and efficiency of public support measures addressing organic farming. Braunschweig: Thünen-Institute of Farm Economics.
- Santacoloma P (2007a): Organic certification schemes: managerial skills and associated costs. Synthesis report from case studies in the rice and vegetable sectors. Rome: FAO
- Santacoloma P (2007b): Certification costs and managerial skills under different organic certification schemes - Selected Case Studies. Rome: FAO
- Santini F, Guri F, Gomez y Paloma S (2013): Labelling of agricultural and food products of mountain farming, European Commission Joint Research Centre, Institute for Prospective Technological Studies, Publications Office of the European Union, Luxembourg
- Schäfer M (2007): The role of organic agriculture in networks of rural development
- Sengstschmid H, Sprong N, Schmid O, Stockebrand N, Stolz H, Spiller A (2011): EU Ecolabel for food and feed products - feasibility study. DG Environment. Brussels: European Commission
- Seufert V, Ramankutty N, Foley JA (2012): Comparing the yields of organic and conventional agriculture. *Nature*, No 485, pp. 229-232
- Stolze M, Hartmann M, Moschitz H (2012): Report on total costs of three organic certification systems in six European countries with particular focus on organic supply chains. CERTCOST [http://www.certcost.org/Lib/CERTCOST/Deliverable/D21\\_B.pdf](http://www.certcost.org/Lib/CERTCOST/Deliverable/D21_B.pdf)
- Tuomisto HL, Hodge ID, Riordan P, MacDonald DW (2012): Does organic farming reduce environmental impacts? - A meta-analysis of European research. *Journal of Environmental Management*, No 112, pp309-320
- Underwood et al. (2013): Agriculture and climate change and agriculture and biodiversity (Study 1) under the project on The technologies for feeding 10 billion people. Report to the STOA Panel of the European Parliament. Brussels/London: Institute for European Environmental Policy; Paris: BIO Intelligence Service; Berlin: Ecologic Institute.

## Chapter 14

- Dabbert S, Häring A, Zanolini R (2002): Politik für den Öko-Landbau. Stuttgart: Ulmer
- European Commission (2004): European Action Plan for Organic Food and Farming Brussels: European Commission
- European Commission (2005): Simplification and Better Legislation for the Common Agricultural Policy. Communication from the Commission of 19 October 2005, COM(2005) 509, Brussels: European Commission.
- European Commission (2012): Application of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products. Report from the Commission to the European Parliament and the Council, Brussels: European Commission.
- Stolze M, Lampkin N (2009): Policy for organic farming: Rationale and concepts. *Food Policy*, 34: 237-244

## Regulations

- Council Regulation (EC) No 1980/2000 of the European Parliament and of the Council of 17 July 2000 on a revised Community eco-label award scheme. OJ L237/1, 21.9.2000.
- Council Regulation (EC) NO 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. OJ L31.1, 1.2.2002.
- Council Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules, OJ L 191, p. 1, 28.5.2004.
- Commission Regulation 608/2004 concerning the labelling of foods and food ingredients with added phytosterols, phytosterol esters, phytosterols and/or phytosterol esters
- Council Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods, OJ L 404/9, 30.12.2006.
- Council Regulation (EC) No 1332/2008 of the European Parliament and of the Council of 16 December 2008 on food enzymes OJ L 354/7, 31.12.2008.
- Council Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods OJ 354/34, 31.12.2008.
- Council Regulation (EC, EURATOM) NO 1101/2008 of the European Parliament and of the Council of 22 October 2008 on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities, OJ L 304/70, 14.11.2008.
- Council Regulation (EC) No 767/2009 of the European Parliament and of the Council of 13 July 2009 on the placing on the market and use of feed, OJ L 229/1, 01.09.2009.
- Council Regulation (EC) No 73/2009 of the European Parliament and of the Council 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, OJ L 30/16, 31.01.2009
- Council Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics
- Council Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel, OJ L 27/1, 31.01.2010.
- Council Regulation (EC) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, OJ L 304/18, 22.11.2011.
- Council Regulation (EEC) No 2081/92 of 14 July 1992 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs, OJ L 208, 24.7.1992.
- Council Regulation (EEC) No 2082/92 of 14 July 1992 on certificates of specific character for agricultural products and foodstuffs, OJ L 208, 24.7.1992.
- Council Regulation (EC) No 1804/1999 of 19 July 1999 supplementing Regulation (EEC) No 2092/91 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs to include livestock production
- Council Decision 2006/144/EC of 20 February 2006 on Community strategic guidelines for rural development (programming period 2007 to 2013), 20.02.2006

- Council Regulation (EC) No 510/2006 of 20 March 2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs, OJ L93, 31 .3.2006.
- Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91
- Council Regulation (EC) No 3/2008 of the European Parliament and of the Council 17 December 2007 on information and promotion actions for agricultural products on the internal market, OJ L 3, p 1, 5.1.2008.
- Commission Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control
- Council Regulation (EC) No 967/2008 of 29 September 2008 amending Regulation (EC) No 834/2007 on organic production and labelling of organic products
- Commission Regulation (EC) No 1235/2008 of 8 December 2008 laying down detailed rules for implementation of Council Regulation (EC) No 834/2007 as regards the arrangements for imports of organic products from third countries
- Commission Regulation (EC) No 1254/2008 of 15 December 2008 amending Regulation (EC) No 889/2008 laying down detailed rules for implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control
- Council Regulation (EC) No 74/2009 of 19 January 2009 amending Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), OJ L 30/100, 31.01.2009
- Commission Regulation (EC) No 710/2009 of 5 August 2009 amending Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007, as regards laying down detailed rules on organic aquaculture animal and seaweed production
- Commission Regulation (EU) No 271/2010 of 24 March 2010 amending Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007, as regards the organic production logo of the European Union
- Commission Implementing Regulation (EU) No 426/2011 of 2 May 2011 amending Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control
- Commission Implementing Regulation (EU) 505/2012 of 14 June 2012 amending and correcting Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control.
- Council Regulation (EC) No 1151/2012 of 21 November 2012 on quality schemes for agricultural products and foodstuffs, OJ L 343/1, 14.12.2012.
- Commission Implementing Regulation (EU) No 203/2012 of 8 March 2012 amending Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007, as regards detailed rules on organic wine.
- Commission Implementing Regulation (EU) No 344/2011 of 8 April 2011 amending Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control

## Directives

- European Commission (2006) Proposal for a Directive of the European Parliament and of the Council establishing a framework for the protection of soil and amending Directive 2004/35/EC, COM/2006/0232 final, 22.09.2006.
- Commission Directive 1999/10/EC of 8 March 1999 providing for derogations from the provisions of Article 7 of Council Directive 79/112/EEC as regards the labelling of foodstuffs
- Commission Directive 2002/67/EC of 18 July 2002 on the labelling of foodstuffs containing quinine, and of foodstuffs containing caffeine
- Commission Directive 2008/5/EC, concerning the compulsory indication on the labelling of certain foodstuffs of particulars other than those provided for in Directive 2000/13/EC
- Council Directive 90/496/EEC of 24 September 1990 on nutrition labelling for foodstuffs
- Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources. OJ L357/1, 31.12.1991.
- Directive 91/414/EEC of 15 July 1991 concerning the placing of plant protection products on the market, OJ L 230, 19.8.1991.
- Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. OJ L206/7, 22.7.1992.
- Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes. OJ L221/23, 8.8.1998.
- Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for a Community action in the field of water policy. OJ L327/1, 22.12.2000.
- Directive 2000/13/EC of the European Parliament and of the Council of 20 March 2000 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs.
- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Waste Framework Directive). OJ L312/3, 22.11.2008.
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. OJ L20/7, 26.1.2010.
- Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L 140/16, 5.6.2009.



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