Foreword

This Annex complements the report on Voluntary Environmental and Organic Standards in Agriculture: Policy Implications. It analyses possible roles of public authorities in the area of environmental and organic standards, including policy objectives, options for interaction, and means for the use of standards to achieve public policy goals. It identifies the main objectives behind government activity on environmental and organic standards in the area of consumer protection and fraud prevention, the enabling of functioning food markets, and how to improve efficiency in the design, implementation and monitoring of public policies.

The authors of this Annex are Sylvain Rousset, Koen Deconinck, Hyunchul Jeong and Martin von Lampe of the OECD Secretariat. This work has benefited from substantial input from officials of agricultural and environment ministries, and from private standard owners in OECD countries, Argentina and the European Commission. It was carried out under the direction of Frank van Tongeren, Head of the Policies in Trade and Agriculture Division in the OECD Trade and Agriculture Directorate. In addition, the authors wish to thank Carmil Cahill, Guillaume Gruère and Ron Steenblik for their valuable comments and suggestions at various stages of the work. Editorial assistance was provided by Martina Abderrahmane.

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**Keywords:** Private standards, environmental standards, organic standards, environmental policies, organic regulation, organic agriculture, agricultural trade.
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TABLE OF CONTENTS

Annex 1. Glossary ......................................................................................................................... 8
Annex 2. Background on standards ............................................................................................ 13
  Standards versus technical regulations .................................................................................. 13
  The standardisation process .................................................................................................. 14
  Standard design ....................................................................................................................... 16
  Implementation of certification schemes .............................................................................. 18
  Standards and labelling ......................................................................................................... 19
  Impacts of voluntary environmental standards ..................................................................... 20
  Standards and the efficiency rationale for government intervention .................................... 23
    Information and product attributes ...................................................................................... 23
    Market efficiency for different attributes ........................................................................... 24
    Business-to-Business transactions ....................................................................................... 26
    Third party certification ......................................................................................................... 27
    Private standards and regulations ....................................................................................... 28
    Labels and standards ........................................................................................................... 29
Annex 3. Organic agriculture standards: a cross-country analysis ............................................. 31
  Introduction ............................................................................................................................ 31
  Organic agriculture in the OECD ............................................................................................ 32
  Organic regulations ................................................................................................................ 32
    Adoption of organic regulations .......................................................................................... 32
    Government motivations for organic regulations ................................................................. 33
    Coverage of organic regulations ........................................................................................ 34
    Authorities responsible for preparing organic regulations ..................................................... 36
    Authorities responsible for implementing organic regulations ........................................... 37
    Control of organic regulations ............................................................................................ 39
    The control bodies for organic regulations ......................................................................... 41
    Advantages of public bodies ............................................................................................... 42
    Advantages of private certifiers .......................................................................................... 42
    Disadvantages of private certifiers ..................................................................................... 42
    Overseeing of private certifiers .......................................................................................... 43
  Policies .................................................................................................................................... 44
    Strategic plans to promote the development of the organic sector ......................................... 44
    Government motivations for supporting organic agriculture ............................................... 45
    Support to organic farmers .................................................................................................. 46
    Support to organic food marketing channels ...................................................................... 47
    Other governmental measures ............................................................................................. 47
    Measures implemented by local governments ...................................................................... 48
  Private organic standards ........................................................................................................ 49
    Government involvement ..................................................................................................... 49
    Coexistence between regulations and private standards ...................................................... 50
  Conclusion ............................................................................................................................... 51
  Appendix Tables ..................................................................................................................... 52
  Questionnaire on Organic Agriculture .................................................................................... 62
Annex 4. Country studies ................................................................. 72

France ........................................................................................................ 73
  Introduction ......................................................................................... 73
  Organic agriculture ............................................................................ 73
    Brief outline of the case ................................................................. 73
    Background information ............................................................... 74
    Synergy between standards and public policies ............................ 79
  Farm Environmental Certification ................................................. 80
    Brief outline of the case ................................................................. 80
    Background information ............................................................... 81
    Synergy between standards and public policies ............................ 87
  Voluntary scheme for biofuels ..................................................... 87
    Brief outline of the case ................................................................. 87
    Background information ............................................................... 87
    Synergy between standards and public policies ............................ 92

Korea .......................................................................................................... 93
  Introduction ......................................................................................... 93
  Korean Certified Organic ............................................................... 93
    Brief outline of the case ................................................................. 93
    Background information ............................................................... 93
    Synergy between standards and public policies ............................ 98

Netherlands ............................................................................................ 99
  Introduction ......................................................................................... 99
  EKO Quality Mark ........................................................................... 99
    Brief outline of the case ................................................................. 99
    Background information ............................................................... 100
    Synergy between standards and public policies ............................ 103

Switzerland ............................................................................................. 105
  Introduction ......................................................................................... 105
  Bio Suisse organic standard .......................................................... 106
    Brief outline of the case ................................................................. 106
    Background information ............................................................... 106
    Synergy between standard and public policies ............................ 111
  IP-SUISSE ....................................................................................... 112
    Brief outline of the case ................................................................. 112
    Background information ............................................................... 113
    Synergy between standards and public policies ............................ 117
  SwissGAP ......................................................................................... 118
    Brief outline of the case ................................................................. 118
    Background information ............................................................... 118
    Synergy between standards and public policies ............................ 122

Annex 5. Organisations interviewed .................................................. 123

References .............................................................................................. 125
Tables

Table A1. Common food product attributes ................................................................. 26
Table A2. Organic agriculture in OECD countries..................................................... 52
Table A3. Motivations for organic regulations.......................................................... 53
Table A4. Coverage of organic agriculture regulations............................................. 53
Table A5. Number of control bodies for organic agriculture regulations................. 55
Table A6. Strategic plans for organic agriculture in the OECD (n=22 countries).... 56
Table A7. Policy measures supporting organic farmers ........................................... 57
Table A8. Policy measures supporting organic food marketing channels.............. 59
Table A9. Other measures supporting the growth of the organic sector............... 60
Table A10. Private organic standards................................................................. 61
Table A11. Key data of organic agriculture production in Korea ........................... 96
Table A12. Comparison of practice requirements for Swiss organic farmers (selection) .... 107
Table A13. Checklist for conformity assessments (selection).................................. 112

Figures

Figure A1. Sequences and main actors in the standardisation................................. 15
Figure A2. Certification initiatives........................................................................ 19
Figure A3. Evolution of environmental labelling and information schemes .......... 20
Figure A4. Profitability of selected standards......................................................... 21
Figure A5. Date when first organic regulation passed into law............................. 33
Figure A6. Motivations for organic regulations..................................................... 34
Figure A7. Categories of Competent Authorities implementing regulations ......... 39
Figure A8. Models of control system for organic regulations................................. 41
Figure A9. Motivations for policy support to organic agriculture......................... 45
Figure A10. Environmental motivations for support to organic agriculture .......... 46
Figure A11. Diversity of policy measures supporting organic agriculture............. 48

Boxes

Box A1. An example of contrasted results: impact of GLOBALGAP .................... 22
Box A2. Food safety as a credence attribute ......................................................... 30
Box A3. Organic agriculture in Argentina............................................................. 49
Box A4. Private organic standards in France ......................................................... 76
Box A6. Private agricultural standards in France .................................................. 84
Box A7. The EU Renewable Energy Directive (RED)............................................ 90
Box A8. Dutch organic organisations................................................................. 103
Box A9. Swiss regulations on organic farming...................................................... 109
Box A10. The Credit Point System to assess biodiversity at farm-scale............... 114
Box A11. The Proof of Ecological Performance.................................................... 119
ANNEX 1.

GLOSSARY

**Accreditation**
Procedure by which an authoritative body gives a formal recognition that a body or person is competent to carry out specific tasks (FAO, 2009).

**Audit**
A systematic and functionally independent examination to determine whether activities and related results comply with planned objectives (CAC, 1995).

**Authority**
A body that has legal powers and rights (ISO/IEC, 2004).

**Certification**
A procedure by which official certification bodies, or officially recognised certification bodies, provide written or equivalent assurance that foods or food control systems conform to requirements. Certification of food may be, as appropriate, based on a range of inspection activities which may include continuous on-line inspection, auditing of quality assurance systems and examination of finished products (CAC, 1995).

**Certification body**
Competent and recognised body that conducts certification. A certification body may oversee certification activities carried out on its behalf by other bodies (FAO, 2005).

**Chain of custody**
The concept that all relevant steps in the production chain including the growing, handling, processing and other processes have been inspected or certified as appropriate. In the traceability process the chain of custody refers to the steps needed as a whole to trace a product from the source to the consumer (FAO, 2009).

**Claim**
Any representation which states, suggests or implies that a food has particular qualities relating to its origin, nutritional properties, nature, processing, composition or any other quality (CAC, 2009).

**Code of practice**
A document that recommends practices or procedures for the design, manufacture, installation, maintenance or utilisation of equipment, structures or products. A code of practice may be a standard, a part of a standard or independent of a standard (ISO/IEC, 2004a).

**Competent authority**
The official government agency having jurisdiction (FAO, 2009).
Conformity assessment

Any activity concerned with determining directly or indirectly that relevant requirements are fulfilled (FAO, 2009).

Conservation agriculture

Conservation agriculture aims to achieve sustainable and profitable agriculture and subsequently aims at improved livelihoods of farmers through the application of the three conservation agriculture principles: minimal soil disturbance, permanent soil cover and crop rotations (FAO, 2009).

Environmental labelling

Indication of the environmental impact-related characteristics of a product, typically on the package containing the product, by private or public institutions (UNSD, 1997).

Environmental standard

Standards for materials, products and production processes to ensure that negative impacts on the environment are minimal or kept within certain limits (FAO, 2009).

Environmentally friendly agriculture

Environmentally friendly agriculture includes any type of farming approach that seeks to minimize pollution and degradation of natural resources (FAO, 2009).

Environmental management system (EMS)

The part of the overall management system that includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy. The environmental policy is a statement by the organisation of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets (ISO, 2004).

Farm assurance standards

Standards for agricultural production that emphasises the principles of quality assurance, defined as the part of quality management focused on providing confidence that quality requirements will be fulfilled. Quality requirements are related to traceability, product characteristics and production methods, which may include environmentally friendly farming practices.

Good agriculture practices (GAP)

Application of available knowledge to the use of the natural resource base in a sustainable way for the production of safe, healthy food and non-food agricultural products, in a humane manner, while achieving economic viability and social stability (FAO, 2004).

Hazard Analysis Critical Control Point (HACCP)

Hazard Analysis and Critical Control Points is a systematic preventive approach to food safety and pharmaceutical safety that addresses physical, chemical, and biological hazards as a means of prevention rather than finished product inspection. HACCP is used in the food industry to identify potential food safety hazards, so that key actions, known as Critical Control Points (CCP’s) can be taken to reduce or eliminate the risk of the hazards being realized (FAO, 2009).
Harmonisation

Process by which standards, technical regulations and conformity assessment on the same subject approved by different bodies establishes interchangeability of products and processes. The process aims at the establishment of identical standards, technical regulations and conformity assessment requirements (FAO, 2009).

Inspection

Examination of food or systems for control of food, raw materials, processing, and distribution including in-process and finished product testing, in order to verify that they conform to requirements (CAC, 1995).

Inspection body

Body performing the inspection part of certification. Where a certification body performs its own inspections, the inspection body is identical to the certification body (FAO, 2009).

Integrated pest management (IPM)

The careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keeps pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment. IPM emphasizes the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms (FAO, 2009).

Integrated production

System that mixes plant, livestock, trees and/or fish, produced contemporarily. Emphasis is placed on a holistic systems approach involving the entire farm as the basic unit and on balanced nutrient cycles. Biological, technical and chemical methods are balanced carefully taking into account the protection of the environment, profitability and social requirements (FAO, 2009).

Label

Any tag, brand, mark, pictorial or other descriptive matter, written, printed, stencilled, marked, embossed or impressed on, or attached to, a container of food (CAC, 2009).

Mandatory

Required or commanded by authority; obligatory, compulsory (OECD, 2011).

Normative document

Document that provides rules, guidelines or characteristics for activities or their results (ISO/IEC, 2004a).

Organic agriculture

A holistic production management system which promotes and enhances agroecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, cultural, biological and mechanical methods, as opposed to using synthetic materials, to fulfil any specific function within the system (FAO, 2009).
**Organic agriculture standard**

Organic agriculture standards have long been used to create an agreement within organic agriculture about what an “organic” claim on a product means, and to some extent, to inform consumers. It includes recommended and prohibited practices and substances as well as guarantee requirements (FAO, 2009).

**Participatory certification**

Participatory certification is based on the involvement of those interested in the production and consumption of these products, in the inspectional certification process. Principles and rules for organic certification are conceived and applied with the contribution of all stakeholders – producers, consultants and consumers. Participatory certification can take the form of a participatory guarantee system (PGS) or third-party certification using an Internal Control system (ICS) (FAO, 2009).

**Product standard**

A standard that specifies requirements to be fulfilled by a product or a group of products, to establish its fitness for purpose (ISO/IEC, 2004a).

**Process standard**

A standard that specifies requirements to be fulfilled by a process, to establish its fitness for purpose (ISO/IEC, 2004).

**Provision**

Expression in the content of a normative document, that takes the form of a statement (provision that conveys information), an instruction (provision that conveys an action to be performed), a recommendation (provision that conveys advice or guidance) or a requirement (provision that conveys criteria to be fulfilled) (ISO/IEC, 2004).

**Quality assurance**

Part of quality management focused on providing confidence that quality requirements will be fulfilled (ISO, 2000).

**Regulation**

A document providing binding legislative rules that is adopted by an authority (ISO/IEC, 2004a).

**Regulatory authority**

Authority that is responsible for preparing or adopting regulations (ISO/IEC, 2004a).

**Standard**

Document, established by consensus and approved by a recognised body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context (ISO/IEC, 2004a).

**Standardisation**

The activity of establishing, with regard to actual or potential problems, provisions for common and repeated use, aimed at the achievement of the optimum degree of order in a given context. Standardisation may have one or more specific aims, to make a product, process or service fit for its
purpose. Such aims can be, but are not restricted to, variety control, usability, compatibility, interchangeability, health, safety, protection of the environment, product protection, mutual understanding, economic performance, trade. They can be overlapping (ISO/IEC, 2004a).

**Synergy**

The combined power of a group of things when they are working together that is greater than the total power achieved by each working separately (Cambridge Dictionaries, 2014).

**Technical regulation**

Regulation that provides technical requirements, either directly or by referring to or incorporating the content of a standard, technical specification or code of practice (ISO/IEC, 2004a).

**Traceability**

The ability to follow the movement of a food through specified stage(s) of production, processing and distribution (CAC, 2006).

**Third party**

Person or body that is recognised as being independent of the parties involved, as concerns the issue in question (FAO, 2005).

**Voluntary**

Without any legal obligation (OECD, 2011).
ANNEX 2.
BACKGROUND ON STANDARDS

Standards versus technical regulations

Is there a clear distinction between regulations and standards? Some authors see regulations as a subgroup of standards, while others see them as distinct groups. Indeed, the content of standards and regulations often looks similar as they are normative documents providing requirements. It is therefore important to identify the characteristics that distinguish regulations from standards.

The WTO Technical Barriers to Trade (TBT) Agreement distinguishes standards from technical regulations. The WTO TBT Agreement defines a standard as a document approved by a recognised body, that provides for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It explains that a technical regulation is a document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. Both can include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method by the definition. Following this definition, the two types of normative documents are very similar, possibly exactly same, in the contents, but different in the enforcement of requirements. Therefore a standard may turn into a technical regulation if made mandatory.

There are other views that separate the mode of governance from the concepts of standard and regulation. Henson and Humphrey (2010) point out that the majority of literature sources in social sciences employ the terms ‘private standards’ and ‘voluntary standards’ interchangeably. They find many private standards developed by coalitions of private actors can be called ‘private voluntary standards’ and the standards developed by public authorities with rules backed by legal sanctions ‘public mandatory standards’ which can be more accurately termed ‘regulation’. But they argue that this is not sufficient to describe the variety of private standards and they suggest four combinations of private/public and voluntary/mandatory; i) public mandatory standard (i.e. regulation), ii) public voluntary standards, ii) legally-mandated private standards and iv) voluntary private standards. In this typology, “public” versus “private” refers to where the standard originates from. From this stance, regulations are treated as a type of mandatory standards which is developed by public bodies and backed by legal system, and there is another type of mandatory standards developed by private sectors which are then made mandatory by public authorities. Also, as in the earlier discussion about voluntary versus mandatory standards, it should be born in mind that the meaning of the term mandatory is directly linked to their legally binding force.

Conceptually, the ‘legally-mandated private standards’ can be divided into two different elements. One is a document which contains the rules, guidelines or characteristics for products or related processes and production methods (PPM), similar to those defined in standards that are of voluntary use. The other is a form of order prescribed by governmental authorities which makes compliance to the standard mandatory. If we accept to call the latter a ‘regulation’, then a ‘legally-mandated private standard’ could be interpreted as a hybrid of a ‘private voluntary standard’ and a ‘regulation’. Moreover, we may divide the ‘public mandatory standards’, which Henson and Humphrey (2010) set equal to regulations, into ‘public voluntary standards’ and ‘regulation’ along the same line. In short, we make a distinction between the “content” of the technical requirements and their legal status, i.e. the way the specifications are enforced.
Following this line of thought and highlighting the government involvement with private standards, attention needs to be paid to the activities of governments in standard development. Governments can take different roles, including acting as a setter or manager of standards. They can support activities relating to implementation of standards by various kinds of actions such as funding, promoting, education, setting policy framework, etc. They can also make use of existing standards or induce private sectors to use them.

Though private entities can take similar action to their trading partners and eventually they can make standards de facto needed to access markets, only governments can impose legal obligations and legal penalties. Regulations are “documents providing binding legislative rules, which are adopted by an authority” (ISO/IEC 2004a, emphasis added). Although the classifications may be different in the literature, a regulation is always linked to some legal enforcement, while voluntary standards are never confounded with regulations. In consequence, in the study, it is proposed to follow the distinction between technical regulations and standards in Annex 1 of TBT Agreement:

- **Technical regulation**: A technical regulation is a document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method (WTO, 1995, emphasis added).

- **Standard**: Document approved by a recognised body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method (WTO, 1995, emphasis added).

As regards to the enforcement of the requirements, technical regulations are ultimately enforced by criminal or administrative courts, whereas standards are enforced by public and private certifications bodies (Henson and Humphrey, 2010). Their content may originate in the private or public sector, but what makes regulations different from standards are their enforcement mechanisms.

EU Directives can be categorized as specific cases of regulatory documents, which have a binding force on Member States to achieve a particular result with a certain amount of leeway as to the choice of form and methods to be adopted. It can be distinguished from EU Regulations which become immediately enforceable as law in all member states simultaneously and do not require any implementing measures.

**The standardisation process**

Before focusing on environment-related standards, the section will elaborate on the different steps of standardisation and the main actors involved. Six sequences have been identified in the standardisation process, from the identification of common issues and needs by stakeholders, to the enforcement of standards at the scale of agricultural holdings and other individual operators in food chains. This schematic overview is useful to emplace the interactions between standards and public policies. The main actors and their position in the six sequences are summarized in Figure A1.

1. **Strategizing.** Interested parties within the industry, the civil society, and/or government agree on the need to develop voluntary standards to achieve some common goals. They rally in a coalition and set strategic objectives.

2. **Organisational design.** The coalition defines the responsibilities for the development of standards and the duties for the management of related label and certification scheme. If there is no already existing organisation or relevant working party within an active organisation, interested parties may establish a standardising body as a formal legal entity.
Members of the coalition define the legal status of the body (i.e. public, non-profit, for-profit), the objectives of the organisation and its governance.

3. **Standard design.** The requirements and compliance points are drafted by technical committees, generally made of coalition’s members and external experts. Members of committees are representing their institution or act on a personal basis. Other stakeholders and the public may be consulted in the process. Standards are periodically reviewed and released.

4. **Certification scheme implementation.** Control bodies providing inspection and granting compliance certificate are recognised and overviewed by the standardising body, one of its specialised committee, or potentially through a delegation to another organisation. The standardising body promotes the standards and related label; provide guidance to would-be candidates to certification. Other entities, such as food buyers, producer cooperatives, professional bodies, extension services, non-governmental organisations (NGOs), donors, governments, are also involved in providing advice and support to farmers.

5. **Monitoring.** Individual operators enrolled in the scheme, e.g. farm holdings, food processors and traders, have to show compliance to standards, through record checking, on-site inspection, and product testing.

6. **Enforcement.** In case of non-compliance, remedies are provided, as well as different sanctions and penalties applied by the certification body (e.g. fines, periodical removal of certificate). In the process, litigation may arise. Disputes are solved through appeal procedures when they exist.

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**Figure A1. Sequences and main actors in standardisation**

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**Source:** OECD.
**Standard design**

*Public standards* are developed and maintained within central and regional governments, or within international organisations as the result of an agreement between participating governments. Stakeholders from the industry and the civil society are usually consulted in the process. For instance in the United States, organic standards are developed by the USDA/National Organic Program (NOP), in consultation with the industry and the National Organic Standards Board (NOSB), a fifteen member advisory committee appointed by the Secretary of Agriculture, which includes farmers, organic food handlers and retailers, environmentalists, consumer interest advocates, and others. In the EU, the European Commission works with the Advisory Group on Organic Farming (AGOF) that brings together representatives of different technical and economic interest groups, such as IFOAM, BEUC (consumer association), COPA/COCEGA (farmers and cooperatives) and others, to support its decision-making in matters of organic agriculture. Likewise, the OECD Agricultural Codes and Schemes are discussed by delegations of Member and non-Member countries, in close co-operation with specific non-governmental and industrial organisations, for example the International Seed Federation for the OECD Seed Schemes (OECD, 2012).

For their part, *private standards* can be established and maintained in several ways:

1. Through a formal industry collaboration, within standardising bodies having international, regional or national aim. Examples of those multi-sector standardising bodies include the International Organisation for Standardisation (ISO), publisher of the ISO 14000 family of standards related to environmental management systems, the European Committee for Standardisation (CEN) currently leading an initiative on sustainably produced biomass for energy applications, and the French *Association Française de Normalisation* (AFNOR) publisher of an environmental standard with application to the agricultural sector.

2. Product or industry-specific standard-setting organisations, professional and trade associations (OECD, 2010c). As regards to primary production, this include standards of good agricultural practices developed by regional consortium of retailers, such as GLOBALGAP in Northern Europe, and their counterpart in export-oriented value chains, for example the ChileGAP standards developed by the Association of Exporters from Chile.

3. Partnerships between the industry, NGOs and other stakeholders. Examples are the numerous private organic standards, the Fairtrade (FLO) and UTZ Certified labels and the fast-growing single-commodity “sustainability” standards in rapeseed, sugar, palm oil and biofuel production.

4. Autonomously, within single companies such as food processors and retailers, with varying degrees of consultation with suppliers, the civil society and other stakeholders.

In the latter case, some will dispute that the outcome may be called a “standard”. As regards to the final purpose of standards as put forward by ISO (common and repeated use), it may be suggested that the specific rules defined by single firms to manage their procurement ’will not be appropriately called a standard. However, in the context of the study, we are following an extensive definition of standards, that also includes “individual firm standards” (Henson and Humphrey, 2010), also called “proprietary standards” in the literature (Hobs, 2010). Examples are Nurture (Tesco), *Natur* (Eroski), *TerraSuisse* ( Migros), Quality Line (Carrefour), Field to Fork (Marks and Spencer’), C.A.F.E. Practices (Starbucks), and Conservation Grade (Jordan).

As regards to governance, the ISO Guide 59 on good practice in standardisation emphasise the role of interested parties and on consensus in the drafting and revision of standards (ISO, 1994). To clarify the definition of “international standards”, on which mandatory regulations shall be preferentially based according to TBT, a decision of the TBT Committee had put forward six principles that should be observed in the development of standards: 1) transparency, 2) openness,
3) impartiality and consensus, 4) effectiveness and relevance, 5) coherence, and 6) the development dimension, i.e. improving the participation of developing countries (WTO, 2011). The ISEAL Alliance, a platform that defines guidelines for its member organisations (e.g. Forest Stewardship Council, Rainforest Alliance) has published its Code of Good Practice (ISEAL, 2010). Under the influence of WTO law, the Code advocates transparency, consultation, strives for consensus, non-discrimination and the balance of interests among stakeholders (Arcurri, 2013).

The governance of standard design can be complex, as illustrated below by the cases of GLOBALGAP, the Roundtable on Sustainable Palm Oil (RSPO) and Carrefour’s Quality Line.

GLOBALGAP is an initiative from the food industry, founded as EurepGAP in 1997 by the Euro-Retailer Produce Working Group (EUREP). Membership is open to three groups of stakeholders: retailers, producers/suppliers and associates engaged in the food industry or standard-setting activities. The consortium is represented by a Secretariat based in Germany, responsible for the management and the implementation of the standards (Hachez and Wouters, 2011). A Board is in charge of determining the strategy, designing the standard-setting procedure, adopting standards and rules, and providing the legal framework for regulating the certification bodies; it is made of an equal number of elected producer and retailer representatives. Technical Committees are responsible for developing and defining the standard criteria, for the three categories of commodities (Crops, aquaculture and livestock); members are retailers and supplier representatives elected by their peers. In addition, several committees provide guidance to the Board and the Technical Committees. Stakeholder Committees are responsible for proposing changes in standards and for reviewing standard drafts; the different working groups are concentrating on specific topics, such as crop protection or microbiological risk; they are made up industry experts that include GLOBALGAP members, non-members, NGOs, retailers and suppliers. Moreover, national Technical Working Groups (NTWGs) in several countries have been developed to identify specific local adaptation and implementation challenges and develop national interpretation guidelines from the input of local experts (Hachez and Wouters, 2011).

The Roundtable on Sustainable Palm Oil (RSPO) is an initially informal imitative from WWF-Switzerland, formally established as an association in 2004, with a Secretariat established in Kuala Lumpur. It brought together food manufacturers (notably Unilever), retailers, palm oil traders and processors, and financial institutions. The certification scheme for sustainable palm oil started in 2007 (Schouten and Glasbergen, 2011). All decisions on the RSPO scheme are held on a majority vote by the ordinary General Assembly, made up of ordinary members from the different stakeholder groups, with a strong representation of processors and traders (about seven times as many as there are NGO representatives). The sixteen members of the Executive Board in charge of executing the decisions are elected by the General Assembly, with an allocation of seats for each group (i.e., oil palm growers, processors, consumer goods manufacturer, retailers, banks/investors, environmental NGOs, development NGOs). Different Standing Committees and other working groups are appointed by the Board; composed of ordinary members, affiliate members (with an observer statute in the General Assembly) and eventually other stakeholders, they are working on a consensus base on specific and potentially contentious issues such as technical criteria, verification and communication. Guidance on standard setting is also provided through public consultations (Schouten and Glasbergen, 2011).

Carrefour’s Quality Line (Filière Qualité) is a third-party certification programme developed in 1992 by the French retailer Carrefour SA to manage its supply and differentiate shelves with a specific range of high-quality products (Carrefour, 2012). The retailer is responsible for the development of numerous standards for production and food processing, in collaboration with selected suppliers. In France, for each of the 68 different products in the range, the requirements are drafted by working groups, consisting of the retailer’s quality managers, farmers and food processors. In Europe, Asia and Latin America, Quality Line products may have the same specifications than in France or be developed by the company’s subsidiaries. As standard-setting rules and the baseline definitions of
good practices shall be the same for all countries, a permanent team travels abroad, providing guidance
to the subsidiaries and overseeing standard development.

More broadly, standardising bodies increasingly adhere to the principle of subsidiarity and favour
the tailoring of environmental and social requirements to local contexts. This is achieved through the
inclusion of local stakeholders in standard-setting, as well as through development of regionally
specific standards (IISD/IIED, 2014).

Implementation of certification schemes

In the terminology of the Codex alimentarius, certification is “a procedure by which official
certification bodies, or officially recognised certification bodies, provide written or equivalent assurance that foods or food control systems conform to requirements” (CAC 1995). Certification
schemes may be related to voluntary initiatives from the private sector and government, which are the
topic of this report, as well as to mandatory regulations (Figure A2).

Certification is done by independent third-parties called certification bodies or certifiers. This
contrasts with the first-party monitoring (self-assessment by the producer) and second-party
monitoring (verification by the buyer) of technical requirements (Dankers, 2003). However, in the
case of group certification, the external certification body delegates the inspection of individual
farmers to another entity, generally a producer cooperative or a purchasing company. Group
certification is popular in organic agriculture (Bolwig et al., 2009). The possibility is also open by
several private standards (e.g. option 2 in GLOBALGAP).

Third-party certification is handled by private and governmental entities. The former include a
diversity of businesses: small and large sized; operating in a single country, a region or worldwide;
generalists of certification and audit services (e.g. Bureau Veritas, SGS Global Services, NFS
International), as well as specialists of sustainable products (e.g. IMO Control); dealing exclusively
with agriculture, or even on a sub-sector such as organic certification.

There are numerous certification schemes in agriculture and foodstuffs. A study-inventory for the
European Commission listed more than 424 active schemes within EU-27 in 2010. Holders of
schemes include government and public agencies, consumer and civil society NGOs, certifiers, as well
as all operators along the value chain: producers of agricultural inputs, providers of farm services,
farmer associations, slaughterhouses, processing business, wholesalers, traders, and retailers. About
58% of the schemes reported in the inventory are related to environmental issues: environmental
management (67), organic farming (84), integrated crop/pest management (47), sustainable use of
resources and climate change (50) (Areté, 2010). In organic farming, private certifiers are important
initiators of certification schemes: according to IFOAM, on 576 organic certification bodies
worldwide (from 85 countries), 121 have developed their own private standard (Bowen, 2013).

Before the certificate may be granted to an operator, conformity assessment is determining that
the relevant requirements are fulfilled, through information processing, product and on-site
inspections. The body that performs the inspection part of certification is generally identical to the
certification body, but they may also be separate entities.

The formal recognition that a certification body is competent to carry out conformity assessment,
in a consistent and reliable manner, is granted by independent accreditation bodies, in reference to ISO
Guide 65 (ISO, 1996) or similar international guidelines. Accreditation bodies, which may be private
or governmental, are themselves operating in accordance with the requirements of international
guidelines, such as ISO/IEC 17011 (ISO/IEC, 2004b).
In their mechanism to approve certifiers, private standard owners may supplement accreditation against external guidelines with their own requirements. In the case of public standards laid down or referred in legislation, an authority is in charge of approving certifiers directly or by delegation from government. In the United States, a private or governmental entity seeking accreditation to certify according to National Organic Program (NOP) should submit an application to USDA Agricultural Marketing Service. In the European Union, private bodies willing to do inspection and/or certification according to Council Regulation (EC) 889/2008 should be recognised by the competent authorities of Member States. One prerequisite for certifiers is to be accredited according to ISO Guide 65 or EN 45011 by national accreditation bodies (e.g. Entidad Nacional de Acreditación in Spain).

**Standards and labelling**

A label is “any tag, brand, mark, pictorial or other descriptive matter, written, printed, stencilled, marked, embossed or impressed on, or attached to, a container of food” (CAC, 2010). Labels may be related to standards, or unrelated; for example self-declared claims are not necessarily based on a product or PPM standard. Conversely, B2B standards are generally not associated with a specific logotype or mark. The label may also have been introduced later in the life of the standard.

The OECD study on environmental labelling and information schemes reports 139 labels related to food and agricultural products. As shown in the combined OECD-Ecolabel Index dataset (Figure A3), there has been a regular increase of labels in the sector, although other sectors, such as energy and transportation, have been growing more quickly in recent years (OECD, 2013a).
Impacts of voluntary environmental standards

With respect to the impact of voluntary standards, studies undertaken by the OECD in Chile and several developing countries identified good opportunities to access modern food chains, but also simultaneously the potential exclusion of small producers that lack human and capital resources, and face high upfront costs in adopting the standards required by their foreign customers (OECD, 2007). In recent years, studies on the topic have flourished within academic, government, and intergovernmental agencies, in particular the FAO (Loconto, 2013; Loconto and Dankers, 2014) and the International Trade Center (ITC, 2011a, 2011b).

The ITC review reports about twenty quantitative studies, from ‘agency reports to peer-reviewed journal articles, which assess the socioeconomic and environmental impacts of private standards at farm-level – using counterfactual situation and econometric technique to correct for selection bias in observational data (ITC, 2011a). Bearing in mind the diversity of empirical methods and subsectors surveyed, the report concludes with a “cautious optimism” about the impact on farmers’ income and well-being. Private standards are often associated with increased business opportunities, such as guaranteed sales for certified produce, better access to credit and other scarce resources, and even technical benefits such as higher yields, even though in some cases additional compliance costs exceed extra earnings (ITC, 2011a).

An even more nuanced picture emerges from the recent literature review conducted by the FAO on a total of 101 studies dealing with the impact of voluntary standards on smallholder market participation (Loconto and Dankers, 2014). The survey shows that the published literature is
concentrated on few standards, essentially GLOBALGAP, Fairtrade and organic, with a focus on two sectors (coffee and horticulture) and a limited number of countries in Latin America (Mexico, Peru, Costa-Rica) and Africa (Kenya, Uganda). In a number of those studies, the impacts of standards are assessed with more or less rigorous approach and different methodologies, ranging from case studies to econometrics controlling for selection bias. The reported impacts include yields, quality, price, production costs, compliance costs, profit, knowledge or capacity building, and reputation effects, each study reporting unfortunately only two or three of the indicators.

Figure A4. Profitability of selected standards

Despite this limitation and the different caveats highlighted in the literature review, the conclusion is of a simultaneous increase of revenues and costs for smallholders. However, the survey clearly illustrates the heterogeneity in the results and the difficulty to conclude on profitability, taking into account the benefits and the additional costs for farmers (e.g. yield, production and compliance costs). For the two most studied standards, organic and Fairtrade, profitability may increase, decrease or remain the same, depending on the study (Figure A4).

For other standards, it is not possible to conclude, due to limited papers and contradictory results. More generally as regards to impact assessment, in their conclusion, the authors point out the “relatively weak” evidence on the causal impact of voluntary standards on smallholders in developing countries, and the “extremely context-specific” influence of standards (Loconto and Dankers, 2014). For example, in the case of GLOBALGAP, the few rigorous studies available have provided contrasted results, as regards to small-holder inclusion, farmer and firm workers’ benefits (Box A.1).

On the question of the trade impact of voluntary standards (are they trade-catalysts or trade-restrictive?) the empirical literature is unfortunately thinner and inconclusive. The few papers published and the lack of broadly comparable data make it impossible to draw general findings.
Box A1. An example of contrasted results: impact of GLOBALGAP

In Kenya, the survey of 539 small-scale farmers growing high-value vegetables shows that GLOBALGAP has a positive and significant causal impact on the net income of farmers, with a 24% higher crop revenue per hectare. Growers also benefit from the changes in pest management practices: although certification does not significantly reduce total pesticide expenditures, certified producers use safer pesticides based on the WHO classification (Asfaw et al., 2009; Asfaw et al., 2010). Also in Kenya, a survey of 249 growers of French beans shows a positive effect of GLOBALGAP on producer prices, with a premium of 12% and 25% depending of the season (Kariuki et al., 2012).

In the case of lychees in Madagascar, an econometric analysis of a survey of 505 growers based on natural experiment shows a positive average impact of certification on quantities sold and farm-gate prices. However, the positive impact of GLOBALGAP is not homogenous and concentrated on a small number of farmers in the supply chain; therefore the overall impact of certification on development in the region remains limited according to the authors (Subervie and Vagneron, 2013).

Other quantitative studies show that private standard lead to changes in the structure of supply chains, often leading to increased “exclusion” of smallholder producers. The analysis of a sample of 87 Peruvian firms exporting asparagus shows a causal effect of certification on the sourcing strategy of traders. Overall, the introduction of farm gate standards leads to more vertical coordination and increased exclusion of smallholder producers. Regarding individual certificates, the adoption of GLOBALGAP decreases external sourcing by 36% on average and sourcing from smallholders by 68% (Schuster and Maertens, 2013a).

Also in Peru, a survey of 213 fresh mango smallholders provides mixed results. Although only a small proportion of growers are complying with GLOBALGAP, those certified producers are not necessarily larger than others; but they are more specialised in mango and maintain stronger ties with the buyers through contract farming, e.g. written contract and advance payment (Lemeilleur, 2013). In Morocco, a survey of 86 growers shows that GLOBALGAP is widespread in the export-orientated early vegetable sector; "early adopters" of the certification are more often vertically-integrated producers with their own packing station, and large farming size (2.25 times higher than followers, and four times higher than non-certified growers) (Aubert et al., 2013).

Looking at the impact on workers in export companies, a survey of 268 individuals employed in horticultural trade companies in Senegal (mangos and green bean) shows that certification is associated with an increase in workers’ daily wages and longer employment period during the year, but not with more secure contracts (Colen et al., 2012).

The trade impact of standards in the agri-food sector may be quantified with ex ante simulation or ex post empirical estimation with econometric models (Korinek et al., 2007). In the former, partial equilibrium models are used to measure the impact of standards on exports with tariff equivalents, and on consumer and producer welfare, from the simulation of demand and supply shifts in exporting and importing countries. The latter includes two broad families of approaches: i) gravity-based models that make use of aggregated panel data to explain bilateral trade flows from a set of explanatory variables, including some quantitative measures of standards (e.g. frequency and coverage, pesticide maximum residue levels); ii) models of individual firm export decisions, based on cross-sectional or panel firm-level data (Korinek et al., 2007).

Gravity models have been used to assess the trade impact of technical regulations in the agrifood sector, including mandated HACCP requirement for the seafood industry in the United States (Anders and Caswell, 2009), mandatory Sanitary and Phytosanitary Standards (SPS) for processed food (approximated by the incidence of detention in importing country) (Jongwanich, 2009), the level of pesticide maximum residue limits (MRL) for chlorpyrifos insecticide in vegetable production (Chen et al., 2008), and the similarity/dissimilarity of MRL regulations in apples and pears (Drogué and DeMaria, 2012). We are not aware of similar study for voluntary standards, with the exception of a recent paper on Chilean fresh fruits exports, which uses stringency-perception indexes for four categories of regulations and standards: phytosanitary, quality, MRL, and Good Agricultural Practices (GAP). Whereas the gravity model shows no significant impact for phytosanitary and quality indexes, MRL stringency appears to have a negative impact on trade from Chile, and conversely GAP standards have a positive and highly significant impact on exports (Melo et al., 2014).
Going to individual firm models, compliance with ISO 9000 certification improves the export performance of Pakistani firms in agri-food and textile sectors (Masakure et al., 2009). As regards to the causal impact of GLOBALGAP, a cross-sectional analysis of 102 fresh produce export firms in sub-Saharan Africa shows that certification increases the value of export revenues (Henson et al., 2011). Conversely, a longitudinal study on the transactions of 569 export firms from 1993 to 2011 in Peru refute the “standards-as-catalyst” point of view: even if there is a difference in export performance between certified and non-certified asparagus exporters, it is not possible to show a causal effect of certification on export performance (Schuster and Maertens, 2013b).

Standards and the efficiency rationale for government intervention

This section summarizes the efficiency rationale for government initiatives in standard-setting, product labelling and the regulation of private standards and labels. First, the fundamental information problems that create a need for labels and standards are explained. Next, these problems are analysed from the point of view of consumers and discussed under what conditions and using which mechanisms the market could overcome the information problems. Information problems faced by businesses in a business-to-business setting are discussed and again the cases in which market mechanisms could provide a solution. Subsequently the question of what role government intervention can play to complement or improve upon these market mechanisms is examined. Special attention is given to policy options regarding labelling and standards.

Information and product attributes

The fundamental reason why labels exist is that market participants often lack accurate information about the attributes of a product or service. Depending on how easy or difficult it is for participants to obtain the necessary information, these attributes can be grouped in three categories (Nelson, 1970; Darby and Karni, 1973).

A first category contains search attributes: attributes which a market participant can easily distinguish even before making a first purchase. A consumer buying an apple may look for apples with a certain size, shape, or colour; it is easy for buyers to search the apple with the preferred attributes.

A second category is that of experience attributes: attributes which a market participant can only learn about after having consumed the product. The taste of an apple would be an example. Consumers can only learn through experience whether the apple has the taste they were looking for.

A third category concerns credence attributes: attributes which cannot be verified before or after consuming the product. For instance, a consumer may prefer apples from a specific region, or apples from organic agriculture. Even after consuming the product, the consumer cannot easily verify whether the product has the desired attributes. Credence attributes often refer to production processes, as is the case for e.g. dolphin-safe tuna, free-range poultry, and so on (Roe and Sheldon, 2007).

The distinction between the different categories can be interpreted in terms of the costs a market participant would need to incur in order to discover accurate information about the attributes. In general, these costs will be lowest for search attributes and highest for credence attributes. However, even within the categories there may be variation in the information costs. While for some search attributes (e.g. the colour of an apple) the costs are negligible, in other contexts it may still be difficult or costly for buyers to gather and compare the necessary information (e.g. in buying a car or certain financial products). Likewise, for some credence attributes it may be possible (but costly) for a buyer to verify whether the attributes are present (e.g. when buying apples which the retailer claims are coming from a local farm), while for other credence attributes this may simply be impossible or prohibitively costly (e.g. in verifying whether the various parts of a smartphone were made in acceptable labour conditions). From this perspective, the cost of verifying an experience attribute is the cost of consuming the good or service for the first time (Nelson, 1970).
Market efficiency for different attributes

Information problems can seriously hinder the efficient functioning of the market. However, not all attributes create the same challenges. Below, market efficiency is discussed for the three categories of attributes, with a particular focus on how and under what circumstances the market would provide buyers with products with their desired attributes despite the obstacles posed by information problems.

Search attributes

For search attributes, the information cost to buyers is generally lowest. When this cost is negligible, buyers can simply choose the product with their preferred attributes. There is thus a strong pressure on sellers to provide products with the attributes preferred by buyers. When information on these search attributes is easily available to both buyers and sellers, there are no major information problems preventing the functioning of the market.

Experience attributes

For experience attributes, the situation is more complicated. Before using a product, a buyer has no information on the experience attributes. On the other hand, sellers know the attributes of their products. There is thus a situation of asymmetric information which can potentially prevent the market from functioning properly.

In particular, sellers might be tempted to falsely advertise their product as having desirable experience attributes. A first consequence is that buyers may be deceived. However, once buyers take into account this possibility, they would distrust products advertised as being high quality, and they would refuse to pay the quality premium necessary to cover the extra costs of providing this higher quality. As a result, sellers of high-quality products would find it difficult to sell their products, and buyers who are looking for high-quality products would find it difficult to find these products. Even though both buyers and sellers would be willing to trade high-quality products, information problems might prevent this from happening – a situation known as “adverse selection” (Akerlof, 1970).

However, there exists a possible market-based solution to this problem. Sellers could invest in building a reputation for providing high-quality. Sellers with a good reputation who are trusted by buyers would be able to charge a quality premium which covers the costs of providing the high-quality good. Sellers with a good reputation will keep on providing high quality as an investment in future reputation as long as the potential gain of cheating buyers in the short run does not weigh up against the loss of reputation and future income from quality premiums (Shapiro, 1983; Klein and Leffler, 1980).

For this mechanism to work, however, a number of conditions should be satisfied. First, if sellers are too “impatient”, they might prefer the short-term gain of cheating buyers over the loss of future quality premiums. Second, the reputation mechanism will only work if negative experiences for one buyer have a considerable effect on the reputation of the seller. If buyers do not engage in repeat purchases, there is little to be gained for a seller from investing in providing the buyer with high quality. Moreover, if there is no information flow from existing to future buyers about their experiences with sellers, providing high quality to a buyer would not result in a higher reputation and higher future quality premiums. In this case, sellers will not have an incentive to invest in higher quality.

The role of repeat purchases can be clearly seen in some touristic destinations. If the likelihood is low that a guest in a hotel or restaurant will return, the incentive for the owners to provide good service is low. This problem can be overcome if existing buyers share their experiences with future buyers, as increasingly happens through online quality ratings.
These observations also explain the importance of brands and trademarks. A seller has little or no incentive to invest in high quality to build his reputation if his competitors can simply use the same brand name and thus ‘free ride’ on his efforts. In order for a reputation mechanism to work, brand names and trademarks should be protected.

One particular example of the problem of ‘free riding’ on reputation concerns products protected by a geographical indication (GI). A GI is a collective label used by producers from a given region, such as the Protected Designations of Origin (PDO) for wines and other regional products in the European Union, or the American Viticultural Areas (AVA) in the United States. Consumers often identify products by their GI and not necessarily by the individual producer. In this case, if an individual producer invests in providing high quality, this positive contribution to the reputation of the product is shared by all other producers in the GI region, including those who did not invest in providing high quality. The collective reputation thus creates a temptation for individual producers to ‘free ride’ on others’ efforts to provide high quality (Winfree and McCluskey, 2005).

Credence attributes

The third category, credence attributes, poses more serious problems for the market provision of quality (Darby and Karni, 1973). With credence attributes, consumers cannot easily ascertain the quality of a good either before or after consumption.

The asymmetric information problem described earlier for experience attributes arises for credence attributes as well: while buyers may in theory be willing to pay a premium for goods with good credence attributes, the market will not function if sellers are unable to convincingly demonstrate that their products have these attributes. In contrast with experience attributes, the reputation mechanism does not function efficiently for credence attributes since buyers cannot easily verify after consumption whether the seller’s claim regarding the product was true or not (See Box A2 for the question of food safety).

For some credence attributes, transparency on behalf of the seller and efforts by social actors (such as NGOs) can overcome the information problem. For instance, NGOs might investigate companies’ labour practices, environmental impact or respect for human rights and publicize the results of their investigations. This “spotlight effect” (Spar, 1998) could provide an incentive for sellers to provide the credence attributes buyers want.

Another possible solution to the problem of credence attributes is that companies ask a third party to verify and vouch for the presence of the attributes desired by buyers. For instance, an independent company could inspect the production processes of the seller and confirm that these are consistent with the principles of organic farming. The certifier could award a label to the product, thus transforming the attribute from a credence attribute to a search attribute. However, such independent certification will only work if the certifying company itself is credible in the eyes of buyers (Leland, 1979).

Table A1 gives an overview of some common food attributes and their classification as search, experience or credence attributes.

From attributes to products

The discussion so far deliberately referred to attributes and not to goods, as is sometimes done. Following Lancaster (1966), products can be considered as a “bundle” of attributes, some of which will be search attributes while other attributes may be experience or credence attributes. Thus, the size and colour of an apple are search attributes; the taste of the apple is an experience attribute; and whether the apple originates from organic agriculture is a credence attribute.
As a result, market inefficiencies will manifest themselves at the level of attributes. If left by itself, the market may provide apples with the size and colour desired by consumers; and the reputation mechanism may ensure that apples have the right taste. However, these apples may still lack the desired credence attributes. The distinction between attributes and products is useful, since consumers may (correctly or incorrectly) rely on search or experience attributes to make inferences about credence attributes. Search or experience attributes can thus become substitutes or complements for credence attributes, and this will in turn affect incentives for producers (Grolleau and Caswell, 2006).

<table>
<thead>
<tr>
<th>Table A1. Common food product attributes</th>
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<tr>
<td><strong>Search</strong></td>
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<tr>
<td>Quality</td>
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<td>Food safety</td>
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<td>Animal welfare</td>
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<td>Environment</td>
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<td>Labour</td>
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*Source: OECD.*

**Business-to-Business transactions**

Up to this point, examples are used of consumer choice to illustrate the effect of information problems. However, market participants in a business-to-business (B2B) setting face similar problems. In purchasing inputs, businesses may look for goods with certain search attributes which are easily checked such as dimensions, weight, colour, and so on. Some other characteristics such as the reliability and maintenance costs of equipment may only become clear after using the goods and are therefore experience attributes. Businesses may also care about credence attributes, as e.g. when a clothing chain wants to ensure its supplies were made in acceptable labour conditions.

Since businesses often have specialized needs and specialized expertise, they can be expected to have better information than consumers might have in a comparable context. Nevertheless, many of the arguments previously made about information problems and market solutions carry over to the B2B context.

In the B2B context a further distinction can be made in terms of the motivation for businesses to care about certain attributes. In general, these motivations fall into two categories, which we can call “derived demand” and transaction costs considerations respectively.

**Derived demand considerations**

A first motivation for businesses to care about certain attributes is driven by the downstream demand for their products and hence, ultimately, by consumer demand. For instance, if consumers demand food from organic agriculture, and if an institutional context is in place to ensure that businesses cannot make any false claims, retailers selling organic products to consumers will in turn need to find suppliers able to provide these products. The attributes demanded by consumers are thus translated into attributes demanded by companies to their suppliers.

The derived demand effect is particularly important for credence attributes such as whether food derives from organic agriculture, whether products are “fair trade”, or whether products were made under good environmental or labour conditions. Moreover, the derived demand effect is also important for food safety issues.
Transaction costs

As discussed previously, the different categories of attributes imply different information costs to buyers. For search attributes, the cost to the buyer of acquiring the necessary information will generally be lowest. However, some search attributes may still involve considerable information costs to buyers. For instance, for many agricultural commodities it would be possible but cumbersome for buyers to verify the exact physical properties of the commodity. For quantifiable attributes, a solution is the use of “grades” – a system of classification by a third party based on objective parameters (cfr. infra). When standardised grades are used, the information costs for buyers are reduced, thus facilitating market transactions.

Similarly, for experience attributes such as the reliability of a supplier, a buyer may wish to avoid or reduce the transaction costs of discovery through trial-and-error. Private standards such as ISO 9001 may indicate that a supplier meets minimal quality requirements; this signal reduces the transaction costs for the buyer.

Apart from information problems, in some interactions the buyer may also impose standards and procedures on suppliers to ensure that the supplier’s processes are smoothly coordinated with those of the buyer. Such standards create homogeneity, which reduces handling costs and leads to economies of scale.

Many standards introduced in a B2B setting are a combination of both transaction cost and derived demand considerations.

Third party certification

An important issue regarding third-party certification is the reliability of the certifier. Without external control, the reliability of third-party certification would itself become a credence good, as consumers are unable to verify the integrity of the certifier or the thoroughness with which the certifier screens producers.

From the point of view of the certifier, four factors determine the optimal amount of inspection to be carried out (Jahn et al., 2005). Increasing the quality of inspections would lead to greater direct costs (e.g. due to higher labour costs), together with a higher opportunity cost of losing the producer as a client. On the other hand, reducing the quality of inspections would increase the risk of a loss of reputation for the certifier, or of costs due to liability. This suggests four ways of improving or guaranteeing the quality of third-party certification (Jahn et al., 2005).

First, alternative ways of organising inspections might reduce the direct costs of offering a good quality of inspection. One way of reducing costs is to move towards a risk-based inspection system. As shown by Gambelli et al. (2014), the risk of violating the requirements of organic farming can be predicted by previous noncompliance, as well as by farm size and complexity of operations. However, the data currently recorded by control bodies are insufficient to implement an effective risk-based approach.

Second, the risk of losing the producer as a client could be reduced in several ways. One approach is to grant a monopoly to a single certification body, removing the possibility for producers to engage in “opinion shopping” to select the most lenient certifier (Lennox, 2000). Another solution is to prohibit certifiers to take on clients representing a large share of their revenues, to prevent moral hazard problems. Other solutions are a forced rotation of certifiers or forced long-term contracts.

Third, increasing the potential reputation loss for certifiers would also improve the quality of third-party certification. As Jahn et al. (2005) note, at present buyers have only limited information about the performance of certifiers. One solution might be to publish rankings based on detected fraud by different certifiers.
Fourth, increasing liability costs for the certifier in case of fraud would provide another way to guarantee the quality of third-party certification. Jahn et al. (2005) note that this can happen by increasing the probability of fraud detection, increasing the probability of liability, and increasing the costs or fines in case of liability.

**Private standards and regulations**

Given the information problems outlined above, an important policy question is to what extent the provision of desirable attributes can be achieved using private initiatives, and when public initiatives are useful or necessary. We first discuss specific private and public initiatives related to search attributes, experience attributes and credence attributes. In the next section, we discuss more general policy options for governments.\(^1\)

**Search attributes: the role of grading**

As mentioned before, for search attributes (i.e. attributes which the consumer can verify before consuming the good) the market will generally be able to achieve the provision of the desired quality. However, when information costs for search attributes are high, and when search attributes are quantifiable, transaction costs for market participants can be reduced by the provision of grading.

Grading depends on a set of rules by which commodities are classified according to quantifiable attributes such as weight, purity, and so on. Using these definitions and specifications, commodities can be grouped into homogeneous categories. For instance, in the United States the Department of Agriculture sets standards for barley, defining the exact biological variety (*Hordeum vulgare*) which can be considered ‘barley’ and distinguishing between different types such as six-rowed blue malting barley or two-rowed barley. The grading system specifies grades based on the weight per bushel, the percentage of ‘sound’ barley, the maximum percentage of damaged barley, the maximum percentage of foreign material, and so on. Such definitions greatly reduce transaction costs for market participants (Giovannucci and Reardon, 2000; Clayton and Preston, 2003). In theory this function could be fulfilled by a private body, although historically grading has been mostly the domain of government (Gardner, 2003).

One possible drawback of grading is that homogenization may give producers the wrong incentives. For instance, the original beef grading system of the USDA rewarded quantity over quality and seems to have induced a decline in quality over time (Ferrier and Lamb, 2007). A second problem with grading is that the measurement system is not perfect; this may reduce the incentives to produce high-quality products (Chalfant et al., 1999).

**Experience attributes: Trademark law**

For experience attributes (i.e. attributes which the consumer can only evaluate after consuming the good), reputation mechanisms can lead to the provision of quality, as discussed above. Public initiatives are necessary to provide an institutional framework in which the reputation mechanism can function, however. For instance, legislation to protect trademarks is necessary to prevent fraud and free-riding by competitors.

A trademark is a “word, symbol, or other signifier used to distinguish a good or service produced by one firm from the goods or services of other firms” (Landes and Posner 1987, p. 268). A trademark thus allows consumers to unambiguously distinguish between products from different firms.

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1. Discussion here is limited to those attributes for which the government does not find it necessary to set mandatory quality levels (Cf. Chapter 2 in main report). Such “minimum quality standards” (regulations in our terminology) are discussed in OECD (2009).
The reputation mechanism as identified by Shapiro (1983) and Klein and Leffler (1981) relies on consumers’ ability to “reward” high quality production by repeat purchases. Without trademark protection, firms would have little incentive to invest in high quality, since any low-quality firm could sell its goods under the brand name of the high-quality firm and free-ride on its good reputation. Instead of rewarding high quality production, the benefits of building a good reputation would thus go to the free-riding low quality producer.

By contrast, trademark law creates “brand equity”, the value of the reputation of the high-quality producer (Shapiro, 1983). Thus, a legal and institutional framework is necessary to make the reputation mechanism function (Landes and Posner, 1987).

Credence attributes: Regulation of information

Since private initiatives are less likely to lead to a desirable supply of credence attributes (i.e. attributes which the consumer cannot verify), government initiatives are most likely to be found in this domain. An important distinction here is whether the credence attribute is a ‘good’ or a ‘bad’, i.e. an attribute consumers desire in their product (e.g. fair trade) or an attribute consumers wish to avoid (e.g. pesticides). In the absence of government initiatives, producers might falsely advertise desirable credence attributes and/or neglect to inform consumers about undesirable credence attributes of the product. The appropriate government policy will be different: on the one hand the government wants to prevent private actors to give false impressions about desirable credence attributes; on the other hand the government wants to induce private actors to give accurate information about undesirable credence attributes.

Regulating positive claims

For desirable credence attributes, the government will often ban misleading or false advertising. Consumer protection authorities regulate labelling claims and advertisement under laws prohibiting misleading and unsubstantial claims about product and process properties. The general principle is enumerated in Codex Alimentarius: “Food should not be described or presented in a manner that is false, misleading or deceptive or is likely to create an erroneous impression regarding its character in any respect” (CAC, 1979).

Mandatory disclosure

For credence attributes which are not desirable for the consumer (e.g. the presence of pesticides), the producer has an incentive to withhold this information. To overcome this problem, governments could mandate the disclosure of certain types of information (Caswell and Mojduszka, 1996). A well-known example is mandatory disclosure of nutritional information (on calories, fats, proteins etc.) in a standardised format. As for ‘good’ credence attributes, this mandatory labelling policy transforms the credence attribute into a search attribute.

Labels and standards

For some attributes a ban on misleading advertising in turn leads to two related problems, i.e. how certain descriptions or claims should be defined, and how these can be verified. A law against misleading advertising does not by itself solve the problem that a concept like “organic” can be defined differently by different sellers. Moreover, even with a clear definition and a law prohibiting false advertising it would be difficult for buyers or competitors to verify whether sellers violated the law or not. Hence, for some attributes, regulation against false advertising is not sufficient.

One solution to this problem is labelling. A third party (private or public) could establish a definition and verify that a seller satisfies these criteria. The seller could then be awarded a label which can be displayed on the product. If the label is accurate, this transforms the credence attribute
into a search attribute, since buyers can simply look for the label when buying the good (Caswell and Mojduszka 1996).

Labelling involves a number of policy decisions (Roe and Sheldon, 2007). A first question is whether labelling should happen under the authority of a government agency or through a private firm. It is important to note here that defining the meaning of a label and certifying that a certain seller satisfies the criteria are in principle two separate activities which could be undertaken by separate bodies, whether public or private. For instance, both the process of defining and certifying could be left to the public sector. The standard could also be defined by the government, with certification by private bodies. Conversely, government agencies could certify private standards, as e.g. USDA is increasingly asked to do (Clayton and Preston, 2003).

Alternatively, a private company or organisation could define a certain standard, and the same or another private body could certify that a seller satisfies the criteria of the standard. There are a number of problems which may arise if standard-setting and certification are left to private organisations. These in turn create scope for government policies to improve upon the market outcome.

A second question which may arise is whether, in addition to a government-backed label, other labels will be allowed as well. For instance, in the United States, all organic certification is overseen by government entities, and private firms may not establish alternative definitions of organic food.

**Box A2. Food safety as a credence attribute**

The distinction between search, experience and credence attributes is especially relevant in the context of food safety. Most aspects of food safety are credence attributes. It is usually not possible to observe whether a particular food product is safe before consuming it. In some cases, food safety can be determined immediately after consumption (e.g. in case of food poisoning). In this case, food safety can be considered an experience attribute. However, if the effects of unsafe food occur with some delay, it becomes hard or impossible for buyers to trace health problems to the specific food which they consumed. The reputation mechanism in this case would not function efficiently. For all practical purposes, food safety can therefore be considered a credence attribute.

There is a fundamental difference between food safety and other food quality attributes since, in the words of Caswell and Mojduszka (1996, p. 1249), for other attributes “the consequence of being temporarily misled is injuries to [consumers’] pocketbooks but not to their health.” Consuming unsafe food has potentially much more dramatic consequences than consuming lower-quality food. Even if buyers were able to trace health consequences to specific products, from a public welfare perspective it would be preferable to avoid relying on such a trial-and-error method of establishing food safety in the market. Food safety thus calls for public policies.

The following policy options can be distinguished (Henson and Caswell, 1999).

1. The government can engage in direct “ex ante” regulation by stipulating minimum quality standards, product testing and inspections.

2. A second possibility is for the government to hold sellers liable for the damage caused by their products – effectively a form of ex post regulation. If buyers who were harmed by a product can sue sellers for damages, this would in theory create an incentive for sellers to make sure their product is safe. However, the effectiveness of product liability as a mechanism to ensure food safety is questioned by Buzby and Frenzen (1999), who show that in the United States only a small minority of food poisoning lead to litigations; even fewer give rise to compensation; and the average compensation for victims is low.

3. Firms may engage in self-regulation through internal control systems, internal standards, and certification through third parties.

In recent years, much attention has been devoted to the question of possible interactions between such private initiatives and public standards (Henson and Hooker, 2001; Henson and Caswell, 1999; Codron et al., 2005; Smith, 2009). While private food safety standards are similar to private quality standards discussed in the main text, some particular interactions exist given the importance of food safety. Private food safety standards could occur for three main reasons. First, governments may require firms to develop internal standards or control systems. Second, firms may adopt such tools in response to liability rules. For instance, in the United Kingdom, a company that can demonstrate it exercised all “due diligence” can use this as a defence against liability. Since the introduction of this principle in 1990, private quality control and private food safety standards (as embedded in e.g. HACCP, BRC, IFS or GLOBALGAP) have grown in importance (Henson and Caswell, 1999). A third way in which private food safety standards can emerge is that firms want to avoid food safety issues which could hurt their reputation. Hence, a variety of mechanisms and incentives can be used as policy tools to achieve food safety.
ANNEX 3.

ORGANIC AGRICULTURE STANDARDS:
A CROSS-COUNTRY ANALYSIS

Introduction

Based on the framework for the analysis of government involvement with standards, the Secretariat has conducted an OECD wide survey on organic agriculture standards, with the objective to broaden the insights gained from the literature review and the country studies.

The survey intends to highlight the scope for government involvement in the definition, implementation, and enforcement of organic standards, as well as the rationale for governmental support to the organic certified supply chains to pursue policy interests. The questionnaire is composed of 25 questions covering three topics: i) regulations on organic agriculture and foodstuffs, ii) public policies towards organic agriculture and food markets, and iii) private organic standards (See the full questionnaire at the end of the Annex).

The first part of the questionnaire is intended to provide a background on the legislation related to organic agriculture, to explain the motivations of governments for regulating organic standards, to present the areas covered by organic regulations (e.g. crop production, labelling, export compliance), and to map the public and private organisations involved, from the setting of technical requirements to conformity assessment at the level of farms and food operators.

The objectives of the second part are to identify if governments are promoting the development of organic agriculture and/or the domestic market of organic food; if so, for what reasons; and through what kind of policy measures. It reports specific measures targeting organic farmers such as subsidies and extension services. The questions also address measures targeting marketing channels, consumers and the wider public.

Finally, the third part of the questionnaire focuses on private organic standards. To the extent that those standards are operating in the country, the survey aims at gathering background information. When governments are contributing to the activities of standardising bodies, the questionnaire aims at understanding their motivations for such involvement.

The questionnaires have been sent to the relevant government officials identified by the OECD delegations (Cf. list of organisations interviewed in Annex 5). To ensure consistency across countries and avoidance of misunderstandings as much as possible, follow-up has been done through interviews and emails with the respondents.

The questionnaire has been filled by 33 OECD member countries, as well as by the European Commission and the Government of Argentina. In Belgium, the survey has been filled by two regional Competent Authorities, Beleidsadviseur Biologische Landbouw (Flanders) and Service public de Wallonie (Wallonia).
Organic agriculture in the OECD

According to the OECD Compendium of Agri-environmental Indicators (OECD, 2013b), the OECD area represents 24.7 million ha of agricultural land area under certified organic management in 2010. With 12 million ha, Australia alone represents half of OECD total, which is explained by a large proportion of organic area in permanent grassland (97%) for extensive livestock productions. Australia is followed by the United States (1.9 million ha), Spain (1.6), Italy (1.1) and Germany (1.0) (Table A2). However, the highest proportion of organic agricultural land is found in other countries, all European, where the proportion exceeds 10% of agricultural land: Austria (16.4%), Sweden (14.2%), Czech Republic (12.7%), Estonia (11.9%) and Switzerland (10.5%) (OECD, 2013b).

The number of organic producers is estimated to be close to half a million within the OECD (478,464 in 2011) according to data from FiBL/IFOAM survey of organic agriculture (FiBL/IFOAM, 2013). One-third of those farmers are located in Mexico (169,570). Turkey (43,716) and Italy (42,041) are distant second and third countries.

Organic regulations

In 2014, all OECD governments have implemented some official programme as regard to organic agriculture and food, although the approach towards regulation differs from one country to another.

In New Zealand, there is not specific legal framework for products sold on the domestic market, but the government administers a voluntary programme for exports. In Australia, the organic legislation only applies to exported production, in reference to a standard maintained by the industry.

In all other OECD countries, there are fully implemented organic legislation and regulated organic standards developed by governments. The coverage of regulations on organic agriculture and food (thereafter organic regulations) are then quite similar.

Adoption of organic regulations

In the 1990s, only a handful of OECD countries passed organic regulations into law, in the European Union (Denmark, France, and Spain), and Austria and Finland, which were not yet EU members.

In the United States, the Organic Foods Production Act of 1990 authorized a National Organic Program (NOP) to be administered by the US Department of Agriculture (USDA).

In 1991, the publication of Council Regulation (EEC) 2092/91 has brought all EU-12 countries into a common framework for the regulation of organic agriculture (Figure A5). Sweden has adopted the regulation with the 1995 enlargement. Central and East European Countries have taken over the “Community acquis” during the pre-accession period: Estonia in 1997, Hungary in 1999, Slovak Republic in 1998, Czech Republic in 2000, Slovenia in 2001, and Poland in 2004.

Outside the European Union, organic regulations have been passed into law in 1994 in Iceland, and Norway, following the Agreement on the European Economic Area (AEEA), bringing together in a single market the EU Member States and three members of the European Free Trade Association (EFTA), Iceland, Liechtenstein and Norway.

Turkey also set up regulations in 1994, Switzerland and Korea in 1997, Japan and New-Zealand in 2001 – the latter with the voluntary programme for exports. Over the last decade, regulations have been enacted in Australia and Israel (2005), Mexico and Chile (2006), and finally in Canada (2009).
Government motivations for organic regulations

As there is a common framework for the regulation of organic agriculture in the European Union since 1991, the motivations for regulations in OECD countries are analysed, taking the EU-28 as a single entity. The answers to the questionnaire from the European Commission (DG Agriculture and Rural Development, Unit B.4 Organics), and for non EU countries, from the relevant officials within central governments were used for this analysis.

The issues related to food markets seem to be highly relevant for OECD countries (Figure A5). In particular, the protection of consumers from false claims is the most frequently quoted motivation for organic regulations (11 of 14 countries). A better integration of domestic market is also an important motivation for governments, as well as a better access to foreign markets (both 9 of 14).

A short majority of countries reports the environmental benefits of organic agriculture. The improvement in animal welfare, the positive impact of organic agriculture on consumer health and employment are also quoted by a minority of countries.

For several countries, market issues have been the main spur of regulations. In Korea, consumer protection was initially the motivation for the Act on organic agriculture. In Iceland and Switzerland, organic regulations have been strongly motivated by the prospects of trade integration with the European Union (AEEA Agreement, EU-Switzerland bilateral agreement). In the case of Switzerland, regulations also aim at improving the conditions for a market-oriented production and increasing the value of Swiss agricultural products.

In these three countries, the possible benefits of organic agriculture and food are not reported as a motivation for maintaining national regulations (Table A3). This is also the case in Australia and Canada, whose governments are neutral regarding the benefits of organic farming (versus conventional farming). In New Zealand, the government is also completely neutral on this question, but reports a positive impact of organic chains on employment, as a motivation for setting the voluntary export programme.
Conversely, the environmental benefits of organic agriculture are a motivation for regulations in Chile, the European Union, Israel, Japan, Mexico, Norway, Turkey and the United States. In addition, the improvement in animal welfare is stressed in the EU, Israel, Japan, Norway and the United States. These answers are consistent with the questions on the motivations for policy support to organic farmers and food chains.

**Coverage of organic regulations**

The coverage of regulations on organic agriculture and food are quite similar amongst OECD countries, with a comprehensive legislation and country-regulated organic standards.

Two countries appear to follow a different approach, Australia and New Zealand, with no dedicated governmental framework except for exported production. In these countries, ‘organic’ claims on the domestic market are nonetheless regulated through consumer law.

There is no specific legal framework on organic agriculture in New Zealand. The New Zealand Ministry for Primary Industries (MPI) administers a voluntary programme named Official Organic Assurance Programme (OOAP) which covers the export of organic products. Representations about food sold in New Zealand are regulated under the Fair Trading Act 1986. According to this act, all representations about food must be truthful and must not mislead. Organic certification provides some assurance to retailers and manufacturers that an organic claim complies with the provisions of the Fair Trading Act. However, apart from the requirements of the Fair Trading Act, organic food destined for the domestic market is not subject to regulatory requirements specific to that food being organic. The Commerce Commission responsible for enforcing the Act uses a standard for organic production (NZS8410-2003) as a reference document. Organic products destined for export may be exported...
under the OOAP, an export programme providing government official assurance for organic products exported to countries with whom New Zealand has government to government agreements in place covering the trading of organic products. The OOAP was established in 2001 by MAF Food (now MPI) at the request of the Organic Products Exporters of New Zealand Inc. (now Organic Exporters Association of New Zealand).

In Australia, legislation exists only to govern the certification of Australian organic and biodynamic products for export according to Export Control Orders 2005. The legislation makes reference to the National Standard for Organic and Bio-Dynamic Produce. The AQIS has set administrative arrangements for approved certifying organisations operating inspection and certification activities for Australian organic and bio-dynamic Produce. There is no similar requirement for domestic certification. However, organic claims must be properly made and businesses that make organic claims must be able to substantiate those claims. Consumers that think they have been misled may contact the Australian Competition and Consumer Commission (ACCC) and take legal action.

In other OECD countries, the regulations cover production rules for organic agriculture in the domestic market as well as for exports. As regards to food chains, organic regulations cover crop and livestock productions (Table A4). The legislation describes obligations concerning the processing of organic food, the labelling of organic products, control, inspection and certification, as well as imported organic production. Processing of organic feed is covered in most regulations.

Packing, storing and transport are not covered in Canada. In the United States, the NOP regulates the handling of unpackaged organic products, which includes packing activities. However, products that remain in the same packaging in distribution and transport, including storage, are not required to be certified under the NOP. In Korea, certified packaged products are not required additional certification to store, transport, import or sell provided that they remain within their original packaging. However, certified products are required to be certified again when the original packaging is to be removed and repackaged.

In addition to crop and livestock, aquaculture is also regulated in the European Union, Chile, Korea, Mexico and Turkey. In the United States, the USDA’s Agricultural Marketing Service (AMS) is currently working on aquaculture and apiculture standards for implementation into the NOP. Though the standards are not yet finalised, these are active projects.

In Canada, the Organic Product Regulations (OPR) incorporate by reference the two Canadian Organic Standards (COS): CAN/CGSB 32.310 (General Principles and Management Standards) and CAN/CGSB 32.311 (Permitted Substances Lists), which outline the general principles of organic agriculture and the production management practices for crops, livestock, apiculture, maple, mushroom, sprout, greenhouse, honey products and wild crops, including the preparation, processing, handling and transport of these products. Use of the organic logo is voluntary. The logo is only permitted on products that have an organic content that is greater than 95% and has been certified according to Canadian requirements for organic products. The OPR only applies to organic products that are traded inter-provincially and internationally; it does not apply to organic products marketed and sold within the province where they were produced (intra-provincially).

Certain provinces however, to ensure consistency in the market and reduce consumer confusion, have implemented regulations for organic production marketed within the boundaries of their province. Quebec and Manitoba each have in place organic regulations governing all organic food produced and marketed as organic. In Manitoba, a provincial law that enforces the national OPR was implemented on 30 June 2009. In Quebec, certification by an accredited certifier (CB) has been mandatory since 2000. In British Colombia, the BC Certified Organic Program is a voluntary agri-food quality programme sanctioned by the Government of British Columbia through the Organic Agricultural Products Certification Regulation. In other provinces, organic products sold intra-
provincially may certify to the Canadian Organic Standard (COS), but it is not a mandatory requirement.


In the EU, in contrast with Directives, Regulations do not need to be transposed into national law and are directly applicable as law in all MS simultaneously. National regulations developed in a handful of MS before the publication of Council Regulation (EEC) 2092/91 have therefore been repealed. This is the case in Spain, for example, where the former national regulation (Real Decreto 759/1988) is no longer applied.

However, additional national regulations and decrees were installed to allocate tasks to corresponding national Competent Authorities and Control Bodies, to harmonise the requirements for Control Bodies and to set the legal frame for a national bio-logo (e.g. Germany, France). In Denmark, the EU legislation is implemented and supplemented through the Organic Act (Økologiloven) of 3 May 2011 and the Order on Organic Agricultural production. In the United Kingdom, the current implemented regulations are the Organic Products (Amendment) Regulations 2010; in Greece, the Joint Ministerial Decision n°245090/2006 and other Joint Ministerial Decisions, Ministerial Decisions and related Circulars, etc.

MS are also providing their organic operators and control bodies with guidelines and agreements on how to apply the EU regulation. Moreover, for the sectors that are not covered by the EU legislation, MS may develop and implement national regulations. This is the case for the production of organic rabbits and snails in several countries. In Slovenia, a national regulation for areas not covered by EU legislation includes mass catering operations and production rules for livestock regarding wild animals.

In Italy, as the Competent Authority is shared by central and local governments, there are also Regional Laws (LR) in addition to the Ministerial Decrees, for example in Emilia-Romagna LR n°28 of 1997 (Standards for the organic agro-food sector); in Toscana LR n°49 of 1997 (Provisions on controls for organic agricultural products); in Valle d’Aosta LR n°8 of 2001 (Provisions relating to cattle, sheep and goat products and derived products obtained by organic methods).

Authorities responsible for preparing organic regulations

In the European Union, the European Commission is the Regulatory Authority responsible for preparing organic farming regulations. The first stage of preparing regulations takes place at the European Commission (DG Agriculture and Rural Development), in later stages the Council of the European Union and the European Parliament co-decide through the ordinary legislative procedure. Commission regulations are developed in cooperation with the Standing Committee on Organic Farming (SCOF), comprising representatives of all EU Member States countries and a Commission representative as chairperson.

Outside the European Union, the Regulatory Authority (RA) is generally granted to the Ministry of agriculture in the central government. This is the case in nine of the 13 non-UE countries.
In Australia, the Department of Agriculture oversees organic regulations relating to export of organic produce. The industry-run Organic Industry Standards and Certification Council (OISCC) is responsible for matters pertaining to the content of National Standard for Organic and Bio-dynamic Produce.

In Chile, the Agricultural and Livestock Service (Servicio Agrícola y Ganadero, SAG) of the Ministry of Agriculture is the RA for Law 20.089 on organic agriculture and its complementary regulations. In Israel, the Plant Protection and Inspection Services, a division of the Ministry of Agriculture and Rural Development, is responsible for preparing and implementing organic regulations. Iceland’s RA is the Icelandic Ministry of Fisheries and Agriculture. In Korea, the Ministry of Agriculture, Food and Rural Affairs (MAFRA) is the RA having jurisdiction on the regulation on organic agriculture. In Mexico, the function is performed by the Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA). In Switzerland, the Federal Office for Agriculture (FOAG) is drafting and revising the Federal Ordinance 910.18 on organic agriculture. The Ministry of Food Agriculture and Animal Husbandry is the RA in Turkey.

In the United States, the USDA is responsible for the NOP. The USDA routinely works with the Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA) to ensure overlaps or any discrepancies between regulations are properly addressed. The USDA also works with the Office of Management and Budget (OMB), who is responsible for approving regulatory work plans, coordinating interagency efforts on specific regulatory topics, as well as reviewing the economic impact of regulatory efforts. Through an USDA’s Advisory Board, the National Organic Standards Board (NOSB), the USDA also takes into account public comments from industry.

In four OECD countries, the Regulatory Authority is granted to another ministry or a public agency. In Canada, the Canadian Food Inspection Agency (CFIA) reports to both the Minister of Agriculture (non-food safety aspects) and the Minister of Health (food safety aspects). The Organic Product Regulations (OPR) are prepared in consultation with other government departments, industry and the public. The OPR incorporate by reference the two Canadian Organic Standards, developed by the Canadian General Standards Board (CGSB), a government service provided through the Department of Public Works and Government Services Canada.

In Japan, the Regulatory Authority is the Food and Agricultural Materials Inspection Centre (FAMIC), an incorporated administrative agency pertaining to the Ministry of Agriculture, Forestry and Fisheries (MAFF). In New Zealand, the RA is the Ministry for Primary Industries (MPI), a ministry formed from the merger of the Ministry of Agriculture and Forestry, the Ministry of Fisheries and the New Zealand Food Safety Authority. In Norway, the authority is the Norwegian Food Safety Authority (Mattilsynet) which operates under responsibility of Ministry of Agriculture and Food, Ministry of Health and Care Services and Ministry of Trade, Industry and Fisheries.

**Authorities responsible for implementing organic regulations**

*European Union*

Branch of central government

In the European Union, the Competent Authority responsible for implementing the EU regulations is often a branch of central government in the Member State. The situation is found in 12 countries (of 19): Austria, Czech Republic, Denmark, Finland, Greece, Ireland, Italy, Luxembourg, the Netherlands, Poland, Slovenia, and the United Kingdom.

This ministerial department is generally the Ministry of Agriculture or a ministry with agriculture and environment responsibilities, as this the case in Slovenia and the United Kingdom. Exceptions are
Austria, where the responsibility is to the Ministry of Health and the Netherlands, where it falls to the Department for Agriculture of the Ministry of Economic Affairs.

In Austria, the Ministry for Health is the Competent Authority (CA) for the EU regulation, but it delegates the responsibilities for implementation to local governments, i.e. food authorities in the federal provinces. In Italy, the Ministry of Agricultural, Food and Forestry Policies shares responsibilities as CA with Regions.

In the United Kingdom, the Department for Environment, Food and Rural Affairs (Defra) shares responsibilities with Port Health Authority and HM Revenue & Customs, as well as with UK Local Government Authorities. Local Authorities are responsible, through their trading standards arms, for oversight of retail operations selling organic produce to confirm legislation conformity. Port Health Authority officials inspect imports arriving at sea ports to confirm adherence to import requirements. HM Customs & Revenue officials inspect imports arriving on land at border inspection points for the same purpose.

Public agencies

In six EU countries, public agencies implement the regulations. In France, the National Institute for Origin and Quality (Institut National de l’Origine et de la Qualité, INAO) is a public institution under the aegis of the Ministry of Agriculture, Agri-Food and Forestry. In Sweden, the responsibility is shared between the Swedish Board of Agriculture (primary production) and the National Food Administration (food), two agencies under the supervision of Ministry of Rural Affairs. In Estonia, the CA are the Agricultural Board and the Veterinary and Food Board. In Finland, the regulations are implemented by two agencies, the National Food Safety Authority (Evira) and the National Supervisory Authority for Welfare and Health (Valvira), as well as by the Regional Government of Åland. In Hungary, the National Food Chain Safety Office is the CA supervised by the Ministry of Rural Development.

Local governments

Organic regulations are implemented by local governments in Belgium, Germany and Spain. As a federal State, Belgium has three regional CA for agriculture in general and for organic production and products in particular: Wallonia, Flanders, and Brussels region. In Germany, the Ministries of the Länder are the CA. In Spain, the Autonomous Communities are the CA on organic farming in their respective territories. However, the Ministerio de Agricultura, Alimentación y Medio Ambiente (MAGRAMA) is competent in representing the country in international bodies as the European Commission or the Council. MAGRAMA attends the meetings of SCOF and is also in charge or realising import authorizations according to article 19 of Regulation (EC) 1235/2008.

Non EU countries

Outside the European Union, the Competent Authority for implementing regulations is generally the same authority as the Regulatory Authority in charge of preparing regulations.

There are three exceptions: Iceland, Japan and Korea. In Iceland, the Food and Veterinary Authority is acting as CA on behalf of the Ministry of Agriculture. In Japan, the CA is shared between FAMIC and the local subsidiaries of the Ministry of Agriculture, Forestry and Fisheries (MAFF). In Korea, the CA is the National Agricultural Products Quality Management Service (NAQS), a designated governmental agency under MAFRA, also in charge of inspection and certification.

Note also that in Switzerland, if no foodstuffs are involved, the Federal Office for Agriculture (FOAG) shall implement the Ordinance 910.18 on organic agriculture in accordance with the
legislation on agriculture. The Cantonal Food Inspection Services shall implement the Ordinance in accordance with the legislation on foodstuffs.

Figure A7. Categories of Competent Authorities implementing regulations (n=33)

Source: OECD survey.

Control of organic regulations

Models of control systems

For the conformity assessment of organic regulations, three main models of control systems can be identified within OECD member countries:

- Private certifiers officially recognised as control bodies (CB) by the Competent Authority responsible for the implementation of the regulations (22 countries on 33);
- Public control bodies designated by the Competent Authority (Denmark, Estonia, Finland);
- Coexistence between private and public bodies (Korea, Japan, Poland, Spain, United States).

In addition, specific control systems are found in the Netherlands, Norway, and Mexico. Although the control systems in the Netherlands and Norway show similarities with the first model, they differ in the competition allowed on the certification market.

Private control bodies

In two-thirds of the countries, conformity assessment is performed by private certifiers which are recognised by the Competent Authority as control bodies responsible for the compliance with regulations.

Private certifiers may be domestic and foreign companies. In Luxembourg, there are not enough organic operators for the regulatory functioning of a national private certifier on the basis of EN45011, so the Competent Authority has delegated control tasks to four foreign private CB, who had asked for an agreement in Luxembourg. In Chile, private certifiers are also all foreign.

In Australia and New Zealand, when there is no regulated standard for the domestic market, private certifiers are operating the certification for export of organic products according to the National Standard for Organic and Bio-Dynamic Produce (Australia) and the Official Organic Assurance Programme (New Zealand).
In addition to private certifiers, public authorities may also perform controls related to foodstuff and labelling in retail. For example, in the Czech Republic, CB are all private certifiers, but the Competent Authority, the Central Institute for Supervising and Testing in Agriculture (CCTIA) is also in charge of monitoring and enforcing businesses’ compliance with Regulation EC 882/2004 on official controls for feed and food law. In Luxembourg, the ASTA (Administration des services techniques de l’Agriculture) is in charge of the verification of the labelling and the presentation of organic products present on the Luxemburgish market. In France, in addition to the inspection of organic farms at least once a year by the designated CB, the consumer protection authority (DGCCRF) conducts targeted controls on the presence of pesticide residues in organic products, the compliance with rules on organic production by the operators (including the obligation to certify their activity), and on food labelling that should not lead consumer into error (products outside the scope of the organic regulations).

Public control bodies

In Estonia, the two Competent Authorities, Agricultural Board, and Veterinary and Food Board, are directly carrying out inspection under the rules for organic production. This is also the case in Finland, with the three CA (Evira, Valvira, Regional Government of Åland).

In Denmark, only authorities under the Ministry of Food, Agriculture and Fisheries carry out inspection under the rules for organic production. The Danish AgriFish Agency inspects the primary production, while the Danish Veterinary and Food Administration inspects food companies.

Coexistence between private and public bodies

In Korea, conformity assessment of organic production is performed by a number of private certifiers and the NAQS. NAQS conducts diverse tasks related to agri-food safety and quality management including agricultural product safety inspection, environment-friendly agricultural product certification and country of origin. In Poland, CB are 9 private certifiers and the Agricultural and Food Quality Inspection Service.

In Japan, conformity assessment with the Japanese Agricultural Standards (JAS) for Organic Plant and Organic Processed Foods is operated by 75 private certifiers and six local governments (Aya town miyazaki, Gifu Prefecture, Tsuruoka City, Tottori Prefecture, Fukushima Prefecture, and Ishikawa Prefecture). In Japan, like private certifiers, public control bodies should be accredited by the Competent Authority.

In Spain, where the Autonomous Communities are the Competent Authorities (CA), there are four different control systems: i) nine CA have conferred the control to public control authorities (Galicia, Asturias, País Vasco, Navarra, Cataluña, Madrid, Comunidad Valenciana, Región de Murcia, Islas Baleares), ii) two CA have delegated control tasks to private CB (Andalucía, Castilla la Mancha), iii) two Competent Authorities have a mixed system with public control authorities and private CB (Aragón, Castilla y León), iv) four CA carry out directly the controls (Cantabria, Extremadura, Islas Canarias, La Rioja).

In the United States, the USDA recognises public and private bodies as Accredited Certifying Agents (ACAs) for the National Organic Program. Public bodies that carry out organic certification activities in the United States are State or County Departments (e.g. Oregon Department of Agriculture, Rhode Island Department of Environmental Management, Yolo County Department of Agriculture). In addition, 63 private certifiers are accredited to NOP, including 33 foreign certifiers. The USDA accredits all CB for organic agriculture practices within the United States, or intended for sale in or trade to the United States. Exceptions include authorized certifiers approved under a recognition agreement with another country’s competent authority (currently with India, Israel, Japan (through September 2014) and New Zealand), or those approved under an equivalency arrangement.
with another country’s government (currently with Canada, EU, and Japan). Outside of recognition agreements or equivalency arrangements, the direct certification of organic products to the NOP must be conducted by a certifier that is accredited by the USDA/NOP.

Other systems

In two countries, there is a “hybrid system” where the Competent Authority has granted the monopoly of conformity assessment in the national territory to a single private organisation, through a formal agreement. In a sense, that makes the control system “semi-public”. In the Netherlands, Stichting SKAL is non-profit, established by the Dutch Government. This certification body is also providing conformity assessment with private organic standard EKO (See country cases). In Norway, the Norwegian Food Safety Authority has fully delegated inspection of organic production in accordance with the Norwegian Regulations on the Production and Labelling of Organic Agricultural Products to the private certifier, Debio. The inspection services of Debio are based on an agreement with the Authority. Debio also certifies agricultural production according to the private biodynamic standard Demeter.

In Mexico, conformity assessment of organic production for the local market is traditionally not performed through third-party certification, but rather under participatory guarantee systems (Sistema de certificación organica participativa, SCOP). In SCOP, organic farmers are subject to the monitoring and review among peers, involving organic consumers and technical consultants in regional networks. However, following the revision of national regulation (Ley de Productos Orgánicos) in February 2014, private certifiers are under the process of recognition by the SENASICA (Servicio Nacional de Sanidad Inocuidad y Calidad Agroalimentaria). The first certification body approvals were granted in June 2014, official information on the qualifications of certification bodies and the services they provide is currently being processed. The Mexican regulation on organic products also recognises foreign certifiers operating on the basis of ISO Guide 65 or equivalent. The system of government control approved these bodies and monitors their operation within the territory of Mexico.

Figure A8. Models of control system for organic regulations (n=33)

![Pie chart showing distribution of control bodies]

Source: OECD survey.

The control bodies for organic regulations

The number of control bodies, including private certifiers and public authorities, ranges from one in Island, Norway and the Netherlands, to up to 81 in Japan and 82 in the United States (Table A5).
The comparison between Iceland (about 6,000 ha of certified organic land) and the United States (close to 2 million) is not relevant. However, the correlation between organic land and the number of control bodies is poor (Pearson correlation coefficient = 0.45). Indeed, the average area inspected by CB shows high variations between countries. In Japan, CB are inspecting on average 112 hectares, to be compared with 111,955 ha in the Czech Republic and 105,680 ha in France.

Advantages of public bodies

According to the answers from several OECD member countries, the inspectors from public bodies are regarded as independent and impartial by organic producers. Certification fees of public bodies are generally lower than those of private certifiers. The implementation of the standards is similar for all producers. With a government-managed system, the credibility of organic claims to consumer is high.

Advantages of private certifiers

Competition

With a market for certification, organic producers have a choice of the control body. Competition between certifiers can promote better value for organic producers. It forces certifiers to make their work as effective as possible.

Specialization

Private certifiers’ personnel are dedicated organic specialists whose function is to ensure conformity with organic farming and production standards. They have the expertise to certify to organic standards, while being as independent and impartial than governmental officials.

Private certifiers are more specialized than public control bodies, which have to cover a wider range of standards. They can assure a higher efficiency compared to public structures. For operators they provide fast inspection and certification procedures and objectivity and less complicated administration than in governmental administration. Private certifiers work in close collaboration with organic operators, enabling trusted and long-standing relationships to develop.

Synergies with private standards

Regarding conformity assessment, the private certifier can check conformity concerning other international trademarks and standards as well (e.g. Bio Suisse in Switzerland). As private certifiers often propose their own private standards, the system allows for the coexistence of national regulations and private standards; the first providing a minimum standard and the latter providing the opportunity for market diversification of organic products.

Fewer resources from government

Having private certifiers carry out conformity assessment allows for a “user-pays” approach to organic certification. The financial burden on governments is lower than when undertaking an inspection role. Some countries interviewed pointed to a lack of human resources and budget to maintain a public control body, so that certification has to be outsourced.

Disadvantages of private certifiers

Higher costs

In countries where private and public bodies are coexisting, certification fees of private certifiers are generally higher than that of public agencies. Some countries stated that organic certification is
expensive and certification costs are passed on to consumers, making organic products less accessible to a wider part of the population. Moreover, high fees make it more difficult to attract new organic producers in the system. In addition, certifiers may promote their own private standard rather than simply offering the official certification scheme.

**Disparities of procedures**

With private certifiers, it is difficult to ensure consistent delivery in conformity assessment. It is not always possible to have agreed best-practice, as due to commercial interests they are not always keen to agree to a standardised approach. Private control bodies may have their own procedures that make it harder for producers to change the body swiftly. When the number of certifiers becomes high, this results in major difficulties in supervision for the Competent Authority.

**Lack of credibility**

As there is an economic pressure on private bodies, competition can lead to dumping. If no unified system of controls and sanctions is in place, there is a greater chance for fraud and false certificates. In case of findings, operators could put pressure on the private certifier threatening to move to a competitor.

In some countries, consumers of organic food have less confidence in the inspection by private bodies. Private certifiers may have less credibility internationally than government authorities. Gaining market access to other countries may then be more difficult for private certifiers.

With a delegation of conformity assessment to the private sector, there is obviously a potential loss of control in the enforcement of regulations. The Competent Authority is responsible for overseeing the operation and thus providing a guarantee to consumers. It is also in charge of coordinating the control bodies to avoid disparities in procedures and sanctions.

**Overseeing of private certifiers**

In the countries where private certifiers are officially recognised as control bodies, a system has been implemented for the surveillance of their operations. The overseeing is more or less comprehensive from one country to another.

In Iceland, the certification bodies need an official permit of operation from the Ministry of Fisheries and Agriculture. This is the case for Vottunarstofan Tún, the only independent inspection and certification body for organic production operating in the country.

In the European Union, according to Council Regulation (EC) 834/2007 it is mandatory for the Competent Authorities to develop a programme of surveillance to supervise and monitor control bodies, with office audits of Control Bodies and witness audits of certified organic operators. Control bodies are submitted to a double control, from the Competent Authority (audit once a year) and from the accreditation body (audit every 15 months). The surveillance of CB is also mandatory for countries that have bilateral agreements with the EU (Sanders, 2014).

The authorities responsible for overseeing control bodies are generally the same as the Competent Authority. In Austria, the Ministry of Health delegates the overseeing of CB to the food authorities of the nine provinces. In Canada, CFIA designates Conformity Verification Bodies (CVB) to oversee certifiers; they are both public and private entities.

Before being recognised by the Competent Authority, and regardless of whether they provide conformity assessment to regulated organic standards only, or to other agricultural standards as well, private certifiers have to show that they are competent and reliable when they operate product certification.
This is done through a formal accreditation according to ISO/IEC Guide 65 (General requirements for bodies operating product certification systems), EN 45011 (General Criteria for Certification Bodies Operating Product Certification Systems) or equivalent.

Within OECD members, 21 accreditation bodies are public entities, branches of central government or agencies. This includes the Irish National Accreditation Board (INAB) in Ireland, the Turkish Accreditation Agency (TÜRKAK) in Turkey, and SWEDAC in Sweden. In other countries, 12 accreditation bodies are private, for example the National Normalization Institute (INN) in Chile, the United Kingdom Accreditation Service (UKAS) in the UK, and the COFRAC (Comité Français d’Accréditation) in France.

In Luxembourg, as all organic certifiers are foreign, they must provide the Competent Authority with a copy of their national accreditation body in order to get their agreement for operating in the country.

Policies

Support to organic agriculture and organic food markets are widespread in the OECD. It has been widely documented in the case of the European Union, Norway and Switzerland, with regularly updated analysis from EU Commission-funded research projects (Lampkin et al., 1999; Häring et al., 2004; Stolze and Lampkin, 2009; Sanders et al., 2011). Other publications make reference to the more market-led approach taken in the United States in the development of organic sector (Dimitri and Oberholtzer, 2007; Baylis et al., 2008; Johnson, 2008).

This section based on the questionnaire filled by officials aims at updating information and expanding coverage to other OECD countries.

Of the 33 countries surveyed, all but six report at least one governmental-funded measure supporting organic agriculture and food. Countries with no policy are essentially non-EU: Australia, Chile, Israel, Mexico and New Zealand. This is consistent with the findings of the previous section: those countries minimally regulate organic agriculture (Australia, New Zealand) or have implemented public organic standards recently (Israel in 2005, Chile and Mexico in 2006). The Netherlands is the only EU country to report no governmental measure in 2014, following the repeal of measures in place in previous CAP programmation.

Strategic plans to promote the development of the organic sector

Among the 27 countries with some policy measure, 22 have published a strategic plan (or action plan), to promote the development of organic agriculture or the market of organic food.

There is no governmental plan in the six countries referred to above, as well as in Canada, Greece, Iceland, the Slovak Republic and Switzerland.

In Belgium, the two main regions, Flanders and Wallonia, have issued distinct strategic plans. The plans aim at integrating the numerous policy measures targeting organic agriculture in a consolidated framework, bringing together legal, communicative and financial instruments. In the majority of countries (14 of 22), the plan sets targets for the growth of the domestic sector.

The main objective is generally to increase the agricultural land area under organic management, either expressed in farmland, percentage of the total area or as growth during a period (Table A6). In Korea, a target of 15% of farmland for the five-year Plan for Promoting Environment-Friendly Agriculture is given as “non-conventional farming area”, which includes organic farming area. When the target is reached, the government expects that the area of organic farming may reach up to 3% of total farmland.
In the Czech Republic, Estonia, the United States and Wallonia, the plan also includes the growth in the number of organic operators. In Estonia, France and Norway, an objective is to increase the share of organic food consumption in the domestic market.

As regards to organic farmland, some strategic plans have set an ambitious target, in Finland 19% in 2020 (from 7.4% in 2010), in Norway 15% in 2020 (from 5.7%), in France 8% in 2017 (from 2.9%), in Ireland 5% in 2020 (from 1%).

**Government motivations for supporting organic agriculture**

Among the 27 OECD countries that support organic agriculture and food, the main motivation for policy is the environmental benefits associated with organic agriculture (Figure A9). Canada and Switzerland are exceptions.

In Canada, the federal government is neutral regarding the benefits of organic farming (versus conventional farming). Agriculture and Agri-Food Canada (AAFC) supports a variety of production methods, including organic agriculture, as long as they meet the plant, animal health and food safety requirements set out by Canada’s regulatory regime. AAFC recognises the growth potential of organic production in Canada and continues to support industry efforts to capture business opportunities in this emerging market.

![Figure A9. Motivations for policy support to organic agriculture (n=27)](image)

*Source: OECD survey.*

In Switzerland, organic agriculture is supported through subsidies to farmers since the ecological direct payments introduced in 1993 (See country study in Annex 4). The payments have been extended in the new policy package for 2014-17 as part of the payments for production systems (i.e., area and headage payments to provide incentives for environment/animal-friendly production systems). However, the support to organic agriculture is only a subset of the policy mix of the Confederation, which combine environmental cross-compliance and more targeted agri-environmental measures (e.g. Biodiversity payments targeted to specific outcomes or farming practices, payments for landscape quality, resource-efficiency payments) (OECD, 2015). The objective is to make all Swiss farmland greener and not only the land managed under organic principles. Today, the rationale for support to the organic sector is then more focused on supply chains - improving the conditions for a market-oriented production and increase in the value of Swiss agricultural products - rather than on the positive externalities of this mode of production.
Response to consumer demand and the improvement in animal welfare are also frequently quoted by governments. The positive impacts on employment and consumer health are driving organic policies in about one-third of countries.

For one-third of countries, the support to organic agriculture and organic food markets reinforces the synergies with other policies: environmental policy, rural development policy (national and within CAP), promotion of agricultural products.

Within the potential environmental benefits of organic agriculture, the preservation of biodiversity is the main argument put forward in policies, followed by soil conservation and water quality. The mitigation of climate change is less frequently reported (Figure A10). Countries also spontaneously point out air quality, rural vitality, agricultural landscape, and the positive spill-overs from organic agriculture methods into conventional farming.

**Figure A10. Environmental motivations for support to organic agriculture (n=27)**

![Bar chart showing environmental motivations for support to organic agriculture (n=27)](chart)

Source: OECD survey.

**Support to organic farmers**

Among the OECD members that support organic agriculture and food, Canada is the only country that does not have a policy specifically targeted to individual organic farmers (See table A7).

Direct area payments to producers are widespread: 52% of countries are providing payments for conversion to organic agriculture and 58% payments for maintenance. Only Canada, the Czech Republic, Greece and Italy are not supporting organic farmers with targeted area payments.

In the European Union, member states may benefit from EU funds to support organic agriculture under article 29 of the European Agricultural Fund for Rural Development (EAFRD) for 2014-2020. In the previous period 2007-2013, support for conversion and maintenance were founded by EAFRD as part of the measures targeting the sustainable use of agricultural land, as well as under article 68 of the European Agricultural Guarantee Fund (EAGF) for certain MS. Payments for conversion to organic were first implemented by the Agri-Environmental Regulation n°2078/92 in 1992.

In the United States, the USDA Natural Resources Conservation Service (NRCS) administers the Environmental Quality Incentives Program (EQIP), open to all US producers. With the Agricultural Act of 2014, conservation practices related to organic production and transition continue to be eligible for payments under EQIP provision added in the 2008 Farm Act. Payments to organic and transitional
farmers under this provision remain capped at a much lower level than those to other farmers. However, farmers can choose the higher payment limit by enrolling in the regular EQIP programme.

Regarding other types of direct financial support, the coverage of certifying costs is relatively frequent (36%), as well as investment grants to individual farmers (24%). In Hungary, within start-up programmes for young farmers and modernisation of animal husbandry units, organic farming is important in the assessment (extra points are granted). For farmland purchases, organic farmers have the priority.

Measures for improving human capital include advice and technical training (48% of countries), vocational training (24%), and integration of courses on organic farming in curricular (21%).

In the United States, within EQIP, the 2014 Organic Initiative provides technical assistance to implement a broad set of conservation practices and to assist organic producers in addressing resource concerns including, but not limited to assistance with developing a conservation plan, establishing buffer zones, planning and installing pollinator habitat, improving soil quality and organic matter while minimizing erosion, developing a grazing plan and supportive livestock practices, improving irrigation efficiency, enhancing cropping rotations and nutrient management.

**Support to organic food marketing channels**

Governments are also supporting organic food channels. This is more frequently done through the support to organic fairs (39%) and for organic food marketing initiatives (33%).

Public procurement is not widespread (18%) and only found in Europe (Denmark, France, Ireland, Italy, Norway, Switzerland). It embodies mandatory percentage of organic food and the subsidisation of organic menus in administrative, school restaurants and other catering services.

In Canada, Agriculture and Agri-Food Canada (AAFC) helps promote the agriculture and agri-food sector, including organic, through the Value Chain Roundtables (VCRT). VCRTs bring together stakeholders throughout the value chain (e.g. input suppliers, producers, processors, food service industries, retailers, traders and associations) with provincial and federal government policy makers. The Organic Value Chain Roundtable (OVCRT) was created in December 2006, to build a shared understanding of the organic sector’s competitive position, and to develop consensus on what actions should be taken to help the sector grow domestically and abroad.

**Other governmental measures**

Regarding collective services for organic agriculture and food (cf. list of “other measures” in questionnaire), more than half of countries are supporting research projects on organic agriculture and food (58%) and the provision of sector information (58%). They are also frequently providing or funding information and collective promotion campaigns (39%).
In 16 OECD countries, local governments, that may be States, regions, counties or municipalities, are promoting the development of organic agriculture.

In Korea, provincial governments have implemented action plans in accordance with the central government’s Plan for Promoting Environment-Friendly Agriculture. In Mexico, although there is no particular measure from central government to support organic agriculture, some State governments (Chiapas, Michoacán, Mexico City, and Oaxaca) and a limited number of municipalities have implemented specific programmes.

In Italy, in addition to the Italian Action Program for Organic farming and organic products (Programma di azione nazionale per l’agricoltura biologica e i prodotti biologici), several Italian Regions have developed their own set of measures, in particular to promote the use of organic products in schools (Trento, Veneto, Friuli Venezia Giulia, Emilia-Romagna, Toscana, Marche, Lazio,
Basilicata, Sardegna). Some of the regional measures are co-funded by the EU under the Rural Development Program.

In the United Kingdom, while Defra acts as the UK Competent Authority for compliance with the EU organic regulatory framework for all countries in the United Kingdom, individual Devolved Administrations (DAs) operate their own support schemes and promotional activities for organic farming and production within their national boundaries. For example, England has implemented an Organic Entry Level Scheme.

Box A3. Organic agriculture in Argentina

Argentina has around 1,200 organic farmers, representing 3.2 million hectares of land under organic production. The first regulations on organic farming and foodstuffs came into force in 1992. The motivations for setting organic regulation include protecting the consumer from false claims and improving access to foreign markets, in addition to perceived benefits to the environment, animal welfare and consumer health. Regulations cover the full spectrum of organic production, processing, distribution and labelling, and are applied to crops, livestock, aquaculture, textiles and wine. Regulations are prepared and implemented by Servicio Nacional de Sanidad y Calidad Agroalimentaria (SENASA), an agency under the Ministry of Agriculture, Livestock and Fisheries, while inspection and certification is done by four private certifiers (three of which are also active in other countries). The perceived benefits of using private certifiers include their flexibility and the cost savings for the government. On the other hand, private certification (especially in the early stages) can represent a large cost for producers. In the absence of promotional funds during the conversion period, this may explain why the number of organic farmers has been stable in the last decade. In addition to the regulations, there is a National Program for the development of organic agriculture. Support to farmers is mostly in the form of advice and training programmes and capacity building. The government also supports organic fairs and invests in information and promotion campaigns.

Private organic standards

According to the findings of the survey, private organic standards are operating in 25 OECD countries. It is worth reminding that, following the concepts in the main report, an extensive definition of private standards was chosen, including those developed by NGOs, private certifiers and other for-profit companies, as well as those developed by officially recognised non-governmental standardising bodies (Table A10).

It is impossible to show reliable and comparable statistics on the scope of private standards. Only a handful of countries are able to provide the number of farmers certified according to private standards or the land area certified. When comparing those figures and the total area in organic production, one can nevertheless see that private organic standards in Austria (60% of organic farms), Ireland (99%), Luxembourg (58%), the Netherlands (27%), Sweden (79%) and Switzerland (95%). Moreover, as there is no regulated standard for the domestic market in Australia and New Zealand, all certified organic farmers producing for the domestic market are certified according to private standards.

Government involvement

Generally, governments are not interacting with private organic standards. Only seven countries report to be involved to some extent: Australia, Germany, Hungary, Ireland, Norway, New Zealand and Switzerland. Government officials may be invited to comment on standard drafts and to provide guidance through round-table discussions or similar meetings. They may also act as experts in standard-setting committees. In Hungary, the private standards have to be approved by the authorities. The main motivations for interacting with private bodies are to make sure standard-setting is transparent, fair and inclusive, and compatible with governmental objectives. Conversely, no OECD government is funding the activity of private organic standardising bodies.
In Australia, the Australian Government is represented on the committee overseeing the Australian Standard for Organic and Biodynamic Products (AS6000-2009) developed under the auspices of Standards Australia, the main standardising body in the country. This standard is available for use by private certifiers. It is a different standard than the National Standard for Organic and Bio-Dynamic Produce used to certify production for export markets.

In 2003 Standards New Zealand published a standard for organic production (NZS8410-2003). The standard was developed in consultation with staff from NZFSA (New Zealand Food Safety Authority now Ministry for Primary Industries), and from 23 other organisations with an interest in organics. The Standard sets out minimum requirements for the production, handling, processing and labelling of organic products including plant and plant products, and animal and animal products. This standard is used by a number of organisations as a reference document, including The New Zealand Qualifications Authority and the Commerce Commission.

**Coexistence between regulations and private standards**

As part of their answers to the questionnaires, some member countries have pointed out the benefits and drawbacks of having coexisting organic regulations and private organic standards operating in the country.

**Benefits**

**Market opportunities**

In most OECD countries, private standards have to comply with the legal minimum set in regulations. This means that there are opportunities for standards higher than the regulated standard. For example, the private standards that operate in Ireland set higher requirements than Council Regulation (EC) No 834/2007. The higher standard provides an added extra and is attractive for export of products to continental Europe.

Moreover, private standards provide additional benefits in the market due to the standard owner’s stance on specific issues such as for example animal welfare and bio-dynamic agriculture. Some private organic standards give an assurance for products that are of origin (e.g. Slovenia, Switzerland) which is positively valued by domestic and foreign consumers. With private standards, organic producers have access to different marketing channels through which they can singularise their products.

**High credibility**

The owners of private standards are investing in building and maintaining brand name equity. Those strong brand names increase confidence amongst consumers. For example, in Sweden, KRAV has been very successful in marketing organic products. With private standards, control may be more diverse and deeper, which yields more trust in ‘organic’ claims for consumers.

**Innovation**

Private standards bring innovation in the organic sector. If there is a need from a governmental perspective, some requirements of private standards may be implemented into organic regulations in further stages. Indeed, national regulations have been influenced by private organic standards in several OECD countries.
**Drawbacks**

The main drawback of private organic standard is the possibility of confusion amongst consumers as to the dividing line between the standard and the country regulation. In the European Union, it is not obvious if consumers are always aware of the differences between the two.

The certification bodies often propose their own private standard; they are in competition with each other over what their respective versions of the standards offer to producers.

**Conclusion**

From the results of the questionnaire to country officials, it may be put forward a “modal” approach of government involvement with organic agriculture standards in the OECD.

In the typical member country, there is a fully implemented legislation on organic agriculture and foodstuffs, covering the rules in crop and livestock productions, as well as further stages in the value chain, and organic product labelling. The regulation incorporates an official standard for the domestic market and exported production. Private organic standards are coexisting with this regulated standard. The Competent Authority for implementing organic regulations is the Ministry of Agriculture or an agency under the supervision of the Ministry.

Organic operators are inspected by private certifiers, accredited by an accreditation body and recognised by the Competent Authority for conducting conformity assessment under organic regulations.

The central government is supporting the growth of the organic sector, through several policy measures, which are put in coherence within a multi-year strategic plan. The policy mix includes support to research projects on organic agriculture and food, the provision of sector information, and area payments to organic farmers. The main motivations for the support to the sector are the environmental benefits of farmland under organic management and response to consumer demand.

Diverging from this modal approach, some OECD countries have taken a different approach towards the organic sector. Australia and New Zealand have chosen not to regulate organic standards for their domestic markets. These countries, as well as Chile, Israel, and Mexico have not implemented policy measures to support the growth of the organic sector. The Netherlands have repealed the measures in place until 2013 and restricts action to the enforcement of EU organic regulations. Conversely, Denmark, Estonia and Finland have chosen to keep conformity assessment fully under government umbrella.
### Table A2. Organic agriculture in OECD countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Agricultural land area under certified organic management (2010)*</th>
<th>Number of organic producers (2011)**</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Hectares</td>
<td>Share of agricultural area in country (%)</td>
</tr>
<tr>
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<td>OECD (Total)</td>
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1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

*Source: OECD Compendium of Agri-environmental Indicators. Data for year 2010 (Austria, Spain: 2009).

Table A3. Motivations for organic regulations

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<th>Benefits of organic agriculture and food</th>
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Source: OECD survey.

Table A4. Coverage of organic agriculture regulations

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<th>Control, inspection, certification *)</th>
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*) or a subset of these elements.

Source: OECD survey.
Table A5. Number of control bodies for organic agriculture regulations

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1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

* Compliance with the National Standard for Organic and Bio-Dynamic Produce (Export Control Orders 2005)
** Accreditation of private certifiers is ongoing
* Compliance with the Official Organic Assurance Programme (OOAP) for exports

Source: OECD survey.
Table A6. Strategic plans for organic agriculture in the OECD (n=22 countries)

<table>
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<tr>
<th>Country</th>
<th>Running period</th>
<th>Agricultural land area under organic management</th>
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<th>Target year</th>
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<td>Belgium (Flanders)</td>
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Source: OECD survey.
Table A7. Policy measures supporting organic farmers

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Table A7. Policy measures supporting organic farmers (continued)

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Source: OECD survey.
### Table A9. Other measures supporting the growth of the organic sector

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Source: OECD survey.
QUESTIONNAIRE ON ORGANIC AGRICULTURE

As the relevant person responsible for regulations on organic agriculture, your contact details have been forwarded to the OECD Secretariat by your country’s Delegation to the OECD Joint Working Party for Agriculture and Trade. This survey is part of a broader study that aims at understanding possible synergies between voluntary standards, regulations and public policies in agriculture.

We kindly ask you to complete this questionnaire and to send it back to the Secretariat as soon as possible, but **not later than 28 February 2014**.

To complete the questionnaire, please write directly in this protected Word file. Tick boxes and fill the shaded areas when appropriate. There is no restriction on the length of answer, so do not feel constrained by the size of the form. In order to provide context to the answers to closed-ended questions, feel free to provide us with additional information and comments. Please answer question 25 using the Excel sheet attached.

After completing the questionnaire, we would be happy to have a follow-up interview with you. We kindly ask you to provide your availability for a phone call between **February 10 and March 28**. Please also get in touch with the Secretariat if you require further information or have queries on the questionnaire and its questions.

You can contact the OECD Secretariat as follows:

Sylvain Rousset
Tel. (+33) 1 45 24 90 78
sylvain.rousset@oecd.org

Hyunchul Jeong
Tel. (+33) 1 45 24 86 88
hyunchul.jeong@oecd.org

Your input to this survey is highly appreciated. Thank you.
QUESTIONNAIRE ON ORGANIC AGRICULTURE CERTIFICATION
AND POLICIES

PART A. REGULATIONS ON ORGANIC AGRICULTURE AND FOODSTUFFS
(ORGANIC FARMING REGULATIONS)

1. Please present regulations on organic agriculture and foodstuffs in your country

| Date when first regulation passed into Law | Day (dd) | Month (mm) | Year (yyyy) |
| Date when first regulation came into force |          |            |             |
| Data when last revision of regulation came into force |          |            |             |

* Names of current regulations and internet links:

2. What are the motivations of the Government for setting organic farming regulations? *If possible, refer to the explanatory statement of the regulations.* Please tick boxes.

- Issues related to food markets
  - Consumer protection from false claims
  - Response to consumer demand
  - Better integration of domestic organic food markets
  - Better access to foreign organic markets
  - Other
    Please specify:

- Benefits of organic agriculture and food
  - Environmental benefits
  - Improvement in animal welfare
  - Positive impact on employment
  - Consumer health
  - Other
    Please specify:

- Synergies with existing or future public policies
  Please specify policies:

* Any additional comment:
3. What are the areas covered by the organic farming regulations?

☐ Production rules for organic agriculture
☐ Crops
☐ Livestock
☐ Aquaculture

☐ Processing of organic food
☐ Processing of organic feed
☐ Packing, storing and transport
☐ Labelling of organic products
☐ Control, inspection, certification
☐ Imported feed and foodstuff (e.g. assessment of equivalency)
☐ Export compliance (e.g. certificates for organic produce)
☐ Other

Please specify:

• Any additional comment:

4. Please provide information on the regulatory authorities, which are responsible for preparing organic farming regulations

• Names of authorities and internet links:

• What is the nature of these authorities?

☐ Supra-national authority (e.g. European Commission)
☐ Branch of central Government
☐ Ministry of agriculture
☐ Ministry of environment
☐ Ministry of economic affairs
☐ Ministry of health
☐ Other ministry

Please specify:

☐ Local Government

☐ Other authority

Please specify:

• Any additional comment:
5. Please provide information on the competent authorities, which are responsible for implementing organic farming regulations

• Names of authorities and internet links:

• What is the nature of these authorities?

☐ Supra-national authority (e.g. European Commission)
☐ Branch of central Government
  ☐ Ministry of agriculture
  ☐ Ministry of environment
  ☐ Ministry of economic affairs
  ☐ Ministry of health
  ☐ Other ministry
  Please specify:
☐ Local Government
☐ Other authority
  Please specify:

• Any additional comment:

6. What kind of organisations are inspecting and certification domestic operators, such as organic farmers, processors, importers and retailers?

☐ Public bodies (e.g. government, agency)  Go to 7
☐ Private certification bodies (profit or non-profit)  Go to 8
☐ Both public and private bodies  Go to 7
☐ Another system

• Please provide a description:

Then go to 10

7. Please provide information on the public bodies in charge of inspection and certification

• Names of public bodies and internet links:

• From your country experience, what are the advantages of having public bodies carrying out conformity assessment?

• And what are the disadvantages?
8. Please provide information on the private certifiers operating in your country (data for the most recent available year)

<table>
<thead>
<tr>
<th>Total number of private certifiers</th>
<th>Number</th>
<th>Year (yyyy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Domestic certifier only operating in my country</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Domestic certifier that also operates in other countries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Foreign certifier</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- From your country experience, what are the advantages of having private certifiers carrying out conformity assessment?

- And what are the disadvantages?

9. Are they public authorities in charge of overseeing private certifiers?

- ☐ NO
- ☐ YES

    - ☐ Same as the competent authorities, responsible for implementing organic farming regulations
    - ☐ Other public authorities

    - Names of public authorities and internet links:

    - Any additional comment:

10. Are they national accreditation bodies for private certifiers, i.e. for giving them formal recognition that they are competent to carry out specific certification?

- ☐ NO
- ☐ YES

    - Names of accreditation bodies and internet links:

    - Please indicate if the bodies are public or private:

    - ☐ Public bodies (e.g. government, agency)
    - ☐ Private bodies (profit or non-profit)
    - ☐ Both public and private accreditation bodies

    - Any additional comment:
11. Please provide key figures on organic agriculture that is certified under governmental regulation (For EU countries: including EC Organic Regulation 834/2007)

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Value</th>
<th>Year (yyyy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of farms</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area certified</td>
<td>Hectares</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of agricultural production</td>
<td>National currency</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PART B. POLICIES TOWARDS ORGANIC AGRICULTURE AND ORGANIC FOOD MARKETS

12. Apart from the regulations described above, is there a governmental programme specifically designed to promote the development of organic agriculture or the market of organic food?

☐ NO  Go to 14
☐ YES

• Name of programme and internet link:

• Period of programme:

<table>
<thead>
<tr>
<th>Month (mm)</th>
<th>Year (yyyy)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

13. Are they quantitative targets associated with the governmental programme (e.g. percentage of agricultural land, number of organic farms, growth in consumer spending)?

☐ NO
☐ YES

• Please provide information on the quantitative target(s)

<table>
<thead>
<tr>
<th>Definition (e.g. organic area in hectares)</th>
<th>If ending year</th>
<th>If yearly growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>From (yyyy) to (yyyy)</td>
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<tr>
<td>1</td>
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<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14. Are there governmental measures supporting the development of organic agriculture and the market of organic food? By “measures”, we mean any action and support, from information campaign to direct payments to firms, including to farmers, marketing channels or other recipients.

☐ NO
☐ YES  Go to 19

15. What are the motivations for governmental support to the development of organic agriculture and the market of organic food?

☐ Response to consumer demand

☐ Environmental benefits of organic agriculture and food
  ☐ Biodiversity
  ☐ Soil conservation
  ☐ Water quality
  ☐ Mitigation of climate change / reduced greenhouse gas emissions
  ☐ Other

  Please specify:

☐ Other benefits of organic agriculture and food
  ☐ Improvement in animal welfare
  ☐ Positive impact on employment
  ☐ Consumer health
  ☐ Other

  Please specify:

☐ Synergies with existing or future public policies

  Please specify policies:

☐ Any additional comment:

16. Is the central Government providing specific support to organic farmers? By «specific» we mean measures explicitly dedicated to organic farmers or that positively discriminate organic farmers (e.g. a premium on investment grants for organic producers).

☐ NONE
☐ Inspection services provided by Government
☐ Total or partial coverage of certification costs
☐ Advice and technical assistance
☐ Vocational training
☐ Integration in curricular or basic and higher education
☐ Support for capacity building and institutional structures (e.g. organic farmer associations)
☐ Payments for conversion to organic agriculture
☐ Payments for production in organic agriculture
☐ Tax breaks for organic farmers

68
17. Is the central Government providing specific support to organic food marketing channels?

- None
- Public procurement (e.g. governmental restaurants)
- Investment grants for processing and distribution
- Support for new sales structure
- Support for organic food marketing initiatives
- Support for organic fairs, exhibitions and other events
- Other

Please specify:

18. Are there other governmental measures promoting the development of organic agriculture or the market of organic food?

- None
- Information and promotion campaign
- Public education
- Support to research projects (e.g. on organic production, processing, food consumption)
- Provision of sector specific information (e.g. market data)
- Other

Please specify:

19. Are you aware of programs and measures implemented by local governments (e.g. States, regions, districts councils, counties) to promote the development of organic agriculture or the market of organic food?

- No
- Yes

→ Please provide information on key local governments’ programs
PART C. PRIVATE ORGANIC STANDARDS

20. Is any private organic standard operating in your country?
   □ NO  Go to 26
   □ I DON'T KNOW  Go to 26
   □ YES

21. Please indicate in which ways the central Government is involved with private standards
   □ Not involved  Go to 23
   □ Invitation to comment on standard drafts
   □ Providing guidance through round-table discussions or similar meetings
   □ Governmental officials as experts in standard-setting committees
   □ Founding the activity of private organic standard setters
   □ Other

   Please specify:

22. Please provide the reasons why the central Government is involved with private organic standards
   □ Enhancing consumer and citizen confidence in organic claims
   □ Making sure standard setting is transparent, fair and inclusive
   □ Making sure standards are compatible with governmental objectives
   □ Enabling private stakeholders to reach consensus on standard requirements
   □ Other

   Please specify:

   • Any additional comment:

23. From your country experience, what are the benefits and drawbacks of having coexisting organic farming regulations and private organic standards operating in the country?

24. Please provide key figures on organic agriculture that is certified under private standards

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Value</th>
<th>Year (yyyy)</th>
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</tr>
<tr>
<td>Value of agricultural production</td>
<td>National currency</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
25. Please provide information on the main private organic standards operating in the country. To do so, use the EXCEL sheet attached to this questionnaire.

26. **Thank you for completing the questionnaire.**

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sylvain.rousset@oecd.org         hyunchul.jeong@oecd.org

Policies in Trade and Agriculture Division  
Trade and Agriculture Directorate  
Organisation for Economic Cooperation and Development  
2 rue André Pascal  
75775 Paris Cedex 16, France
ANNEX 4.

COUNTRY STUDIES
FRANCE

Introduction

Standards, their related certification systems and marks, are today an integral part of the business of a large number of French farms. In France, the first voluntary standards were addressing origin and quality: the registered designation of origin have been developed as a series of public standards for wines (1935) and extended in 1990 to other raw and processed agricultural products. The “Red Label” (Label Rouge) certification the conditions of production and guaranteeing high quality (e.g. with respect to taste) was created in 1960 (Cadilhon et al., 2011).

After a first wave of organic and biodynamic standards developed in the 1970s, a second generation of farm standards on environmentally-friendly agriculture have been introduced in France in the 1990s (Mazé et al., 2000). Taking up concerns on the environmental sustainability of agriculture, often together with questions related to food safety and quality, those standards were developed by retailers (e.g. Filière Qualité by Carrefour S.A. in 1992), producer cooperatives (Agriconfiance® in 1992), Chambers or agriculture (Quali’Terre® in 1996) as well as farmer associations (Fruit Integrated Production standard in 1996). In addition to the development of agricultural standards, there has also been a significant dissemination of private manufacturing standards in the French agri-food industry. These food safety-oriented standards were developed by companies for the management of their own subsidiaries, by industry associations, by individual retailers (e.g. Auchan, Carrefour) or by groups of retailers (e.g. British Retail Consortium in 1998, International Food Standards in 2002) (Valceschini et al., 2005).

To protect consumers from misleading or false claims and to protect the integrity of value chains, the French government has developed a set of regulations related to the labelling of agro-food products, from the regulation of wine designations of origin, to more recent attempts to clarify the landscape of environment-related initiatives. This was done not only by regulating claims under the Prevention of Fraud law, but also by setting public standards in co-operation with stakeholders as well as by developing governmental labels. A legal framework for organic agriculture was set as early as 1980 and the government-owned brand AB (Agriculture Biologique) is used on pre-package food since 1985. In 2002, the sustainable agriculture qualification (Agriculture Raisonnée) was the first attempt to tackle and rationalize sustainability initiatives in French agriculture. The farm environmental certification and its related “High Environmental Value” claim were introduced in 2009 to provide a common framework for environmental standards.

In addition to regulatory initiatives, the government has been supportive of the development of certified agriculture. The first national Action Plan for organic agriculture was launched in 1998 followed by the creation of a specific Agency to reinforce organic value chains. The support to organic production was reinforced following the Grenelle de l’environnement multi-stakeholder forum in 2007 and recently consolidated with a new five-year Action Plan (Ambition Bio 2017) in spring 2013. This Plan is part of the Agro-Ecological project, which aims at strengthening training, continuing education and farming advice, and encouraging farmers to convert to environmentally-friendly practices. Each measure is associated with a specific quantitative objective, with an overall objective of 50% of French farmers to be involved in certified environmentally-friendly practices in one way or another by 2025.

Organic agriculture

Brief outline of the case

Most of French organic production is certified according to Council Regulation (EC) No 834/2007 only. Next to the dominant public standard, which is compulsory for making organic claims
on food, several private standards and their associated labels exist in France, which include more stringent requirements than those laid out by the EU regulation, or cover other products and topics, for example fair trade.

For the last more than fifteen years and through successive Actions Plans, the French government has actively supported the growth of the certified organic sector, which is considered to make positive contributions to environment preservation, agricultural employment, and rural development. The environmentally-friendly dimension of organic production has recently been emphasised by the incorporation of organic agriculture within a broader national project promoting green growth in agriculture.

**Background information**

**Description of the standards**


According to Regulation (EC) No 834/2007, the unified framework is motivated by the objectives of “ensuring fair competition and a proper functioning of the internal market in organic products, and of maintaining and justifying consumer confidence in products labelled as organic. It should further aim at providing conditions under which this sector can progress in line with production and market developments.” (Recital 3). The contribution of the organic production methods in delivering public goods is also acknowledged by the regulator, namely through the contribution “to the protection of environment and animal welfare as well as rural development” (Recital 1).

The regulation covers the production rules for organic agriculture in crops, livestock and aquaculture; wine and the processing of organic food and feed; packaging, storing and transport; labelling of organic products; control, inspection and certification; imported feed and foodstuff; and export compliance (e.g. certificates for organic produce). Since July 2010, the EU logo (‘Euro Leaf’) is mandatory for pre-packaged food with at least 95% of ingredients from organic agriculture compliant with Council Regulation (EC) No 834/2007.

The authority responsible for preparing the regulation is the European Commission (EC), DG Agriculture and Rural Development, Unit H3 (Organics). The first stage of preparing organic farming regulations happen at the EC, in later stages the Council of the European Union and the European Parliament co-decide through the ordinary legislative procedure.

According to the EU regulation, private organic standards are allowed provided that the EU standard is complied with: private standards can go beyond, but not below practice requirements established by Council Regulation (EC) No 834/2007, and the EU logo should be used next to any private label. Private and national labels could be used simultaneously with the EU logo.

Member States are publishing technical documents for the implementation of organic regulations, such as reading guides for operators. For sectors not covered by the EU regulation, Member States may develop and issue specific product standards. This is the case in France for catering, aquaculture, rabbits and snails (Madignier et al., 2013).

Strictly speaking, after successive steps of harmonising standards within the EU, distinct national organic standards no longer exist. However, in France, the AB brand (*Agriculture Biologique*) is a mark with specific rules of use. The label signalled organic food to domestic consumers from 1985 to 2010 and is now jointly used with the ‘Euro Leaf’.
History of the standards

As in several other EU countries, the first organic standards were private schemes developed in the fringes of a dominant conventional agriculture increasingly relying on chemicals and mineral fertilisers. The standard of the non-governmental organisation Nature et Progrès has been active since 1972.

In a context of burgeoning initiatives and communication on organic method characteristics, France was the first European country to introduce a legal framework for organic agriculture in 1980, followed by Austria in 1983 and Denmark in 1987 (Sanders, 2014). The AB label was introduced in 1985, in a successful attempt to clean and shape the communication on organic claims.

The first EU regulation for organic food, Council Regulation (EEC) 2092/91, was released with the objective to protect the integrity of organic food markets, to provide consumers with credible claims, while guaranteeing fair competition between operators from the different Member States. After several amendments, the regulation was completely revised with Council Regulation (EC) No 834/2007. A new EU organic legislation on organic production and labelling of organic products is currently under development. A web-based public consultation was carried out between January and April 2013, and a proposal of Regulation released on 24 March 2014. Discussions between Member States are expected to take place through 2014 and eventually 2015.

Next to the dominant EU public standard, several private standards exist in France, each of them certification a few hundred farmers. In addition to traditional standards such as Nature et Progrès and Demeter (biodynamic), new organic standards have entered the French market more recently, presenting more rigid requirements, covering value chains that had not been regulated before (e.g. cosmetics, textile) or including other sustainability criteria, such as fair trade and environmental management (Box A4). In comparison to Sweden (KRAV) or Switzerland (Bio Suisse), private standards are still of low economic importance – albeit a growing phenomenon on the organic market.

Private standard-setters operating in the food sector are using the EU regulation as building-blocks for their own standard. In the case of the Bio Cohérence standard, the list of specifications only includes requirements that are not already in the EU regulation, so that to use the brand, farmers should already be certified organic under 834/2007. As more or less the same control bodies are certification under EU regulation and private standards, they may use multi-standard check-lists for audits and certification, and they generally organise joint audits to reduce costs and burden on farmers.

Standard design

In the EU, organic rules are set by ordinary legislative procedure, i.e. European Parliament and Council following a proposal from the European Commission. Detailed rules are set by the EC with participation from Member States and the European Parliament. Specialist ministry staffs who represent Member States are periodically meeting in the Standing Committee on Organic Farming (SCOF). An Advisory Group on Organic Farming can issue non-binding opinions and since 2009 the Expert Group for Technical Advice on Organic Production (EGTOP) is providing advice to DG AGRI (Bloch, 2013).

The original content of regulation 2092/91 and previous national regulations were based largely on the International Federation of Organic Agriculture Movements (IFOAM) Basic Standard of the time. In the subsequent revisions, the evolution of EU regulations through the 1990s became somewhat more independent from IFOAM and was mainly driven by the European Commission and Member States through SCOF meetings (Gibbon, 2006).

In France, the stakeholders of the organic value chain are consulted through the National Institute for Origin and Quality (INAO). Within INAO, a Committee is dedicated to organic agriculture and food rules. The Committee discusses the national application of European regulations, as well as
national technical guides. Other main fora of policy dialogue are the Minister’s office, the Directorate General for Agriculture and Agri-Food, and the Organic Agency (Agence Bio), a public body under the supervision of the ministry, mainly for economic and communicative issues.

The AB brand is the exclusive property of the French ministry of agriculture, who defines the rules of use. It is not transferable or disposable to any private organisation. The mark is legally protected by INAO. The brand is widely used on pre-packaged organic products and well known by French households. According to recent estimates, 93% of French consumers know the AB brand. This is higher than the EU logo (42%), for which recognition is however growing very fast (from 13% in 2010) (CSA-Agence Bio, 2012). Since 1 January 2008, The Organic Agency is officially in charge of the management of the AB brand on communication media.

Box A4. Private organic standards in France

As in other EU countries, the first organic standards were private schemes developed to counterpart the dominant conventional agriculture. The standard of the non-governmental organisation Nature et Progrès has been active since 1972. The early development of an organic legislation (1980) and the government seal Agriculture Biologique (1985) had some impact on the further development and growth of private standards in France. However, in the last decade, new organic standards have emerged. Some are covering cosmetics, a category of products not regulated by Council Regulation (EC) No 834/2007: Ecocert comestique biologique (2003), COSMOS (COSMetic Organic Standard, 2010), Bureau Veritas I-305 (2010). Other private standards include the standards developed by the NGO Bio Partenaire combining organic and social accountability requirements. Biodyvin (2002) is a wine-growing biodynamic standard developed by well-recognised winegrowers. Bio Cohérence (2009) is a standard developed by the Federation of Organic Producers (FNAB) and other stakeholders in the specialized organic value chains.

Bio Cohérence

The Bio Cohérence consortium was established by FNAB, several specialized organic retail networks including the French leader Biocoop, consumer associations, cooperatives and other stakeholders. Production rules are more stringent than those stipulated in Regulation 834/2007, relating for example to the share of livestock feed to be produced on farm, to limits on nitrogen fertilisation and restrictions on the use of certain organic fertilisers, the interdiction of mixing organic and conventional production on one farm (which is authorized by Regulation 834/2007 under certain conditions), sourcing of raw materials and processing of final products within France, and lower thresholds for unintended presence of GMOs (Bio Cohérence, 2013). Certified products should be sold to the consumer either directly or through specialized organic retailers.

The Bio Cohérence private standard can be interpreted as a move of historic organic operators, in reaction to the revision of the legislation in late 2000s. Council Regulation (EC) No 834/2007 has fully harmonised Member States regulations. According to representatives of the consortium, this harmonisation has led to less stringent requirements than those stipulated in the former French regulation. For stakeholders, the two most problematic aspects of the 2007 regulation are the link to land for animal feeding (with the EU regulation leaving more flexibility to sourcing from outside the farm) and the higher GMO thresholds. Moreover, they worried that as organic farming was growing fast and becoming “mainstream”, driven by large retailers, the spirit of organic value chains would risk getting lost.

Operators therefore joined in 2009 to develop the Bio Cohérence charter and the associated private standards for organic production, processing and retailing. The objective is to provide a solution for the whole supply chain, from seed manufacturers to retailers, including millers and other processors. The Bio Cohérence standard for production keeps the previous French regulation requirements and adds new sustainability criteria, e.g. the prevention of various forms of pollution, and improved animal welfare. The list of specifications only includes requirements that are not already in the EU regulation, so that to use the label, farmers have to already be certified organic under the EU regulation 834/2007. As control bodies such as the French leader Ecocert are accredited for both public and private standards, a farmer will generally be controlled for the two standards during the same audit. Standard setting and management is managed by a board with seats allocated to six professional groups (farmers, producer organisations, processors, retailers, consumer NGOs, brand management bodies). In late 2013, 316 farmers, 7 processors and 130 food retail shops had adhered to the standard.

Biosolidaire

The Biosolidaire standard was issued in 2007 and is owned by Bio Partenaires, a NGO created by small and medium-size enterprises operating in food, medicinal herbs and cosmetics. The standard has been developed for domestic organic supply chains on the basis of the previous Bioéquitable label, a fair trade and organic standard for South-North trade. As some of the firms involved with the label source products from both France and foreign developing countries, they found a significant interest in developing a Fair trade label for domestic organic supply.

continued
According to the rules of the Biosolidaire standard, buyers and sellers are managing their long-term relationships through supply chain projects (Bio Solidaire, 2013). The two parties have to commit on volumes for a minimum of 3 years. The written contract should have pricing provision, with a floor price to protect the farmer (or more often the cooperative) and possibility a ceiling price. Parties are required to exchange information, especially on costs and margins. Every year, product prices for the year are negotiated, within the contract boundaries; for some highly price volatile products such as fruits and vegetables, fixed margins rather than prices are defined. To facilitate supervision, the same auditor is generally contracted by buyers and sellers. Products should be sourced from France and, if possible, locally, meaning for example that a company based in greater South-West will preferably supply sunflower seeds within this region. There is some flexibility, as some other quality requirements, such as technical and organoleptic characteristics, may be requested by buyers. Buyers have to draft a strategic plan in which they indicate ways to improve their social and environmental performance. They may use ISO certifications and other environmental management systems. There are also requirements for marketing organic food. The brand Biosolidaire is reserved for specialised organic shops. In 2014, about 300 farmers are involved in the standard, within 14 supply chain projects.

Conformity assessment and certification

The responsibility for implementing organic farming regulations is shared between the European Commission and the Member States. The latter should set up a system of controls with a “competent authority” responsible for the system. National governments maintain one or several control authorities, or delegate control tasks to private control bodies, to be accredited by the national accreditation body. The Commission controls national control bodies through periodical audits (Bloch, 2013).

In France, INAO is the competent authority responsible for supervising certification and overseeing private control bodies. These latter are accredited by COFRAC (Comité Français d’Accréditation). In March 2014, 8 control bodies were approved to certify according to EU standard. Similar rules apply to the AB label.

Key data

By the end of 2012, 25 168 or 4.7% of all French farms were engaged in organic farming, up from 11,978 in 2007 and 3 602 in 1995. The area under organic production was 1 032 941 ha in late 2012 (85% more than in 2007), including 855 644 ha certified organic and 177 297 ha in conversion. Permanent pastures and fodder crops represented 65% of organically managed land, arable crops 20% and other crops 15%. In addition, there were 8 785 processors and 3 172 traders and retailers of organic products, as well as 179 importers of organic products (Agence Bio, 2013).

Government involvement with the standards

Initially, the main motivations for setting national organic regulations and for their subsequent consolidation and revisions were to protect French consumers against misleading claims in a context of burgeoning initiatives and communication on organic method characteristics (1980), to harmonise standards and claims with a single national scheme that would foster market integrity and provide reassurance to consumers (1985), and finally to facilitate market integration with other Member States (1991). The significant involvement of the French government fitted well within the policy framework developed over the 20th century to regulate quality-orientated initiatives from French farmers, e.g. registered designations of origin in 1936, quality labels in 1960, or product conformity certificates in 1988.

Until the mid-1990s, most of involvement with the organic sector was focusing on regulatory and institutional issues. Within a general public regulation on agriculture, the organic sector developed largely independently and without any major specific public support.
From 1992, support for the conversion to organic farming has been provided to farmers under the European Regulation 2078/92/EEC (the “Agri-environment Regulation”). By the end of this programme in 1997, agri-environmental schemes covered 61,000 hectares in France, 0.9% of agricultural land (EC, 1998).

Organic agriculture was put high on the political agenda with the first national Action Plan designed to promote organic agriculture and the market for organic food (1998). The Organic Agency (Agence Bio), was created in 2001 to promote organic products and later on to manage funds for marketing projects. Following the 1999 Agricultural Orientation Law, organic payments were incorporated into Territorial Management Contracts, replaced in 2002 by Sustainable Agriculture Contracts. The 2006 Agricultural Orientation Law has established an income tax credit for organic farmers.

The support to organic agriculture was reinforced following a 2007 multi-stakeholder forum led by the French government (see also case of environmental certification). The Grenelle de l’environnement was initiated to address major environmental challenges, with a series of six workshops bringing together government officials, local authorities, employers, trade unions and non-governmental organisations (Meybeck and Pingault, 2010). This participatory political process has resulted in two framework laws dealing with the integration of sustainability into sectorial policies and the French economy, e.g. climate change mitigation, energy savings, urban planning, transportation, conservation of biodiversity, and environmental safety. The first Grenelle law included quantitative targets for organic agriculture: 6% of organically managed agricultural land by 2012 and 20% in 2020 (JORF, 2009). In support of these aims, a second Action Plan for organic agriculture was released in 2008 for the period going to 2012.

According to a recent evaluation study, support to organic farms mainly comes through the agri-environmental schemes (EUR 263 million in the period 2008-2011), and the income tax credit (about EUR 127 million) (Madignier et al., 2013). The agri-environmental schemes are supporting conversion and maintenance. They are co-financed under Rural Development Program (Pillar II) and, since the 2009 “Health check”, under Article 68 (Pillar I).

Other support is dedicated to research, development and innovative projects. A special fund (Avenir Bio) was created in the framework of the second Action Plan. It is managed by the French Organic Agency and finances, on a competitive tender basis, projects related to the organisation of value chains.

After the 2012 elections, the new cabinet launched an Agro-Ecological project, with the ambition to diffuse sustainable farming practices within French agriculture (MAAF, 2012). Giving momentum to the organic sector is part of this project. The objectives are not only to increase the proportion of organically managed land, but also to benefit from best practices from organic farms that may have favourable spill-overs for conventional agriculture, e.g. mechanical weeding, bio-control of pests, long crop rotations. A new five-year Action Plan for organic farming (Ambition Bio 2017) was launched in spring 2013 (See Box A5 for detailed information).

The French Agro-Ecological project was launched in a national conference held in December 2012. The aim of the project is to initiate a new transfer of agricultural production models and farming systems by reconciling economic and environmental performance.

The Agro-Ecological project is based on three complementary components:

- Assessing current knowledge and experience in agro-ecology. As part of the campaign *Produisons autrement* (‘Let’s Produce Differently’), a participatory forum was created to organise and exchange information on existing practical experiences and agricultural knowledge. In addition, the orientation documents of the research and technical institutes in agronomy and agriculture fields are being revised to promote agro-ecology.
- Strengthening agro-ecological training, continuing education and farming advice.
- Encouraging farmers to convert to and maintain agro-ecological practices at the farming level, through public support. The Common Agricultural Policy is being oriented to encourage changes in practices and investments. The bill for the future of French agriculture (*Loi pour l'Avenir de l'Agriculture*) presented in the end of 2013 also includes support for agro ecological practices.

In addition to these three components, six action plans have been launched. These aim to: i) support the reduction of pesticides; ii) support the reduction of antibiotic; iii) seek methane energy production and nitrogen autonomy; iv) support the beekeeping sector; v) enhance self-sufficiency for plant protein; and vi) support organic agriculture.

Following the presentation of the Agro-Ecological project, a new Action Plan for organic agriculture (*Ambition Bio 2017*), was launched on 31 May 2013 to further develop the organic sector. More specifically, the following six main goals have been defined:

- **Develop organic production:** An incentive system will encourage farmers to keep their fields under organic management. EUR 160 million per year will be provided for conversion to organic (or to support the continuation of organic) cultivation in the context of Pillar II support of the EU Common Agricultural Policy for the period 2014 to 2020.
- **Restructure the sector:** First, the cultivation of protein crops (such as canola, sunflower and soy) is to be supported in order to reduce dependence on imports for feed proteins. Second, in order to improve the organisation of the sector, better data on prices of products at different stages of the value chain are needed. For this purpose, national and regional observatories will be strengthened and co-ordinated. The special fund dedicated to organic farming, “Bio Future Fund” (*Avenir Bio*), managed by the French Organic Agency, will receive an extra EUR 1 million per year, in addition to the EUR 3 million per year received so far. *Avenir Bio* informs consumers, co-ordinates professionals, and identifies necessary changes to structure the sector and finance projects.
- **Develop organic markets and consumer information:** In the case of community catering, organic products are to achieve a share of 20%. Public awareness campaigns will also be run; these will be designed to appeal particularly to the younger generation through targeted advertisements, organised school visits to organic farms, and community garden projects.
- **Encourage research and development:** R&D for the organic sector will receive additional funds from the CAS DAR (*Compte d’affectation spéciale pour le développement agricole et rural*) programme that runs from 2014 to 2020. The outcomes will be communicated more effectively to the public.
- **Educate farmers and processors:** This point addresses the offer of training and advanced training, with special attention being paid to improving collaboration between the administration in the agricultural sector and the experts in organic agriculture. Continued education programmes will be launched for farmers, and specific courses and training periods that already exist in agricultural schools will be developed and expanded.
- **Adapt to EU regulation:** This point focuses on the specific implementation by farmers of special features in the EU regulation for the organic sector. Two bodies have been created to improve the liaison between the regions and the Ministry of Agriculture.

*Source: OECD (2013a, 2013b).*

**Synergy between standards and public policies**

Several private organic standards exist in France, but most producers are certified according to the EU public standard only, Council Regulation (EC) No 834/2007. The development of a common framework for Member States since the early 1990s has been a major step towards the facilitation of trade in organic products within Europe. Moreover, the recognition of the organic regulations of third countries, either through trade agreements or through provisions of Commission Regulation (EC) No 1235/2008, contributes to trade in organic food product.
The case of organic agriculture in France illustrates why and how governments can make use of standards and certifications to achieve policy objectives. For more than fifteen years, with co-funding from the European Union under CAP, and through successive Actions Plans, the French government has supported the growth of the certified domestic organic sector, considering it to positively contribute to environment preservation, farm employment, and rural development. The environmentally-friendly dimension of organic production has recently been emphasised by the incorporation of organic agriculture within the Agro-ecological project, a broader national project promoting green growth in French agriculture.

A major role of government is to correct market failures, through policies that encourage the production of otherwise undersupplied public goods (e.g. landscape, biodiversity) and reduce negative externalities (e.g. nutrient runoff). In several countries, including France and other Member States of the European Union, governments support organic agriculture through various measures as part as their national environmental policy (Stolze and Lampkin, 2009).

In order to raise consumer awareness and hence demand for organic products, governments may develop communicative instruments, such as public education, information and promotion campaigns. Communication is indeed one of the six goals of the current French Action Plan.

However, relying strictly on consumers’ willingness-to-pay to pay for green food fails to recognise that environment has public good characteristics, therefore subject to market failure. Because the benefits of consumption accrue to everyone, only two categories of consumers would agree to pay a price premium for organic and “sustainable” food: altruistic consumers motivated by environmental care and consumers that are associating environment-friendly production with private benefits, such as better taste or safety, for example a reduction in the exposure to pesticide residues (Bazoche et al., 2014; Bougherara and Combris, 2009; Pollans, 2010). For governmental decision makers, there is therefore no guarantee that labelling and communication policies alone will achieve the optimal level of environmental protection.

Moreover, if the objective is to increase the area of land that is sustainably managed, efficient policy measures should target production rather than product consumption. A general recommendation of the OECD Guidelines for Cost-effective Agri-environmental Policy Measures (OECD, 2010a) is to support all alternative management practices, provided that there are positive net public benefits associated with the change from current practices, and there is no “windfall effect” which means that the farmer would not have adopted the change without the incentives (OECD, 2010a).

Finally, apart from correcting market failure, another rational often used for a government stimulus to the certified sector is the “infant industry” argument (Guyomard, 2009). According to the argument, which remains controversial, temporary support by government could help the new organic chains to structure and mature, enable producers to benefit from learning and to exploit economies of scale and scope, eventually reducing production and marketing costs in the long run. After some years, there should be no need for governmental support. Improving the organisation of the domestic organic sector, especially in post-farm gate operations, is one of the objectives of the last two French Action Plans.

Farm Environmental Certification

Brief outline of the case

The farm environmental certification is a public standard with certification by third-party, developed and sponsored by the French ministry of agriculture. This standard is organised around three progressive levels and has been developed in tight connection with the private sector and non-governmental organisations.
An interesting feature of the farm environmental certification is that previously existing environmental standards operating in France can be benchmarked against the certification and recognised as equivalent to its level two. Indeed some of the most prominent private environmental standards have already been successfully benchmarked.

**Background information**

*Description of the standards*

The farm environmental certification (*Certification environnementale des exploitations agricoles*) is a voluntary scheme published in 2011, following a multi-stakeholder forum on the environment led by the French government. It is conceived as a business-to-consumers standard, which may eventually allow certified farmers to charge a premium on labelled products, and simultaneously as a “business-to-society” initiative aiming at establishing a better comprehension between farmers and the civil society. Moreover, an important feature of the farm environmental certification is that it incorporates a mechanism to recognise existing industry standards as equivalent.

The farm environmental certification consists of a series of three public standards embodied in national legislation, with three successive levels of agri-environmental requirements (MAAF, 2014). Level one (thereafter L1) is the introductory standard. Farmers have to comply with the environmental requirements of CAP cross-compliance, including the good agricultural and environmental conditions (GAEC). Moreover, it engages the farmer to assess the environmental status of the farm to evaluate how progress towards higher levels of the scheme could be made (JORF, 2011a).

Level two (L2) reflects farm compliance with a set of 16 different criteria (e.g. biodiversity conservation, crop protection strategy, fertilisation, water management) that have an effective impact on the environment and are designed to be integrated into the farm’s daily management. These criteria define the focuses for environmental progress on the farm, provide guidelines for the rational use of inputs and place limits of accidental leakage into habitats (JORF, 2011b). At this level, the certification can be managed within a collective framework, for example by first gathering entities such as agricultural cooperatives and grain traders. Existing voluntary standards can receive recognition on the basis of dual equivalence: meeting requirements and equivalence of control systems (JORF, 2011a).

Level three (L3) defines farms with “High Environmental Value” (HVE). The requirements concern the environmental outcome, as opposed to farm practice, a novelty relative to existing voluntary agri-environmental standards. Farmers can choose between two options for assessment – A) a group of four composite indicators relative to biodiversity, pest management, fertilisation and water management; or B) two synthetic indicators on the percentage of farm agricultural area under permanent grassland and ecological focus areas (EFAs), and the proportion of inputs in the turnover net of public subsidies (JORF, 2011a).

Certified farmers are allowed to claim on bulk or pre-packaged food that the product is coming from a “High Environmental Value” farm (JORF, 2011c). Standard-setters and firms engaged in L2 are allowed to communicate on their involvement in the environmental certification, for example in brochures and reports on Corporate Social Responsibility, as long they do not use the HVE claim on food products.

The competent authority having jurisdiction on the farm environmental certification is the ministry of agriculture. It delegates the responsibility of overseeing the programme to the National Commission for Environmental Certification (CNCE), an independent committee formerly set up by decree (JORF, 2011a).
**History of the standards**

The farm environmental certification is an outcome of the 2007 multi-stakeholder forum *Grenelle de l’environnement* (see details in the case on organic standards). The commitment to develop an environmental certification for agriculture was incorporated in the first *Grenelle* law, together with the commitment on increasing organically managed land. The law also set the ambitious – and retrospectively optimistic – target of 50% of French farms to be certified by 2012 (JORF, 2009).

The creation of a certification was driven by the objective to better communicate French farmers’ efforts towards sustainability, and simultaneously - for representatives of agri-food and retailing sector - to address consumers’ demand for more environmentally-friendly food (Meybeck and Pingault, 2010; Meybeck et al., 2011).

The initial reflection was centred on an eco-label scheme conceptually similar to forestry labels (FSC, PEFC) and the French “High Environmental Quality” (HEQ) mark in residential housing. The scheme was also intended to be suitable for small businesses and to make the best use of two different approaches in environmental reporting: certifications of good agricultural practices (GAP) in which farms have to demonstrate compliance with a pre-defined list of specifications, and environmental management systems (EMS) in which operators define their own criteria in a continuous progress and improvement in practices (Meybeck et al., 2011).

According to the policy officers in charge of developing the certification, the motivations for the recognition of existing agricultural standards were i) to enhance the environmental efforts already undertaken by farmers; ii) to improve transparency across existing standards; and iii) to promote the wider application of the new scheme, by defining it as complementing rather than competing with existing initiatives by the private sector (Meybeck et al., 2011). The first version of the scheme was released on 21 June 2011 by decree and ministerial orders.

**Standard design**

A Steering Committee, chaired by a senior government official, was set up to develop the farm environmental certification, negotiate critical issues between stakeholders and finally release a report in June 2009, with a draft proposal of decree and ministerial orders (Coll, 2009). Members include representatives of three ministries (agriculture, sustainable development, and economic affairs), farmers associations, cooperatives, agri-food business and retailers, research institutes, consumer and environmental NGOs. Two standard setters, the French Federation of Cooperatives (Coop de France) and the National Commission for Sustainable Agriculture Qualification (CNAR) were also involved.

For the French government, it was important to keep all stakeholders on board and reach a consensus on selective standards, as the presence of NGOs was critical for the credibility of the scheme and the promoters wanted to guard against the potential charge of promoting “green washing”. At the same time, the process was meant to be pragmatic. While making use of up-to-date scientific evidence and feedback from experiments, the process builds on the interesting features of already existing standards, including those promoted by farmers associations and other private bodies since the 1990s (Box A6).

Reporting to the Steering Committee, two working parties worked on technical specifications. The first focused on L1 and L2, whereas the other developed the L3 standard. To develop L2, the working party has analysed existing private and public environmental standards. The sustainable agriculture qualification (Agriculture Raisonnée or AR) was the main building block of L2, as it shared much in common with other French environmental standards. Indeed AR was set by the Ministry of agriculture in 2002 to tackle and rationalize sustainability claims in agriculture, and conversely since then, new private environmental standards have often been developed on the grounds of AR requirements. So it is not surprising that most French standards share the “same genes”.

82
However, with only 16 criteria, the L2 is simpler and more legible than AR and its 103 specific requirements.

Two voluntary standards, AREA from the Aquitaine Region, a local government, and Plante Bleu from the horticulture industry have been developed in the same period as the farm environmental certification, closely interacting with the ministry’s working parties and officials. Therefore, these two have very much in common with the certification requirements. Plante Bleue even follows the same multi-level structure.

The working parties involved in the technical specifications end up with two ways to be certified “High Environmental Value”, option A and option B. These two options aim at allowing for diverse systems of production to be taken into account, while maintaining the same level of environmental excellence. This co-existence, however, also reflects a compromise between farmer associations (which favoured option A) and environmental NGOs (which were pushing for option B).

The ministry of agriculture is responsible for the further developments of the scheme. The CNCE can issue proposals on the application and the development of the standards, in particular on the list of specifications and the thresholds of environmental performance mentioned in regulation.

Conformity assessment and certification

For the first level of the scheme, the core requirements (i.e. the fulfilment of EU cross-compliance) are based on a farm assessment controlled by an operator delivering services to farmers within the framework of the Farm Advisory System established by Council Regulation (EC) No 73/2009.

To audit and certify farms according to levels L2 and L3, private control bodies should be officially accredited by the Ministry of Agriculture, after consultation with the CNCE. There are seven approved control bodies: AFNOR Certification, BIOTEK Agriculture, Bureau Veritas Certification France, CERTIS, Control Union Inspections France, OCACIA, SGS – ICS. The control bodies are accredited by COFRAC.

Farmers may be directly certified under L2 or be automatically recognised as certified if they are in an existing recognised scheme. The standards should cover the 16 compliance points of the farm environmental certification.

As regards to the mechanisms of recognition, requests for equivalence recognition are sent for approval to the CNCE. Any kind of standard-owner could apply. Between 2012 and early 2014, 21 voluntary standards have been recognised as equivalent to the level two of the farm environmental certification (Box A6). Five standards are fully recognised and 16 are recognised for specific value chains: nine in winegrowing, four in arboriculture, one in horticulture (Plante Bleue), one in cereals, and one in poultry. The environmental management systems approved are based on either ISO 14001 or the Agriconfiance® programme (NF V01-007 standard). Other approved certifications include standards, which in addition to environmental requirements may cover criteria related to food hygiene and product quality.

There is no governmental seal for recognised schemes, similar to the “Protected Designation of Origin” logo or the “Label Rouge” seal for high-quality products. One reason is to avoid confusion between HVE, the highest level of environmental performance and the only label permitting claims about the sustainability of a product, and level 2, which the government considers an intermediate step. Moreover, while some of the approved schemes are targeting consumers, others are business to business standards using different communication channels.
Key data

As regards to L2, according to the feedback of standard owners in mid-2013, the estimation is about 5 000 farmers involved in 21 approved schemes, from all regions and sub-sectors, including arable crops, winegrowing, fruit and horticulture. About 80 farms are certified as HVE. It should be noted that the standard is relatively new, and the appropriate use of performance indicators by farmers, accompanying partners and even control bodies requires time.

Box A6. Private agricultural standards in France

Among the 21 different schemes benefiting from sectorial recognition in the farm environmental certification, several are designed within the Agri Confi ance programme, one of the oldest and widely diffused certifications in French agriculture. Other private standards recognised by CNCE include the Filière Qualité Carrefour (FQC) managed by Carrefour S.A., a large French multinational retailer, and the Plante Bleue standard, recently developed by the French inter-professional body for ornamental horticulture.

Agri Confi ance

The Agri Confi ance programme and trademark have been developed since 1992 by Coop de France, the French Federation of Cooperatives. The scheme is based on the principles of quality management system and environmental management system: compliance to regulatory requirements and continuous progress and improvement in practices (ISO 9001-14001, v2000, v2004). The adaptation of these generic principles results in two meta-standards for French agriculture: Norme Française (NF) V01-005 (quality) and NF V01-007 (quality and environment). These standards are developed and owned by AFNOR, the officially-approved standardisation body that represents France in non-governmental European and international standard-setting organisations.

The initial objective of Agri Confi ance was to respond to the requirements of cooperatives’ customers and transfer their demand to farmers, with a tailored tool that also allows flexibility and adaptation to local conditions, but that is also formalised and controlled with third-party certification. Implementation of the programme started in the 1990s. The first focus was on industrial customers such as processors of fruits and vegetables, in the value chains of which non-conformity with quality requirements proved to be a serious problem (e.g. harvest timeline, fruit size). Traceability requirements have been included in Agri Confi ance to cope with safety issues, and the use of the standard has grown with the food safety crisis in the mid-1990s. Since its beginning, Agri Confi ance has been supported by the French government. The initial development of the certification was supported by the programme for agricultural extension (ANDA). Transition costs were then financed by Rural Development Program 2000-2006 through territorial management contracts.

The NF V01-007 standard was issued by AFNOR in 2004. It includes criteria at the cooperative level, for collecting agricultural products, and at the farm level, with a set of good agricultural practices such as scouting for pests and alternative crop protection techniques, e.g. resistant varieties, re-implantation of natural predators, insect traps, reduced use of veterinary products, flower set-aside, waste management, etc.

The development of the meta-standard was parallel to the development of Agriculture Raisonnée, the first public environmental voluntary standard issued in 2002 by the Ministry of agriculture, but the two did not finally match and followed separate paths. However, five years later, Coop de France was very much interested to promote Agri Confi ance during the Grenelle Environnement and actively participated in working groups on the farm environmental certification. The three-level system of the certification is consistent with the continuous progress approach of environmental management systems. The drawback is that, as each Agri Confi ance SME is to some extent specific to one cooperative, therefore schemes could only be recognised by CNCE on a case-by-case basis.

In 2014, there are 132 certified cooperatives, which represent about 30 000 producers, including 10 000 involved with the quality-environment scheme (39 certified cooperatives). Originally, the scheme is a business to business tool, but since 2006 it is possible to communicate on food products with a specific logo (today, about 50 brands and 200 food products use the logo). The Agri Confi ance certificate is granted to the cooperative, affiliated farmers being free to enter the scheme. The cooperative is audited by a certificationcertifier and is responsible for conducting internal control of farmers, and for providing advice through its quality manager or extension service. Producers are audited on a sample base. The information system is managed by the cooperative. As environmental requirements are often seen as a burden for producers, the collective approach of the scheme is considered important and probably key to its success. Moreover, the implementation of an environment management system generally proves to be more challenging than a quality management system. Traceability and food safety requirements are not difficult to handle for technical staff, the scope is well-defined and there is a regulatory framework with the EU Food Law. The scope of “environmentally friendly practices” is much wider, less formalised in Law and continuously evolving. Finally, each cooperative within Agri Confi ance has its own set of criteria; they are developed to be tailored to specific needs of customers and environmental targets, for example the protection of a watershed for a wine cooperative involved.
Carrefour FQC

The FQC programme (Filière Qualité Carrefour) was developed by retailer Carrefour S.A in 1992, to answer to several concerns by European consumers, namely about food organoleptic quality and consistency, food safety, and environmentally-friendly practices. To manage quality in value chains, the answer was a third-party business to business inspection, with product standards developed in close collaboration with selected suppliers, through a privileged partnership.

The programme has grown and finally became an effective business to consumer tool to differentiate quality products on shelves, with a specific logo. FQC standards are developed when there is a consumer need, a relevant criteria not covered by regulation or existing voluntary schemes. For example, antibiotic resistance was identified as a consumer concern early on and since 2012, FQC “Red Label” chickens are guaranteed to be bred without use of antibiotics. Another FQC label is actually developed with producers for free range eggs, guaranteeing no use of antibiotics and GMO-free criteria (<0.9%) in feeding. One of the assumptions is that organic food will continue to be expensive for some categories of consumers, so that there is room for an intermediate level of environmental quality and animal welfare. FQC range is also part of the corporate social responsibility strategy of Carrefour, a stock-listed company (Euronext) that is under the scrutiny of diverse stakeholders.

For each FQC product, the list of specifications is drafted by a working group, consisting of Carrefour quality managers and producers. The criteria cover the entire production processes, from field to manufacturing, for example the requirement of six months pasture (beef), no antibiotics (chicken), no GMOs in feedstuff (pork), etc. Working groups are simultaneously discussing technical aspects, costs and sales prospects, how to communicate on the criteria, how to take into account regulatory constraints on sustainability claims. Requirements that are becoming compulsory by Law are immediately dropped from FQC list of specifications. Competitors’ standards are also benchmarked to assess the gap in process differentiation. In other countries, FQC may have the same specifications or be developed by the group’s subsidiaries in Europe, Asia and Latin America. Carrefour Italy has developed its own criteria for grapes, with low pesticide treatment and maintenance of grassland buffer strips. As the definition of good agricultural practices and standard-setting rules are the same for all countries, there is a permanent FQC team that travel abroad, advising the subsidiaries and checking the list of certifications for approval. On the marketing side, in contrast, there may be some national flexibility, e.g. on the FQC graphic chart.

As FQC development is costly, Carrefour is also building on existing standards and certifications when available: Protected Geographical Indication in Europe or, for example in France, the government-approved “Red Label” seal for high-quality products. Another example is the Certification de Conformité Produit (CCP), a government-approved certification system for food products. The CCP seal is a property of an industry association and is recognised by a 2007 decree. Products under a CCP are third-party certified, with a certification body approved by COFRAC. The retailer tries to build onto the Protected Geographical Indication, “Red Label” and CCP when feasible. The objective is twofold: gaining recognition and endorsement with an official seal recognised by the consumer, while making use of an existing efficient certification system, which allows cost-saving (for example, CCP and FQC audits are done by the same certification body). Similarly, when the first draft of the farm environmental certification circulated in 2009, Carrefour found that it was worth gaining recognition for the FQC certified apple, which requirements closely matched those of L2 certification.

In France only, there were about 16 000 producers for 68 FQC products in 2013, with a turnover of EUR 650 million. Their proportion in Carrefour outlet’s sales is very different from one product to another: 95% for fresh salmon, around 50% for beef, 70% for pork and veal, 25% of lamb, and 17% for apples.

Plante Bleue

Plante Bleue is a private standard certification and label for horticulture that was developed in 2008-2010, in parallel with the farm environmental certification and with tight interactions between the ministry of agriculture and the standard-setter, the French inter-professional body for ornamental horticulture (Val’hor).

The reflection on sustainable development started within the Committee for retailing of Val’hor, composed of flower traders, flower shops, specialized retail chains and producers. Starting from the objective to promote the domestic industry to consumers and attract younger clients, the conclusion was that there was no good tool to communicate best practices (such as lower use of pesticides and better water management) and to raise awareness on sustainability among professionals. French producers are operating in a market that is open, with aggressive competitors from abroad, especially the Netherlands. They wanted to differentiate themselves from imported production, by highlighting environmentally friendly practices. The Dutch Milieu Programma Sierteelt (MPS) is the leading business to business scheme for horticultural products worldwide. Since the late 2000s, is already used by a number of French producers. For Val’hor however, MPS was not suited to all domestic producers, not focused on consumers. Therefore, the organisation chooses to develop a system that supports sustainability claims to consumers, while at the same time providing a formal framework for producer-retailer negotiation on environmental attributes.

The Plante Bleue certification is accompanied by a logo and a registered collective brand. It is very similar to the farm environmental certification, with different steps for farm practice improvement. The entry level is a farm diagnostic, with the same items as L1, plus three extra sets of items that are particularly relevant for horticulture: i) waste management; ii) energy use (greenhouses); and iii) social accountability (as horticulture is labour intensive). The “Plante Bleue” certification has the same core requirements as L2, which were not difficult to translate to the horticulture sector; again extra requirements are related to waste, energy and social issues.
According to Val'hor, HVE (Haute Valeur Environnementale) is the most interesting level for the private sector, as it allows benefiting from governmental endorsement and communication on the logo. But, it proved to be more difficult to adapt to horticultural operations, as some requirements are not discriminating enough best practices (for example crop diversity in option A, which is by definition always very high in nurseries), whereas others are very demanding for producers (for example, the limitation on variable inputs in option B). Work on a L3 is therefore still on-going under the guidance of Astredhor, the technical institute for horticulture.

The first farm diagnostics were conducted in 2009 and the first “Plante Bleue” certifications were granted in April 2011. In April 2014, 127 horticultural farms are certified, with a prospect to certify 500 farms, of a total of about 4 000 French producers. For the inter-professional body, the main target is medium-sized farms operating on the domestic market, but also micro-sized business or giant international nurseries. The objective of Val'hor is to increase the number of certified producers and to enhance the exposition of the label, through communication campaigns targeting large customers, e.g. retailers, municipalities, and also consumers.

Government involvement with the standards

During the initial consultations on the farm environmental certification, some stakeholders expected that the government would grant financial support to stimulate certification. Pointereau (2008) quotes possible fiscal advantages for producers certified according to L2 (premium on pollution taxes, priority access to investment supports); for producers on HVE: tax credit, payment of certification costs, bonus to young farmers, payments through article 68 of CAP. Due to financial constraints, the government finally chose to limit the support to staffing and communication expenditures.

For individual farmers, incentives are therefore mainly coming from the market, through the recognised industry standards that should be enhanced by governmental endorsement and, for HVE certified producers, the possibility to claim HVE on products. Anecdotal evidence shows that the first HVE certified farms were winegrowers and other farmers selling directly to consumers, therefore directly benefiting from eco-labelling.

One important benefit for all certified farmers is a reduction in the control of cross-compliance (i.e. statutory management requirements and GAEC), mandatory for receiving EU direct payments and Rural Development Program payments. According to Commission Regulation (EC) No 1122/2009 (Art. 51, b), the authorities of Member States are allowed to select samples of farms to be checked on a risk analysis “taking into account farmer’s participation in a certification system if the scheme in question is relevant for the requirements and standards concerned” (EC, 2009). Concretely, it means that the farmers involved with the French environmental certification will have less probability to be selected in the sample of control as regards to cross-compliance. The nature of the controls is not modified.

During the negotiations of CAP reform, some governments have advocated the possibility for farmers certified under environmental schemes to be qualified automatically for “greening” payments, as will do organic producers. A recent study commissioned by the European Environmental Bureau on possible equivalence mechanisms for complying with the greening measures examines 15 voluntary schemes in four countries: Ireland, France, the Netherlands and Spain. The conclusion was that while none of the existing schemes was considered precisely equivalent to the greening measures (i.e. crop diversification, maintenance of permanent grassland and ecological focus area), the HVE certification was found to be the most similar (Hart and Menadue, 2013). Subsequent to the study, regulation (EU) No. 1307/2013 was released, stipulating that equivalence with greening is recognised by the EC if the requirements of the proposed certification are among the equivalent practices listed in Annex IX of the regulation (EC, 2013).
Synergy between standards and public policies

The farm environmental certification has been initiated by the French government as part of a wider effort to promote sustainable production and consumption, and to strengthen the environmental dimension of public policies. Developed and sponsored by the Ministry of Agriculture in tight connection with professional bodies and NGOs, promulgated by decree in 2011, the certification is organised around three progressive levels, only the most stringent one granting the label of “High Environmental Value” (HVE) to farmers compliant with the standard.

An interesting feature of this government-driven standard is that previously existing environmental standards can be benchmarked against the certification and recognised as equivalent to its level two. Indeed some of the most prominent private standards operating in France have already been successfully benchmarked.

The case of the farm environmental certification shows the potential of developing a governmental unified framework for voluntary standards in agriculture. In the context of a proliferation of sustainability initiatives, coming from farmer professional bodies, their customers, as well as from local governments, the common framework allows to pool together standards sharing common characteristics, to help level the playing field and raise the credibility of private initiatives.

One of the motivations for the recognition of private standards was explicitly to promote the wider application of the new standard, by defining it as complementing rather than competing with existing standards. The compliance with recognised private standards is considered as a step towards further improvement. In other words, rather than leaping to the HVE label, farmers may take a progressive approach and experiment with the good agricultural practices promoted by the private sector in their close professional environment.

According to officials responsible for the development of the certification, the participatory approach for the setting of the public standard and the proper screening of private standard applications by an independent body are key to the success of the policy.

Voluntary scheme for biofuels

Brief outline of the case

The producer associations representing the bioethanol and biodiesel industries in France (from biomass to biofuels) have joined in a consortium to develop a voluntary scheme named Biomass Biofuels Sustainability voluntary scheme (2BSvs). Private standards have been developed to allow farmers, biomass collectors (e.g. feedstuff cooperatives and traders) and other economic operators along the supply chain to demonstrate the compliance of their product with the sustainability criteria of the EU Directive on Renewable Energy (hereafter RED) and the Fuel Quality Directive. The scheme was approved by the European Commission on 19 July 2011. It supports sustainability claims, with respect to the Directive, for biomass used as raw material and biofuels processed from that biomass.

Background information

Description of the standards

The 2BSvs covers the whole biofuel industry’s supply chain, from biomass producer to the final biofuel traders. The scheme consists of several technical standards and accompanying documents. The 2BSvs-STD-01 standard is related to the requirements for the verification of biomass production and concerns “first gathering” points (e.g. cooperatives, grain merchants) and the biomass producers (farmers) supplying them (2BS, 2012b). The 2BSvs-STD-02 standard is essentially related to the
requirements for the mass balance system and concerns all other economic operators downstream in the biofuel chain, e.g. transformation units and international traders (2BS, 2012c).

The standard for the verification of biomass production for farm and biomass collectors is organised around nine broad principles broken down into several criteria and indicators. Indicators are worded as requirements (“shall”) or recommendations (“should”). Moreover, some compliance points are considered major or critical. The specifications are in line with the sustainability criteria of RED Directive (EC, 2009b): greenhouse gas emissions saving compared with fossil fuel (Principle 2 of STD-01), protection of land biodiversity and preservation of land with high carbon stock (Principles 3 to 5), compliance with relevant agro-environmental practices of Council Regulation (EC) No 73/2009, including good agricultural and environmental conditions or GAEC (Principle 6). The standard also incorporated all RED requirements on land protection, except - pending an official definition - the one related to high biodiversity grassland (Article 17.3.c of RED) (2BS, 2012a).

According to an EC communication (EC 2010), it is the Member States’ responsibility to cover and monitor agro-environment practices and GAEC by all farmers supplying raw material for biofuels or bioliquids. 2BSvs-STD-01 therefore only includes recommendations to biomass collectors, for example that they should train farmers on practices compliant with European legislation and inform them about changes in legislation. Other recommendations concern soil, water and air protection (Principle 7) and social accountability, i.e. reporting whether the country of origin for import of raw material has ratified and implemented the ILO conventions (Principle 8). As both criteria are not a requirement for biomass collectors in RED, they are implemented as only indicative in the standard.

A biomass collector acts as a group manager responsible for farmers, therefore the standard also calls for an internal management and monitoring system (Principle 0). Finally, biomass collectors have to develop and document a mass balance system (Principle 1). Contrary to segregated supply chains, with a mass balance system, it is possible to blend material with different sustainability characteristics during processing, transport and storage, provided that movements of all products are documented (Box A7). A credit account system is designed and monitored, to make sure that at any point of time the withdrawn are not exceeding the material added.

In the RED framework, the mass balance method for demonstrating compliance was chosen to avoid unreasonable burdens on the industry (EC, 2009b, Recital 79). According to 2BSvs-STD-01 standard, biomass collectors are required to keep records and pool information on inputs and outputs (e.g. type of feedstock, volume, sustainability characteristics, etc.). They have to put in place relevant procedures allowing to register sustainable biomass in a credit account, and to ensure that sustainability claims on product sold are backed by available credit in their system (2BS, 2012b).

Similar requirements for mass balance apply to downstream operators. For these operators, the 2BSvs-STD-02 standard also contains provisions on GHG emission savings and requires an internal management and monitoring system, as for biomass collectors (2BS, 2012c).

History of the standards

To achieve several policy objectives like energy security, mitigation of climate change and support to rural economies, several governments in OECD and emerging countries have increasingly promoted the development of biofuels over the past decades. Over time, however, and notably in the context of agricultural price spikes in the late 2000s, concerns became expressed more widely about the potential impact of rising production on food markets and biodiversity, combined with questions on the performance of first generation biofuels in reducing greenhouse gas emissions. In Europe, growing criticism had led several countries to launch national initiatives to regulate the biofuel industry, followed by the European Union that finally implemented regulations for the production, trade and use of biofuels in member countries (Moïsé and Steenblik, 2011; Ponte, 2014).
The Directive 2009/28/EC on renewable energy sets out sustainability criteria for biofuels in its articles 17, 18 and 19 (EC, 2009b). These criteria are related to greenhouse gas savings, conservation of land with high biodiversity value, land with high carbon stock, and, only for agricultural production in the EU, fulfilment of agro-environmental practices (Box A8). The criteria apply to biofuels and bioliquids produced in the EU and to imported products. Only certified “sustainable” biofuels are eligible for tax benefits or may be counted against biofuel use mandates. The sustainability criteria apply since 5 December 2010, date of transposition of the Directive. The criteria are also part of the Directive 2009/30/EC on fuel quality, which amends the previous Directive 98/70/EC and introduces a series of articles on biofuel sustainability and related measures (EC, 2009c).

According to RED Directive, economic operators in the chain must show to their Member States that the criteria have been met, either: i) by providing the relevant national authority with data, in compliance with requirements that the Member State has laid down (a “national system”); ii) by using a “voluntary scheme” that the European Commission has recognised for the purpose; iii) in accordance with the terms of a bilateral or multilateral agreement concluded by the Union with third countries and which the European Commission (EC) has recognised for the purpose (EC, 2009b).

The option to rely on a standard developed by the European Committee for Standardisation was excluded because there was no such standard available and the technical committee on sustainability standard initiated was only being launched a few months before (February 2008).

Between July 2011 and January 2014, 15 voluntary schemes have been recognised by the EC: 2BSvs, ISCC, Bonsucro, RTRS, RSB, RBGA, Greenenergy, Ensus, Red tractor, SQC, RedCert, NTA8080, RSPO, BIOGRACE and HVO Renewable Diesel Scheme (EC, 2014a).

This list includes standards specifically developed to meet RED criteria, for example 2BSvs in France and REDcert initiated by producers in Germany. It also includes pre-existing standards, which have been adapted to fetch EU criteria, e.g. the Red tractor (UK), ISCC (Germany), RTRS and RSPO (international). Some voluntary schemes are implementing the RED requirements, while other adds extra obligations such as on social accountability. Standards may be raw product-specific (e.g., sugar cane for Bonsucro, soy for RTRS, feed wheat for Ensus) or cover a wide range of feedstock.

There was no public or private standard available in France in 2009 and not a strong governmental move at that time to develop a national system. This was not specific to France. Indeed, at the deadline for transposition (5 December 2010) most Member States’ rules for verifying compliance with the sustainability criteria were not available to private operators. The RED Directive was finally transposed into French law in November 2011 and the national system launched in mid-2013. Moreover, there was no provision in RED for an automatic equivalence between national systems, whereas French biofuel producers are importing a significant proportion of feedstock from third countries, up to 30% of raw material for biodiesel.

Therefore back to 2009, a voluntary standard seemed to be the most convenient and flexible option for the private sector, because of the short deadlines for compliance (the RED specified that national laws transposing RED should be implemented from 5 December 2010) and the constraint to manage global procurement. Biofuels certified under Voluntary standards recognised by the European Commission get automatic access to all EU markets. According to our interviews with representatives of the consortium, the only already available standard was the ISCC standard (International Sustainability and Carbon Certification) developed under the direction and financing of the German government as part of national law. The scheme was intended to be a transposition of the RED, but was not necessarily fully compliant with RED. Therefore, the original ISCC scheme (ISCC-DE) was not usable outside of Germany at the time. It still needed to be adapted to fit the requirements of the European Commission and then be recognised by the EU. In addition, it was not selected for other reasons, including the following: (i) ISCC included criteria that are out of scope of the Directive such as on social accounting and may therefore put “unnecessary burden” on producers because of
reporting requirements; (ii) using the ISCC brand is expensive, with fees to be paid on volume of certified biofuel in addition to audit flat-rate payments; (iii) it would have “tied” French producers to a standard on which they have no hand; (iv) the scheme governance is complex, with a slow multi-stakeholder decision-making process, involving environmental NGOs and transnational grain corporations. The other pre-existing sustainability standards were not considered suitable for the context of French agriculture.

Moreover, by bringing together domestic supply chains for biodiesel and bioethanol, the French biofuel industry was considered to reach the critical mass that would make the development of a new and tailored scheme relevant and viable – not least as the two supply chains share mostly the same biomass providers, i.e. arable crop producers from northern France.

In consequence, in late 2009 stakeholders of the French biofuel industries opted for the development of a pragmatic and cost-effective scheme that would limit itself to the RED requirements, avoiding additional criteria. Such a new scheme was considered well-suited to the organisation of domestic supply chain while being sufficiently flexible to allow for foreign producers entering the scheme. The 2BS consortium was founded in April 2010 to create and manage the scheme. Bureau Veritas was commissioned to draft the two technical standards STD-01 and STD-02, based on input from a working party consisting of representatives of the founding members and external experts. Bureau Veritas was also charged to develop the governance of the scheme, an integral part of the submission to the EC. The first draft of 2BSVs Biomass Biofuels Sustainability voluntary scheme was issued in July 2010. After revisions following feedback by the European Commission, 2BSVs was among the first seven voluntary schemes recognised by the Commission on 19 July 2011, alongside ISCC-EU.

### Box A7. The EU Renewable Energy Directive (RED)

The EU introduced legislation to promote electricity produced from renewable energy sources in 2001 and to promote biofuels and other renewable fuels for transport in 2003. It adopted further provisions in 2009 enforcing mandatory targets of a 20% share of energy from renewable sources in overall EU energy consumption and a 10% minimum target for the share of renewable energy (including biofuels) in transport by 2020. The 2009 Renewable Energy Directive (RED) covers all types of energy from renewable non-fossil sources: wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, gas from sewage treatment plants and biogases. In addition, it establishes sustainability criteria for biofuels and bioliquids (liquid fuel for energy purposes other than transport), irrespective of whether the raw materials are grown inside or outside the territory of the Union.

The primary sustainability criterion in the Directive is a GHG emission saving compared with fossil fuel of at least 35%, brought to 50% from 2017 onwards and to 60% from 2018 onwards for biofuels produced in newly launched installations. This is the only criterion that biofuels produced from waste and residues must meet. For other biofuels, additional criteria relate to the protection of land biodiversity and the preservation of land with high carbon stock. Raw materials used to produce biofuels should not be obtained from land that had a high biodiversity value in January 2008, including: (a) primary forest and other wooded land hosting native species and ecological processes not significantly disturbed; (b) areas designated for nature protection purposes, or for the protection of rare, threatened or endangered ecosystems or species, unless evidence is provided that the biomass production does not interfere with these purposes; (c) highly biodiverse grasslands. Furthermore, raw materials used to produce biofuels should not be obtained from land that had high carbon stocks in January 2008, including wetlands and continuously forested areas with significant canopy cover, or from peatland, unless evidence is provided that the cultivation and harvesting does not involve drainage of previously undrained soil.

Agricultural raw materials cultivated in the EU and used to produce biofuels should also comply with EU environmental requirements for agriculture. Although such criteria do not apply to imports from third countries, under the Directive the EU is to encourage the development of multilateral and bilateral agreements and voluntary international or national schemes that cover key environmental and social considerations, in order to promote the production of biofuels and bioliquids worldwide in a sustainable manner. Only biofuels that comply with sustainability criteria count against biofuels targets and renewable-energy obligations, and are eligible for financial support for the consumption of biofuels and bioliquids.

In order to demonstrate compliance with the sustainability criteria, the Directive advocates the use of a mass balance system, whereby consignments of raw material or biofuel with differing sustainability characteristics can be mixed, the resulting mixture considered to have the same sustainability characteristics as the sum of all consignments added in the mixture. Other verification methods can be contemplated in the future, provided they maintain the effectiveness and integrity of the verification system without imposing an unreasonable burden on industry.

Standard design

The 2BS consortium gathers professional associations representing the biofuels industry in France, including biodiesel and bioethanol. The following organisations are members: AGPB (General Association of Wheat and other cereal Producers), AGPM (General Association of Corn Producers), CGB (General Confederation of Beetroot growers), Coop de France Métiers du Grain (French cereal cooperatives), FNA (Fedération of agriculture traders), SNPAA (National Union of Agricultural Alcohol Producers) and ONIDOL (National federation of organisations dealing with oilseeds).

The representatives of these founding organisations and the technical advisor of the scheme Bureau Veritas are members of the Steering Committee, the governing entity of the scheme according to its statutes (2BS, 2013). The consortium has delegated to the 2BS association, founded by the same members as the 2BS consortium, the management of the scheme and of all issues and possible problems with the implementation of 2BS, whether within the European Union or in a third country.

The ambition is for a self-supporting scheme, financed by fees rather than by transfers from the industry. In future years, the standard may be extended to cover areas without mandatory requirements at present, such as biomass for heat and electricity, and industrial by-products (glycerine, dried distiller grains, sugar beet pulp, etc.). In that case, it would change from a standard driven by mandatory compliance with regulation to a “brand”, which may eventually bring some product differentiation.

Conformity assessment and certification

According to STD-01, the biomass collectors are responsible for developing a quality and group management system for their biomass suppliers and are audited by recognised control bodies. Downstream operators certified under STD-02 are also audited by control bodies (2BS, 2012).

Control bodies are endorsed by the Steering Committee against requirements defined in the procedure for the scheme verification process. To be endorsed, control bodies shall be accredited against several ISO and ISAE standards. Eight organisations are accredited to provide audit and certificates, including the technical advisor Bureau Veritas - but with a clear separation (“Chinese wall”) between the staff in charge of developing the scheme and those in charge of certification.

Key data

As mentioned above, the 2BS certificate is granted to biomass collectors, processors and biofuel traders, not to individual farmers. 627 certificates have been delivered to economic operators in France (471) and in several other countries. Today, all French biodiesel producers and most ethanol producers are 2BSvs certified. Along with the German schemes ISCC and RedCert, 2BS is one of the most widely used voluntary schemes in the EU for demonstrating compliance with RED criteria. The standard is also used by biofuel operators from 22 European and foreign countries, including subsidiaries of major grain traders ADM, Bunge, Cargill and Louis Dreyfus Commodities.

Government involvement with the standards

The motivation for setting sustainability criteria are explicitly laid down in RED, particularly in recitals 69 to 88 (EC, 2009b): promoting a development of biofuels and bioliquids that result in significant greenhouse gas emission savings compared to fossil fuels, while ensuring that land use change does not harm biodiverse land and land with high carbon stock worldwide. Therefore, it is mainly the environmental dimension of sustainable development that is promoted by the EU rules.

In France, the voluntary scheme has been driven by the private sector alone. In the course of the development of 2BSvs in 2010, Ministry departments have been informed of progress made, but have not substantially contributed to standard-setting nor participated to working groups. In 2012, however,
the consortium shared its experience on developing a biofuel standard with the Ministry of sustainable development, the authority responsible for implementing the national system of sustainability in France, and that launched the system in mid-2013.

As all economic operators, operators certified within a voluntary scheme should notify the Directorate for Energy of the Ministry of sustainable development. However, in order to simplify administrative procedures and to avoid duplication of reporting, the scheme manager may instead report the list of certified operators to the ministry on an annual basis (MEDDE, 2013).

**Synergy between standards and public policies**

The 2BSvs case provides an illustration of complementarities between public and private sectors in the implementation of regulatory requirements. The voluntary standard option to comply with RED can be analysed as a move toward co-regulation in the sector of biomass production. This approach is consistent with the promotion by the European Union of a greater use of co-regulatory mechanisms to achieve better policies and delivery (OJ, 2001, 2003). It may also be seen as an extreme case in the use of standards, the biofuel standards being certainly voluntary, but used to show compliance with a statutory mandate.

One advantage of voluntary schemes as an option next to Member State’s standards (i.e. national systems) and regional trade agreements, is that they allow individual operators to choose the most appropriate and cost-efficient standards amongst those available. Eventually, there are a dozen approved voluntary standards, a number that is manageable by the regulator and economic operators, while allowing for some competition between the standards, avoiding barriers to entry for operators.

Other pragmatic reasons for opting for voluntary standards initiated by the industry include the absence of standards from specialized standardising bodies (ISO, CEN) at the time the regulatory decision was taken, and the advantage for the EU to establish a system open to third countries, in order to avoid accusations of implementing hidden barriers to trade, with too prescriptive technical regulations on sustainable biofuels.

A limitation of voluntary schemes is that they are not fully compatible with each other, due to extra requirements on environment and social accountability included in some of them. For example, 2BSvs is very similar to the German scheme RedCert, but not to RSB EU RED, a sub-standard of the Roundtable on Sustainable Biofuels. Moreover, there is no provision for automatic equivalence between voluntary standards in the EU Directive. Standard owners have to agree to mutual recognition or to unilaterally recognise a scheme as equivalent; for example, ISCC EU was recognised as equivalent by 2BSvs in December 2011. But, this may not impede sustainable biofuel trade at the end of the chain, because the standards all respect the core RED criteria.

Moreover, the system has been intentionally designed to facilitate trade with non-EU countries. Feedstuff for biofuel from third countries (e.g. sugar cane, soy, palm oil) can be imported through the voluntary schemes developed by commodity initiatives associating traders, NGOs and producers from developing countries. The most prominent of such schemes (RSB, Bonsucro, Round Table on Responsible Soy, Roundtable on Sustainable Palm Oil) have all been recognised by the European Commission.
KOREA

Introduction

Prior to the introduction of regulations on environmentally friendly farming systems, there had been several individual measures and policies, largely disconnected from each other, to respond to the growing concerns about environmental problems arising from agriculture. In 1992, the Korean government introduced a certification system to control the quality of Korean traditional specialty foods. This certification system expanded to also cover organic and non-pesticide agricultural products through the establishment of the Agricultural Products Quality Control Act in 1993. From 1996, the certification system additionally covered low-pesticide agricultural products, and a labelling system for organic products was introduced in the same year.

Unlike the experience of European countries, Korea did not have competent private sectors leading the establishment of environmental standards. In consequence, the Korean government played a key role in the development of environmentally friendly agriculture from the beginning.

Today, Korea has several public regulations to deal with environmentally friendly agricultural products (including organic agriculture), good agricultural practices (GAP) certification, hazard analysis critical control points (HACCP) system, agricultural products traceability information system and other independent certification systems for traditional Korean food and alcohol. In contrast, no private environmental standards have been developed. While the regulation for organic agricultural products and the other sets of regulations show differences in some details, their legal structures and their implementation schemes are very similar. The regulation for organic agricultural products can therefore be considered as largely representative for other environmental regulations as well.

Korean Certified Organic

Brief outline of the case

Twenty years ago, Korea enacted its first regulation on the certification system of environmentally friendly agricultural products, including, among others, products from organic agriculture. The introduction of the environmentally friendly agriculture regulation was motivated mainly by consumer protection and environmental conservation. The organic regulation has been heavily based on the existing private “Basic Standard” developed by the International Federation of Organic Agriculture Movements (IFOAM). The market for organically produced agricultural products has increased rapidly. Nonetheless, both inspection and certification have been predominantly performed by public agencies. However, private certifiers play an increasingly important role, creating the main element of coexistence between public and private activities in the system of environmentally friendly standards.

Background information

Description of the standards

The organic regulation of Korea covers all the requirements for organic agricultural products, feed and processed food; including production rules, processing, labelling, control, inspection,
certification and assessment of imported feed and foodstuff. While the standard for organic agricultural products is established and owned by the government, Korea has a mixed control system. Private certifiers are carrying out the inspection and certification of organic producers and processors, whereas governmental authorities deal with organic producers. However the share of producers covered by governmental authorities has not been significant so far.

History of the standards

The government launched its “Environmental Policy in Agriculture, Forestry and Fisheries for the 21st Century” initiative in July 1996. This initiative emphasized the reduction of pollution and other environmentally harmful effects from agriculture, the conservation and improvement of the agricultural environment and the encouragement of environmentally friendly farming systems, such as organic farming.

Sustainable and environmentally friendly farming became a top priority of the government formed in February 1998. The Sustainable Agriculture Promotion Act established in 1997 under the previous government came into effect in December 1998, and it has been amended several times to introduce new measures to preserve the environment and to promote sustainable agriculture.

In May 2012, Korea amended the Sustainable Agriculture Promotion Act in order to include fishery and food products certifications in the same system and to manage consistently the various certifications which had been applied differently by each category of the products. The name of the law was also changed to the Act on the Fostering of Environment-Friendly Agriculture and Fisheries and the Management and Support of Organic Food reflecting the changes.

The 2012 act provides a legal basis for the equivalency with other organic food certifications established by foreign governments or private certification bodies. The clause on equivalency became effective in January 2014.

Standard design

The regulation on organic agriculture, established by the Act No. 11705, relates to processes and production methods based on the International Federation of Organic Agriculture Movements (IFOAM) Basic Standard. The Act also established regulations for other forms of environmentally friendly agriculture and related products, including for non-pesticide agricultural products, non-antibiotic livestock products and low-pesticide agricultural products. These regulations are similar to the regulation on organic agriculture in terms of format, but differ in their specific requirements.

The Ministry of Agriculture, Food and Rural Affairs (MAFRA) is the official government agency having jurisdiction on the regulation on organic agriculture. The National Agricultural Products Quality Management Service (NAQS), as a designated governmental agency under MAFRA, is in charge of inspection and certification.

NAQS conducts various tasks related to agricultural products and food safety and quality management, including the agricultural products safety inspection, the environmentally friendly agricultural products certification (including that of organic products’), the GAP certification system, the country of origin labelling (COOL) management, the genetically modified organism (GMO) labelling, the living modified organism (LMO) management, and the registration of farms and agro-businesses in order to protect the health of citizens and to help farm management.

2. NAQS operates a certification system which is divided into three groups depending on production method and materials used: 1) organic products and food, 2) non-pesticide agricultural products, non-antibiotics livestock products, 3) low-pesticide agricultural products.
**Conformity assessment and certification**

NAQS does the conformity assessment certification, however it also plays the role of the relevant accreditation body for private certifiers. Farmers, food producers, distributors and importers of organic products or food may apply for organic certification to NAQS or to private certifiers accredited by NAQS. There are nine provincial offices and 109 local offices of NAQS and 71 private certifiers are distributed across the country, and the private certifiers covered 77% of organic agricultural area in 2013. Among the 71 private certifiers, only four are from other countries. Within NAQS, there is a clear distinction with separate operation between designation and certification: while the NAQS headquarters designates the certifiers, the provincial offices of NAQS certify producers and distributors.

There are four steps for the certifiers to issue organic certificates to the applicants. Even after a certificate is issued, it is regularly checked whether the product is still produced in accordance with the regulations. An organic certificate is valid for one year. A renewal of the certification or an extension of the validity of certified products requires the submission of the related application at least two months prior to the expiration date.³

- **Step 1:** Receipt of application for certification.
- **Step 2:** Notice of screening plan by certifier (NAQS or private certifier).
- **Step 3:** Document and Field screening including farm visit.
- **Step 4:** Decision making; Issue the certificate / Deny and notify the reason.

**Key data**

The scale of organic agriculture production in Korea has increased rapidly during the last decade. The number of certified producers increased from 442 farms in 2001 to 16 733 farms (1.5% of all farms) in 2012. The area is also expanded from 450 hectares to 25 467 hectares (1.5% of agricultural land in Korea). The certification of organic livestock products started in 2005. The number of organic livestock producers was only 18 farms in 2005 and increased to 97 farms (under 0.5%) in 2012 (Table A11). The market value of organic products increased from KRW 250 billion (USD 228 million) in 2008 to KRW 410 billion (USD 374 million) in 2011.

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3. The certificates for non-pesticide agricultural product, non-antibiotic livestock product and low-pesticide agricultural product are valid for two years.
Table A11. Key data of organic agriculture production in Korea

<table>
<thead>
<tr>
<th>Year</th>
<th>Total agriculture</th>
<th>Crop products</th>
<th>Livestock products</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Organic</td>
<td>Non-pesticide</td>
</tr>
<tr>
<td>2001</td>
<td>Farms (households)</td>
<td>1 353 687</td>
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</tr>
<tr>
<td></td>
<td>Area (ha)</td>
<td>1 876 142</td>
<td>450</td>
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<tr>
<td>2002</td>
<td>Farms (households)</td>
<td>1 280 462</td>
<td>1 505</td>
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<tr>
<td></td>
<td>Area (ha)</td>
<td>1 862 622</td>
<td>1 602</td>
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<td>Farms (households)</td>
<td>1 264 431</td>
<td>2 748</td>
</tr>
<tr>
<td></td>
<td>Area (ha)</td>
<td>1 845 994</td>
<td>3 325</td>
</tr>
<tr>
<td>2004</td>
<td>Farms (households)</td>
<td>1 240 406</td>
<td>3 283</td>
</tr>
<tr>
<td></td>
<td>Area (ha)</td>
<td>1 835 634</td>
<td>4 622</td>
</tr>
<tr>
<td>2005</td>
<td>Farms (households)</td>
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<td></td>
<td>Area (ha)</td>
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<td>2006</td>
<td>Farm (households)</td>
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<td>7 167</td>
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<tr>
<td></td>
<td>Area (ha)</td>
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<td>8 560</td>
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<tr>
<td>2007</td>
<td>Farms (households)</td>
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<td></td>
<td>Area (ha)</td>
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<td>2008</td>
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<tr>
<td></td>
<td>Area (ha)</td>
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</tr>
<tr>
<td>2009</td>
<td>Farms (households)</td>
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<td>9 403</td>
</tr>
<tr>
<td></td>
<td>Area (ha)</td>
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<tr>
<td>2010</td>
<td>Farms (households)</td>
<td>1 177 318</td>
<td>10 790</td>
</tr>
<tr>
<td></td>
<td>Area (ha)</td>
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<td>15 517</td>
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<td>2011</td>
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<td>19 311</td>
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<td>2012</td>
<td>Farms (households)</td>
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<td>16 733</td>
</tr>
<tr>
<td></td>
<td>Area (ha)</td>
<td>1 729 982</td>
<td>25 467</td>
</tr>
</tbody>
</table>

Government involvement with the standards

The protection of consumers against misleading claims was the most important motive of the government for setting organic regulations. In the early 1990s, linked to growing concerns about environmental problems related to agricultural production, an increase in deceptive organic claims had been observed in the market, especially from retailers selling imported processed food. Around the same time, motivated by potentially higher incomes and also by other, non-pecuniary benefits such as lower exposure to chemicals, some farmers near large cities started to convert to organic farming on a voluntary and individual basis. However, the conversion to organic farming was not a simple task for the inexperienced farmers, and their claims on the organic quality of their products were neither scientifically proven nor verifiable by consumers. As a consequence, the government decided to regulate organic labelling and advertisement to protect consumers. At the same time, it was decided to
develop a public regulation setting out the minimum requirements to be met by organic products, assisting farmers in the appropriate adoption of organic practices.

The government also played a major role as “fourth-party” enforcer. As organic farming expanded, the cost for conformity assessments and certifications by government agencies also increased. In addition, the government’s service was not flexible enough to respond to the needs of the many farmers and their customers. Hence, the government agency NAQS started to designate private certifiers and to act as the accreditation body and overseer. Originally, the government had planned to gradually transfer this control system to the private sector by 2013, but this plan has been postponed following the increased demand for the NAQS certification and recent fraud cases involving private certifiers.

Another motivation was encouraging the production of public goods (or the reduction of negative externalities), such as enhanced biodiversity, a variable landscape, reduced pollution, or the conservation and improvement of the environment. In this context, the government introduced the notion of “organic agricultural products in conversion period” which are produced by farmers during the first two years of conversion period for organic farming, and the notion of “low-level pesticide use products” which is divided in two groups by the level of chemicals used in the production period; non-pesticide and low-pesticide products. During the establishment of the organic certification system in the late 1990s, many farmers who were moving away from conventional agriculture requested differentiated treatment of their products. They argued that they would need at least three years to comply with organic requirements, and that their products would already be far more environmentally friendly than conventional farm products because of the reduced or no use of agro-chemicals. While the positive effects on the characteristics of the agricultural products were debated, the government decided to recognise the positive effects on the environmental footprint. After a series of amendments to the law simplifying the categories, only two categories will remain from 2016 onwards, including organic and non-pesticide products.

According to the Act No. 11705, MAFRA must set an “Environmentally Friendly Agriculture Fosterage Plan” every five years. This comprehensive plan shall include, not limited to: i) policy goals and direction for conservation of agri-environment; ii) the status of agri-environment and plan for improvement; iii) chemical use reduction plan; iv) research, outreach, education plan; v) plan for fostering demonstration plot; vi) plan for increasing demand for environmentally friendly products; vii) plan for fostering multifunctionality of environmental agriculture; viii) plan for international cooperation; ix) plan for securing budget; x) plan for fostering certifiers. The target for the share of organic agriculture area is 4% of total cultivating land in the most recent plan.

Next to the standard for organic agriculture, the Korean government has also introduced a number of measures supporting the development of organic agriculture and the market of organic food. These include:

- Support to farmers: advice and technical assistance, vocational training, payments for conversion to organic agriculture, payments for maintenance in organic agriculture (OECD, 2012).
- Support to marketing channels: investment grants for processing and distribution, support for new sales structure, support for organic fairs, exhibitions and other events.
- Other national measures: information and promotion campaigns, support to research projects.
- Measures from local governments: all nine provincial governments shall set its own five-year action plan to foster environmentally friendly agriculture in accordance with the “Environmentally Friendly Agriculture Fosterage Plan” set by MAFRA.
Synergy between standards and public policies

As mentioned above, there are no private organic standards in Korea. There are, however, two areas of relationships between the private and the public systems relative to environmental regulations: First, conformity assessment and the certification of organic and other environmentally friendly agricultural products is increasingly shared between public and private agencies, with the government maintaining the accreditation of private certifiers and the ownership of the standard. Second, as for other countries as well, the Korean public regulation on organic agricultural products is largely based on private organic standards developed in other countries and by international organisations. The IFOAM Norm-2005 represents the main basis for the Korean organic regulation, and as a member of the Codex Alimentarius Commission since 1971, Korea follows Codex guidelines.

Referring to existing international standards allows for significant cost savings in the development of domestic regulations. Other countries’ experiences from the development and operation of regulations and standards can be built upon, which should reduce problems potentially arising from inconsistencies in the regulations and with related institutions. In addition, the clear link to existing standards helps to reduce potential trade frictions that arise from differences in national regulations and the need for compliance with different requirements. Finally, the introduction of a legal basis for the equivalency with foreign organic food regulations driven by the linkage to international standards is likely to facilitate trade in organic food products.

Korea’s history of policies regulating and supporting environmentally friendly agriculture is relatively short when compared to that of other OECD member countries. However, as a second mover, Korea benefits from other countries’ experience and existing international standards. Although the government still takes the leading role in the development of organic agriculture, the private sectors’ competence is growing rapidly, especially in the consulting and certification business.

Private organic standards driven by Korean companies might not be observable in the near future due to the relatively small size of the organic market. However, the openness of the Korean economy and consumers’ preference to differentiated quality food may drive food companies and the farmers’ association to eventually develop their own private standards. Looking at the development of organic agriculture in Korea over the past 20 years, it seems likely that the market for organic food products will continue to grow. In consequence, the role of the private sector in the standard setting, conformity assessment and certification may well expand further.
THE NETHERLANDS

Introduction

Conventional agriculture in the Netherlands is under the rule of EU and Dutch public regulations, concerning nutrient use, pesticide use, water management and nature conservation, which include farm level obligations and restrictions. The strong productivity growth in the agricultural sector was driven by increased levels of inputs including mineral fertiliser, manure, pesticides and energy between 1950 and 1980.

Since the 1980s, the Dutch and European consumers have become increasingly concerned about the environmental impacts of the high-input agricultural system, and agricultural development has been placed under environmental restrictions aiming to promote environment-friendly agricultural production. Linkages between agricultural production and sustainability are being enforced by the cross-compliance principle of the EU’s Common Agricultural Policy (CAP), since 2003. Under this principle, farmers receive payments in compensation for the decreased prices of a number of commodities, conditional to meeting specified standards on environmental quality, animal welfare, veterinary restrictions, and others.

A number of environmental certification schemes for agricultural produce have been developed in the Netherlands since the 1990s, complementing national and EU legislation in this area. The initiatives were taken by farmers, retailers and food processors to reduce the risk of negative impacts of intensive agriculture on environment and biodiversity, and differentiate production. The EKO Mark for organic agriculture was introduced in the Netherlands in 1991 at the same time than Council Regulation (EEC) 2092/91. The main difference relative to the other environmental certifications is the absence of synthetic fertiliser and pesticide use. In addition to the EKO label, several environmental certificates with less restrictive criteria for pesticide and nutrient use have been developed. Of these, the MBT (Environmentally Aware Cultivation), Milieukeur (Environmental Quality Label), and CC (Controlled Cultivation) labels are most frequently found and are more adapted for implementation on conventional farms than the EKO organic scheme. These intermediate farming schemes aim at improving agricultural sustainability while enabling higher yields compared to organic farming and, with current product prices, allow for comparatively easy compliance by farmers.

All environmental labels operate within the overall constraints of the EU and Dutch legislations. The EKO Quality Mark for organic agriculture illustrates the potential synergies between private standards and public regulation in the Netherlands.

EKO Quality Mark

Brief outline of the case

For organic production, the Netherlands follows and operates the EC legislation on organic agriculture and foodstuffs. The EC legislation for organic production has been laid down in two regulations; The Council regulation (EC) No 834/2007 of 28 June 2007 and the Commission regulation (EC) No 889/2008 of 5 September 2008.

The history of organic agriculture started in the 1920s with the first bio-dynamic farm in Zeeland, Loverendale. In 1996, the Dutch government started to develop an action plan to support organic
farming and the growth of the certified organic sector. From 2001 to 2004 a first action plan called “Policy Document on Organic Agriculture” was implemented. A series of subsequent action plans with the same policy title were issued in 2005, 2008 and 2012, gradually moving the focus from the creation of an organic market to fostering the growth of organic agriculture.

Complementing the EC regulations and national implementation orders, a number of organic organisations were established to protect the interest of organic farmers and to encourage organic farming (see Box A8). Private standards on organic agriculture in the Netherlands go beyond public requirements in a number of areas, including animal welfare, clean environment, on-farm nature and biodiversity, healthy and safe food, close connection with society and consumers, climate neutral production and the conservation of natural resources. Next to the EU organic mark, the collective “EKO Quality Mark” is one of the most well-known private quality marks for organic products, restaurants, catering and retailers in the Netherlands. Demeter, which originated in Germany, is also a famous certifier.

**Background information**

**Description of the standards**

The current regulations on organic agriculture are Council Regulation (EC) No 834/2007, Commission Regulation (EC) No 889/2008 (on production, labelling and control), and Commission Regulation (EC) No 1235/2008 (on trade with third countries). The authority responsible for preparing the regulation is the European Commission (EC), DG Agriculture and Rural Development. Member States publish technical documents for the implementation of organic regulations, such as reading guides for operators. According to the EU regulation, private organic standards are allowed provided the EU regulation is complied with, and the EU logo should be used together with any private mark.

The EKO Quality Mark is only allowed on agricultural products containing more than 95% of organic ingredients and cannot be used on products from farms under conversion. EKO-restaurants and EKO-shops are programmes for downstream business, also involving inspection and certification. SKAL is the certifier for all three programmes. Restaurants and catering companies with the EKO Mark have to make a commitment to organic food and to be inspected annually. Four different EKO-restaurants certificates can be issued: minimum of 40%, 60%, 80% and 100% as percentages of the organic purchase value compared to the total purchase. The EKO-shops mark is allowed for shops providing more than 90% of food as organic and the shops have to make efforts to improve their overall sustainability. Foreign companies who wish to operate in the Netherlands can apply for an EKO certificate.

The EKO Quality Mark indicates the additional efforts of organic companies in the field of sustainability to their consumers and buyers. It indicates that the entrepreneurs fully endorse the basic principles of organic farming, which are laid down in the IFOAM principles: ecology, health, fairness and care. These principles have been made explicit within public (EU and national) regulations; other elements are specific to the EKO Quality Mark, such as the use of green energy, clean fuels or renewable packaging. This means the EKO Quality Mark goes further than the EU requirements for organic farming, and thus beyond SKAL.

**History of the standards**

The regulatory framework for control and certification of the organic crop sector only exists since 1992 with the implementation of Council Regulation (EEC) 2092/91. It was expanded in 2000 with the regulatory framework for the animal sector.

The EKO Quality Mark has been introduced in 1991 in parallel of EU regulations. The mark was owned by Stichting SKAL until 2012, when it became a private label owned by the EKO-Mark.
Foundation (Stichting EKO-keurmerk). SKAL is a private, non-profit foundation with a public task as certification and inspection body for the organic production in the Netherlands in accordance with EU regulations. It was established in 1985 as S.E.C. and has operated as SKAL since 1992. This organisation is the only organic inspection body in the Netherlands, assigned by the Dutch government.

**Standard design**

The EKO Mark foundation is developing the EKO code for farmers in cooperation with organic farmers (including organic farmers’ associations of fruits and vegetables), license holders, research institutes (Louis Bolk Institute), foreign private standard holders (Bio Suisse) and Bionext, the umbrella organisation for the organic sector. The Board of the EKO-Mark foundation is represented by the organic sector and directors: farmers (Biohuis), processors (Vereniging Biologische Producers), shops (Biologische Winkelvereniging), chairperson and finance executive.

The EKO code has additional terms to the minimum requirement of the EKO Mark regarding eight themes; Closed cycles, Soil, Seeds, Biodiversity, Clean and Pure Production, Animal Health and Welfare, Energy and Climate, and Social and Fair. When a code is drafted, a hearing for consultation with farmers, retailers, consumers and experts is organised publicly by the EKO Mark Foundation before deciding the code.

Bionext, a forum in which primary organic producers, suppliers, processors, wholesalers and retailers participate, has played an important role in the development of the standards in this context. It has developed activities to strengthen the organic food chain, offer counsel on policy, research and regulation, provide information on organic production methods, co-operate with the conventional agricultural sector and support initiatives to promote organic agriculture. Bionext helps the EKO Mark foundation by providing its facilities and financial resources. The government does not directly engage in the standard setting procedure, but exchanges relevant information indirectly through Bionext and SKAL.

**Conformity assessment and certification**

In the Netherlands, Stichting SKAL is the only control body recognised for providing inspections and certification according to Regulation EC 834/2007. The duty has been assigned by the Ministry of Economic Affairs. The objective of this system is to reassure the consumer that a claim about organic food is justified, and that products labelled as organic actually originate from an organic production process. Apart from controlling the production process, SKAL also assesses post farm-gate operations. In consequence, SKAL oversees the entire organic food chain in the country. SKAL carried out more than 4 000 on-site inspection visits in 2012. It is accredited by the Dutch Accreditation Council (Raad voor Accreditatie) and is also a member of the European Organic Certifiers Council. SKAL cooperates with other national and international inspection bodies and exchanges relevant information.

**Key data**

Organic agriculture is still a relatively small sector compared to conventional agriculture in the Netherlands, with a share of 2.59% of the total agricultural acreage in 2008-2010. It is below the EU15 average 5.02% in the same period. By the end of 2012, 1 658 farm units and 1 758 processors, traders and importers were registered as organic companies, with a total certified organic acreage of 50 736 ha. By the end of 2013, 1 647 Dutch farms were engaged in organic farming and the area under certified organic production had increased to 53 379 ha.

A large part of the organic agriculture area is grassland (75%) used mainly for dairy production. Vegetables and potatoes are the most important cash crops in organic plant production. While covering only a small area, organic greenhouse production provides high economic value. Consumer
demand for organic products has risen steadily over the last decade, with the annual spending on organic produce growing at around 8% on average. The main channels for organic products are supermarkets and specialised organic or natural food stores, with shares of over 85% of total organic products sales. Recently, the internet and the catering market are rising as new sales channels.

The use of the Label “EKO Quality Mark” is restricted to organic companies that are licensees of the foundation and to organic products certified by SKAL. There are 1 100 licensees (farmers, producers, processors, retailers, etc.), 25 restaurants and 70 organic products specialized shops.

**Government involvement with the standards**

In the Netherlands, the main motivations for encouraging organic farming regulations were to protect consumers from false claims and to respond to consumers’ increasing demands for certified organic products. The environmental benefits and improvement in animal welfare from organic agriculture and food were also important motives for the support to EU legislation and EKO standard.

Today, the Dutch government does not interfere with the development of the private EKO standard and also does not attempt to directly influence the development of the organic sector by domestic subsidies. Instead, the government largely limits itself to the implementation of Common Agricultural Policy (CAP) and the implementation, monitoring and enforcement of the EU legislation on organic agriculture. It includes monitoring on genetically engineered products and border controls on imports and exports of organic products, with the ambition to keep administrative costs to a minimum. Unlike in several other Member States, there is no specific national plan to stimulate the development of organic agriculture.

In the past, there was a more direct intervention from the Dutch government. From 1992 until 2004, the government provided area-based payments for organic farming under the CAP. In 2006, these payments have not been renewed. They were replaced by a subsidy for part of the certification cost for organic farms. Over the last years, the refund was covered by the Rural Development Programme 2007-2013 under measure 132 “Participation of farmers in food quality schemes” (Sanders, 2014). Holdings converting to organic production received an annual payment for five years, with up to 100% of costs to be reimbursed, with a maximum of 3 000 EUR per year over a period not exceeding five years.

The government also used to encourage the development of the organic market by indirect policies such as providing a favourable environment by applying knowledge and organising consumer campaigns, supporting retailers in their marketing efforts and promoting export and import of organic products. In the Policy Document on Organic Agriculture 2005-07, the government announced four priority areas for incentives policy: the stimulation of demand, the development and dissemination of knowledge, the state support to promote organic agriculture at regional level, and the subsidies as part of rural development policy to the farmers who converted to organic production (rewards countryside stewardship). It reflected the government’s perspective on organic agriculture as an example for a sustainable system which integrates the various sustainability aspects related to the environment and animal welfare.

In the subsequent Policy Document on Organic Agriculture 2008-11, the ambitions and targets were further developed. Connecting organic agriculture with forerunners in sustainability, promoting the exchange of knowledge and strengthening the connection of the organic sector with society were among the key ambitions. Another objective was to develop the organic sector into a robust independent sector. The priority policy areas also changed in accordance with the ambitions: stimulating demand and chain connections, sector development, regional strength, knowledge and innovation (MANFQ, 2007). In the period 2008-2011, the national measures (not co-financed by the EU) that addressed organic farming included support to marketing and processing, training and advice, promotion campaigns and events, institutional support, and research (Sanders, 2014).
Today, the Dutch government aims to promote market development by means of cooperation in the food chain, and to benefit from a good division of responsibilities between government and the private sector. While not providing any subsidies to support the operation of the organisations, the government provides funding to private sectors on projects which provide information and advice to the government, or which assist the organic sector.

### Box A8. Dutch organic organisations

**Federatie van Biologische Boeren (Federation of Organic Farmers)**

The Federation of Organic Farmers was established in 1995 by merging two earlier organisations, including the NVEL (Dutch Society for Ecological Agriculture), founded in 1983, and the VB-DB (Association of Biodynamic Farming), founded in 1976. The Federation represents the interests of the organic farmers in the Netherlands. Its aims include: safeguard of realistic prices for organic products, improvement of the national and EU-legislation on organic agriculture, increase in the demand of organic products by improved consumer information, safeguard of the natural character of organic agriculture.

**VBP - Vereniging Biologische Producenten (Organic Producers Association)**

VBP is the organisation of processors of organic products, founded in 1995, uniting three smaller associations of processors. The main aim is the representation of the common interests of their members and the stimulation of the trade and processing of organic products.

**Platform Biologica (Bionext)**

Platform Biologica was founded in 1992 by merging two earlier organisations: Biologica had been active in the fields of consumer information and marketing, whereas Platform Biologische Landbouw & Voeding (Organic Agriculture & Food) had focused on agricultural policy. Platform Biologica has become the umbrella organisation for organic farming and nutrition biological farmers, traders, manufacturers and retail-traders. The following organisations are associated with Platform Biologica and they are co-operating to expand the reputation and the market of organic products: The Federation of organic farmers (that unites the NVEL and the VB-DB, the two organic producer associations), the VBP (the organisation of processors of organic products), the VWNR (the association of retail traders in natural food), the CBL (the umbrella organisation of supermarkets).

**SKAL**

SKAL is a private, non-profit foundation with a public task as certification and inspection body for the organic production in the Netherlands in accordance with the public law, based on EU regulation 2092/91. It was established in 1985 as S.E.C., foundation for inspection of the “EKO Quality Mark”, and it operates as SKAL since 1992. The main purpose is to guarantee a reliable certification of the organic products by an independent survey of the organic producers. Inspections consist of visits to farms, processing and importing units, examination of soil, crop or tissue samples and administrative assessments. When the production process fully meets the requirements, SKAL issues a certificate.

**Good Food Foundation**

The Good Food Foundation was established in 1986 with the aim to encourage, initiate, subsidise, manage and supervise projects in the field of organic agriculture. Members of the foundation are mainly European firms. Certified organic products originating from the projects are: sultana raisins and paste, dried figs and fig paste, dried unsulphured apricots and other fruits as well as herbs, pulses, grain and seeds.

### Synergy between standards and public policies

The organic agriculture standard case in the Netherlands shows how governments can cooperate with the private sector to pursue public policy goals. The organic standard EC 834/2007 and related EU legislation are the basis for both ministerial implementation orders and private standards, so the Dutch government confines its role to implement common EU regulation rather than engaging in private standard setting procedures. However, the government has set ambitious targets on sustainable agriculture, including on the development of a robust organic sector. The organic sector, including farmers, businesses, researchers and NGOs, is considered capable of leading on all questions related to sustainability for Dutch agriculture at large. Also, as the organic sector is closely linked to the public awareness of environment-related problems, it is considered to contribute to stronger connections between environmentally friendly agriculture and the society. Through successive policy actions plans, the government indirectly supports the development of the organic sector.

Through the development of the EKO Quality Mark, which sets more stringent constraints on farming than the public regulation, certification related to the public organic regulation has become
less costly. Given that the EKO Mark uses the same certification system and certifier, SKAL, both administrative costs and transaction costs for farmers related to on-site inspections are reduced. Therefore, synergies between the public policy interest and the private standard mainly consist of efficiency gains along the regulatory chain, especially for monitoring compliance at the farm level.

Because SKAL is a non-profit foundation with a public task and Bionext is the umbrella organisation for the organic sector, the close cooperation with these organisations results in double-sided benefits for the EKO Mark Foundation during the development of the EKO standard. The combination of SKAL and Bionext with the private standard owner EKO Mark Foundation brings together the interest of public and private stakeholders in the standard setting process. It enables the system to benefit from the industry’s local knowledge and best practice, to efficiently account for economic constraints, and to balance potentially conflicting views between different stakeholders.

In addition, the definition of the EKO Quality Mark requirements and its certification system as an extension of the EU organic regulations implies the full marketability of organic products bearing the ‘Euro Leaf’ logo across the European Union, in line with the principles of the European common market.
**SWITZERLAND**

**Introduction**

A significant proportion of Swiss farms are certified according to the requirements of private standards. The main private standards and related labels include the Bio Suisse standard for organic cultivation (“Bud” label), the IP-SUISSE standard for integrated farming (“Ladybird” label), and the SwissGAP standards in horticulture and speciality crops.

The growth of private standards has addressed consumer expectations and has been channelled by the food retail sector. Switzerland is characterized by a highly concentrated food retail system, where two retail networks, Migros and COOP, trade over 75% of all fresh agricultural products (Réviron and Chappuis, 2005). Both retailers are cooperatives of consumers, with a diversified portfolio of activities outside the retail business, and particularly into food processing (e.g. meat packing, bakery, mineral water, chocolate). Since the early 1990s, the Swiss retailers have extended their line of “sustainable” and organic food products. Migros has done so through its own private brands, including organic label Migros-Bio and through the promotion of food certified according to external standards such as IP-SUISSE and Fairtrade (Max Haavelaar). COOP has also developed several private brands and engaged in partnerships with the Bio Suisse association to promote a range of organic products (Réviron and Chappuis, 2005). Finally, Swiss retailers have been active in promoting standards related to food safety, and among others were a key driving force behind the development of the SwissGAP standards in horticulture, fruit, vegetables and potatoes.

The growing awareness of environmental issues by Swiss households, relayed by non-governmental organisations and Cantons, also contributed to the greening of Federal agricultural policies through the 1990s and 2000s (Chappuis et al., 2008). The main objectives of Swiss agriculture have also been introduced in the Federal Constitution in the mid-1990s: according to its article 104 (b), agriculture should substantially contribute to the conservation of natural resources and rural landscape (OR, 2013a).

Substantial reforms of the agricultural policy were implemented in 1993, when Federal Council passed the Direct Payment Ordinances, and simultaneously a resolution on the reduction of market price support. The most important change in direct payments was the introduction of general direct payments and ecological direct payments. Payments for integrated production per hectare of crops cultivated according to specific production standards (e.g. soil conservation, manure application) were part of the general direct payments, whereas payments for extensive cereal and rapeseed farming (“extenso”) and payments for organic farming of crops were part of the ecological direct payments designed to provide additional remuneration to farmers for providing public goods (OECD, 2015).

The subsidies to “extenso” production and organic agriculture have been extended in the subsequent agricultural programmes and are one of the elements of the current policy package for 2014-2017. Irrespective of whether they use the Bio Suisse label or not, organic farmers may be eligible to payments for organic farming. The “extenso” requirements (i.e. ban of growth regulators, fungicides, insecticides and synthetic stimulators of plan natural defence) are part of the IP-SUISSE standard for cereals and rapeseed. Therefore IP-SUISSE certified producers may be eligible to “extenso” payments.
The voluntary programme for integrated production was discontinued with the 1999 reform, but their requirements were to a large extent the base for the environmental cross-compliance introduced as part of the reform. Cross-compliance ties the support to farmers to the compliance to regulations and to the fulfilment of a list of environmentally-friendly practices set in the Proof of Ecological Performance (PEP). The list includes a balanced nutrient use, the rotation of crops on the farm, and a minimum share of ecological compensation areas. The fulfilment of PEP is today a prerequisite of the IP-SUISSE, Bio Suisse, and SwissGAP private standards. Those standards are discussed further in the chapter.

Bio Suisse organic standard

Brief outline of the case

In Switzerland, more than 90% of organic farms are certified according to the Bio Suisse standard, a private standard with stricter practice requirements than national organic regulations. The associated “Bud” label achieves a high profile among Swiss consumers. As most organic farmers are Bio Suisse certified, coexistence between private and public standards is a crucial issue in the case of Switzerland. The potential duplication of control and excessive burden on farmers is avoided by the cross-accreditation of private certification bodies and the cost-efficient design of the conformity assessment.

Background information

Description of the standards

The Bio Suisse standard is owned by the Association of Swiss Organic Agriculture Organisations (Bio Suisse in French, Vereinigung Schweizer Biolandbau-Organisationen in German), a private not for profit association founded in 1981.

The standard applies to the production of plant and animal products which are to be marketed under the “Bud” label, the trademark of Bio Suisse, or which are indicated as being produced in accordance with the Bio Suisse standard; to the processing and marketing of foodstuffs which are partly or wholly composed of raw materials produced in accordance with the Bio Suisse standards and which carry the “Bud” label; to “Bud” auxiliary inputs or those which are indicated as being produced in accordance with the Bio Suisse standards (BIOSUISSE, 2012).

The last version of the standard (Cahier des charges pour la production, la transformation et le commerce des produits Bourgeon) was released on 1 March 2014. The document is organised around five chapters: i) general provisions, ii) rules for crop production and livestock husbandry in Switzerland, iii) rules for processing and marketing, iv) rules for wild harvest, v) rules for imported products (BIOSUISSE, 2014a).

The Bio Suisse standard encompasses the legal requirements for organic food, i.e. the regulations on organic agriculture established in 1997. The current regulations are the Ordinance 910.18 on Organic Farming and the Labelling of Organically Produced Products and Foodstuffs and the Ordinance 910.181 on Organic Farming EAER (OR, 2014a, 2014b). Moreover, according to Ordinance 910.18 (Art. 3, g.), all Swiss organic farmers have to comply with the agricultural requirements of the Laws on animal welfare, the protection of water resources, the protection of the environment, and the protection of nature and landscapes. One of the elements is the Proof of Ecological Performance (PEP), which is mandatory to receive any direct payments from the Federal

4. In fact, Bio Suisse has specific and different requirements for the different levels along the food supply chain. While these could be seen as separate standards, this report considers them as just one to improve readability.
government (OR, 2014c). Compliance with environmental regulations and PEP is therefore a prerequisite for farmers to be certified according to the Bio Suisse standard (“must” criteria).

The Bio Suisse standard is more stringent than the requirements of the Ordinance in a number of farming practice areas (Table A12). For example, there is no exception to the principle of whole-farm organic management, the list of permitted plant protection agents is more limited and the requirements for crop rotation are stricter (e.g. 24 month break between main crops of the same family).

### Table A12. Comparison of practice requirements for Swiss organic farmers (selection)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Federal Ordinance 910.18</th>
<th>Bio Suisse standard Additional requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole farm conversion</td>
<td>Whole-farm organic management</td>
<td>No exception to the principle of whole-farm organic management</td>
</tr>
<tr>
<td></td>
<td>Exception: permanent crops (can be non-organic if grown in accordance with PEP*)</td>
<td></td>
</tr>
<tr>
<td>Prohibitions</td>
<td>No utilization of synthetic chemical agents or ingredients; no utilization of genetically modified organisms or their products; hydroponic cultivation not allowed; no utilization of growth regulators, defoliants; no ionizing rays or irradiated products</td>
<td>No hybrid varieties in cereal cultivation (except corn)</td>
</tr>
<tr>
<td>Crop protection</td>
<td>List of permitted plant protection agents as in Annex 2 of Ordinance</td>
<td>Only substances from a list of substances approved by the Research Institute of Organic Agriculture (FiBL)</td>
</tr>
<tr>
<td></td>
<td>Copper application limited to 4kg per hectare and year</td>
<td>Limits for copper application range from 1.5 kg to 4 kg per hectare per year depending on crop, e.g 1.5 kg for apples/pears, 2 kg for berries and 4 kg for stone fruits, potatoes and wine</td>
</tr>
<tr>
<td>Fertilisers</td>
<td>Mineral nitrogen fertilisers not permitted</td>
<td>Min. of 50% of nutrients produced on farm (e.g. slurry, manure, compost) should be applied to own land</td>
</tr>
<tr>
<td></td>
<td>Organic fertilisers should come from own farm whenever possible</td>
<td>Export of farmyard manures only to organic holdings, import from holdings having at least PEP and non GMO feed</td>
</tr>
<tr>
<td></td>
<td>Spreading of nutrients max. 2.5 LU equivalent per ha in prime locations</td>
<td>Min. of 50% of nutrient supply shall come from organic holdings (min. 20% with exceptional approval)</td>
</tr>
<tr>
<td></td>
<td>Use of peat only for the production of seedling and heather earth plants</td>
<td>Max. transport distances (linear distances): slurry 20 km, manure 40 km, and poultry manure: 80 km</td>
</tr>
<tr>
<td></td>
<td>Permitted fertilisers as listed in Annex 2 of Ordinance</td>
<td>Use of peat forbidden Permitted fertilisers listed in FiBL list</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop rotation and protection against erosion</td>
<td>Rotation must be organised to fight preventively against diseases and pests, and to prevent erosion, compaction, and the leaching and runoff of nutrients Fulfillment of PEP* criteria: at least four different crops have to be cultivated per year on those farms where arable land area exceeds 3 ha and maximum shares of individual crops must be respected</td>
<td>24 month break between main crops of the same family At least 20% of grassland throughout the year in the arable land (pastures or set aside), except special provisions At least 50% of arable land should be covered during winter Rules for soil fertility management</td>
</tr>
<tr>
<td>Ecological compensation area</td>
<td>Fulfilment of PEP*: 7% of agricultural area, 3.5% for horticultural holdings</td>
<td>7% of agricultural area for all holdings Min. 5% of total vegetation must be low-input grassland</td>
</tr>
</tbody>
</table>

PEP: Proof of Ecological Performance; LU: Livestock Unit; FiBL: Research Institute of Organic Agriculture.

Source: Agridea (2014).
All operators in the value chain, including farmers, have to comply with social requirements related to employees’ rights, compensation and housing rules, health and safety at work (General provisions, Title 4). The standards on fair marketing practices (Title 5) include a “Code of Conduct”. Related guidelines are discussed within the stakeholders’ platforms and may be at some point translated into binding obligations.

The Bio Suisse standard is also more stringent for food processing and trading than the requirements of the Ordinance. Microwave treatments are not allowed, only quality-preserving methods are permitted, fewer additives are allowed. There are also some restrictions on the packaging of organic food.

The Bio Suisse approval does not entitle operations outside Switzerland to label products with the “Bud” label (Bourgeon in French, Knopse in German). Non-Swiss farmers and producers can produce according to the standard; however they may not use the label.

To be sold with the “Bud” label, imported products should be carried to Switzerland by a Bio Suisse licence holder. Their foreign suppliers must comply with the Bio Suisse standard. To be consistent with sustainability objectives, products must be transported by land or by sea, priority should be given to imports from the nearest production regions or countries, fresh products from overseas are only approved if they cannot be grown in Europe for climatic reasons. Traceability of raw material is checked for all imports in the Bio Suisse chain (Kilcher et al., 2011). Of course, organic products which are equivalent to the Swiss organic legislation can be imported to Switzerland by non-Bio Suisse licence holders. For example, one could find in food retail organic products from the European Union, labelled with the EU logo.

History of the standards

In the early days of organic farming in Switzerland, organic labelling initiatives were founded by farmer associations and other non-governmental organisations. In the late 1970s, more than 30 locally organised organic associations were coexisting, with different appreciation on practice rules (Barrier, 2008).

Claims were often not supported by an independent and neutral conformity assessment. The fragmentation across organisations and regions, and the lack of credibility were challenging the growth of the organic food sector in the Confederation. Moreover, at that time the Federal government was sceptical about the ökologisch and biologique claims, considered to some degree as misleading and not scientifically sound. Rather than introducing a national legislation, as it was done by France (1980), Austria (1983) and Denmark (1987), the government pushed local organic associations to create a common standard that would improve market transparency and increase the integrity of value chains, while protecting Swiss consumers against false claims.

The Association of Swiss Organic Agriculture Organisations (Bio Suisse) was founded in 1981, as an umbrella organisation for local Swiss organic associations. The same year, it set out the first standard for organic cultivation.

Through the 1980s, Bio Suisse and the Federal government were in close contact to improve the mutual understanding of needs and objectives. In 1993, the Federal Office for Agriculture (FOAG) introduced payments to organic farmers. Other forms of support to the organic value chains were introduced in subsequent years.

Federal organic regulations were prepared much latter than the Bio Suisse private standard, in the mid-1990s, to provide common rules for the domestic organic market, in order to improve further the coherence of the organic value chain, as part of the policy for food product quality. Objectives included the improvement of the conditions for a market-oriented production, and the increase in value of Swiss agricultural products. More importantly, regulations have been stimulated by prospects of...
market integration through trade agreements with the European Union and third countries. The bilateral agreement between Switzerland and the EU on trade in agricultural products (ATAP) was signed on 21 June 1999 and came into force on 1 June 2002, facilitating mutual market access. In particular, it provided for a mutual recognition of the equivalence of several regulations, including organic regulations in Annex 9, Art 3 (OR, 2013b).

Standard design

Bio Suisse is a private-sector umbrella organisation, bringing together 32 organic farmers’ associations and the Research Institute of Organic Agriculture (FiBL). The member organisations represent Bio Suisse on the cantonal level and for branch-specific matters. The Head Office in Basel employs a total of 46 people in late 2013 (BIO SUISSE, 2014b).

As regards to governance, the Delegate Assembly consists of 100 representatives from the member organisations. Meeting at least twice a year, one of its main competences is to vote on changes to the Bio Suisse standard and to the rules governing the “Bud” label. The Steering Committee is the association’s strategic decision-making body; it consists of five to nine members elected by the Delegate Assembly, most of which being active organic farmers. The Label Committee is responsible for developing the standards on production, processing and marketing. Members of the Label Committee are chosen by the Steering Committee (Barrier, 2008). The revision of the standards is generally a bottom-up process, initiated by farmers in the cantonal and branch-specific organisations. For example, the recent introduction of stricter requirements on biodiversity conservation has been pushed forward by organic farmers.

Box A9. Swiss regulations on organic farming

The current regulations on organic agriculture are the Federal Ordinance 910.18 on Organic Farming and the Labelling of Organically Produced Products and Foodstuffs of 22 September 1997 (as of 1 January 2014) and the Federal Ordinance 910.181 on Organic Farming of the Federal Department of Economic Affairs, Education and Research of 22 September 1997 (as of 1st January 2014) (OR, 2014a, 2014b).

Regulations are covering unprocessed agricultural crop, animal breeding and animal products; processed agricultural crop and animal products intended for human consumption, composed essentially of ingredients of plant or animal origin; feed material and fodder for animal breeding. The rules are related to production, packing, storing and transport; labelling of organic products; control, inspection and certification; imported products and export compliance. Labeling remains voluntary but agricultural products may only be labelled as organic products if they comply with the provisions of the Ordinance 910.18. The terms related to organic agriculture are protected, e.g “biologisch”, “ökologisch”, “biologique”, “biologico”, “bio”, “eco” (Art 2). The requirements in the Ordinance 910.18 are similar to those of EU regulation, but stricter in requiring conversion of the whole farm to organic management.

The authority responsible for preparing the regulations is the Federal Office for Agriculture (FOAG), a branch of the Federal Department of Economic Affairs, Education and Research (EAER). The responsibility for implementing the regulations is shared between the FOAG and the 26 cantons, the Member States of the Swiss Confederation. According to the Ordinance on Organic Farming, if no processing is involved, the FOAG implements the Ordinance in accordance with the legislation on agriculture (Art. 33 of Ordinance 910.18). The cantonal food inspection agencies (CFISs) implement the Ordinance in accordance with the legislation on foodstuffs. The cantonal veterinary agencies check compliance with the provisions of the Ordinance in slaughterhouses and abattoirs as part of inspections laid out under the veterinary law (Art. 34).

The certification and control of organic operators, including import controls, have been delegated to four accredited control bodies (CB): Bio.inspecta AG, Bio Test Agro AG, Institute for Marketecology (IMO), and ProCert Safety AG. Control bodies are accredited by the Swiss Accreditation Service (SAS), a public body responsible for the granting and withdrawing of accreditation. FOAG’s staffs cooperate with SAS and participate in office and witness audits of control bodies within the accreditation process.

In the context of the agreement between European Union and Switzerland on trade in agricultural products (ATAP), the Swiss regulations for organic production are recognised as being equivalent to the production rules as stipulated in Titles II, III and IV of Regulation (EC) No 834/2007 and the control system is recognised as having equivalent effectiveness to that of the EU. The FOAG is the central “competent authority” responsible for supervising certification and overseeing private control bodies (EC, 2014b).
Officials from FOAG are invited to comment on Bio Suisse standard drafts and attend round-tables and meetings. The reason is to make sure that standard setting is transparent, fair and inclusive, and that standards are compatible with governmental objectives. However, no official is a member of any of the Committees.

Since April 2014, certified operators have the opportunity to call an impartial body for fair practices specially designed for advice, and to ask questions or to file a complaint (e.g. “unfair” pricing behaviour). The Bio Suisse Ombudsman uses the “Code of Conduct” and, as necessary, seeks information and views from various bodies. On this basis it makes recommendations or arranges a settlement discussion.

Conformity assessment and certification

Bio Suisse inspections must be carried out by an inspection body approved by the Bio Suisse association and accredited by the Swiss Accreditation Service (SAS). In March 2014, two control bodies were approved to audit and certify organic farmers according to Bio Suisse standards: Bio.inspecta AG and Bio Test Agro AG. Established in 1998, the leader Bio.inspecta certifies more than 80% of all organic farms in Switzerland (Kilcher et al., 2011). It provides conformity assessments with Bio Suisse and other private organic standards (Delinat, NaTrue, Global Organic Textile Standard). The certifiers also certifies Swiss farmers according to integrated production (IP-SUISSE), registered designation of origin, and other labels (e.g. “Mountain product”). More recently, it has engaged in the control of food operators with UTZ, Marine Stewardship Council and Aquaculture Stewardship Council (Bio.inspecta, 2012).

As regards to processors and traders, Bio.inspecta, Bio Test Agro and two other certifiers, IMO and ProCert Safety AG are recognised by Bio Suisse. These four companies are also the four designated control bodies for the Ordinance 910.18 on Organic Farming (Box A9).

Key data

The area under organic production almost doubled between 1997 and 2012 in Switzerland, from 64 463 ha to 121 788 ha. In 2012, 5 895 agricultural holdings were engaged in organic farming, up from 3 944 in 1997. In 2012, organic holdings represent 10.4% of Swiss farms (source: Swiss Federal Office of Statistics). The same year 5 731 agricultural holdings and about 800 processors were compliant with the Bio Suisse standards (BIOSUISSE, 2013).

Most of Swiss organic farmers are therefore certified by Bio Suisse, about 94% in 2012. They sell farm products with the “Bud” label either to retail outlets and consumers, or to traders and processors that have been granted a license by Bio Suisse. Farmers certified only according to the Federal Ordinance are generally producers located in remote areas, selling directly to consumers.

Indeed, the Bio Suisse standard is strongly favored by food outlets and represents more than 80% of sales in organic food in Switzerland, 60% carrying the “Bud” label. Other organic labels are operating on the Swiss market (e.g. Demeter) but with significantly smaller market shares than the “Bud” label.

In 2012, almost half (47.5%) of Bio Suisse products were sold through the supermarket chain COOP, one of the two major domestic retailers. The other large company, Migros, accounts for 26.4% of sales. Organic specialized shops account for 12.6% of sales and direct sales from farms for 5.5%. The remaining 8% are distributed between other supermarkets and specialty shops. Sales of Bio Suisse certified food have continued to increase in recent years, from CHF 1.443 million in 2008 to CHF 1.832 million in 2012 (BIOSUISSE, 2014b).
**Government involvement with the standards**

Although there is no federal programme specifically designed to promote the development of organic agriculture and the market of organic food, there are several policy measures, including payments for the maintenance of organic farming which have been in place for more than twenty years.

Payments to organic farmers have been introduced with the system of ecological direct payments in 1993, in the form of payments per hectare of special crops, open arable land excluding special crops, and green areas and litter meadows producing in accordance with specific organic farming regulation requirements on the entire farm (OECD, 2015). Payments for organically managed land have been implemented gradually between 1993 and 1998, from CHF 4 million to CHF 44 million per year. They have been extended in the subsequent agricultural program, albeit at the lower level of between CHF 12 million in 1999 and CHF 27 million in 2003. Payments were further extended by subsequent agricultural reforms (2004, 2008) with a stable budget of about CHF 30 million annually. On average over the period 2004-2012, the contribution for organic farming represents 5.3% of all ecological payments.

In the new policy package for 2014-17 (Politique Agricole 2014-2017), organic payments are part of the payments for specific production systems (Contributions au système de production), together with payments for extensive production (grains and rapeseed), payments for animal welfare and payments to meat and milk production on grassland (OR, 2014c).

Other policy support include the provision and dissemination of information, support for sales promotion for Swiss organic products by Bio Suisse association and founding of research projects, e.g. on organic production, processing, or food consumption.

**Synergy between standard and public policies**

The case of Bio Suisse illustrates synergies between private and public standards in conformity assessment and certification. As shown above, the Bio Suisse standards add extra requirements to the Ordinance on organic agriculture, so that farmers compliant with Bio Suisse should be *de facto* also compliant with the Ordinance - but not vice versa. Bio.inspecta and Bio Test, the two control bodies recognised by the Bio Suisse association are also recognised by FOAG, the competent authority responsible for the Ordinance. Therefore, to reduce direct costs (fees) and transaction costs for farmers, the control body is simultaneously assessing compliance to the two standards.

Together with AGRIDEA, a non-governmental farm extension service and the Bio Suisse association, the control bodies have developed a common checklist for organic farm inspection (Bio.inspecta, 2012). Since each checkpoint includes many compliance points to be assessed, the control bodies have their own more detailed checklists in order to conduct comprehensive assessments. For each checkpoint, the inspector will find three columns related to i) compliance with the Proof of Ecological Performance (PEP) according to the regulation on direct payments, ii) compliance with the Federal Ordinance on organic agriculture, and iii) compliance with the Bio Suisse standard. The columns indicate the relevancy of the checkpoints for conformity assessment with the agricultural regulation (PEP), the public organic standard and the private organic standard. An example is provided in Table A13 below.
Table A13. Checklist for conformity assessments (selection)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Proof of Ecological Performance</th>
<th>Federal Ordinance 910.18</th>
<th>Bio Suisse standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pesticides: use / storage in the holding / test of sprayers / presence of clear water tank</td>
<td>Relevant: Fulfilled/Not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. 2.5 LU per hectare of fertilisable area</td>
<td>NA</td>
<td>NA</td>
<td>Relevant: Fulfilled/Not</td>
</tr>
<tr>
<td>Rules on fertilisation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum transport distances for the recovery and disposal of manure and fertiliser to resume recycling are met</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least 50% of the accumulated manure (according to Swiss-Bilanz) can be spread on farm land</td>
<td>NA</td>
<td>NA</td>
<td>Relevant: Fulfilled/Not</td>
</tr>
<tr>
<td>Manure come from farms with GMO-free label or feeding certificate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale of manure only to organic farms</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NA: Not applicable; LU: Livestock Unit.
Source: Bio.inspecta (2012)

Moreover the control bodies have agreed on a catalogue of enforcement measures and sanctions, which corresponds to the general checklist, and also helps to avoid duplication of sanctions (ArG Vollzug Biolandbau, 2014).

As more than 90% of Swiss organic farms are Bio Suisse certified, and as the compliance with the organic regulation is mandatory for all organic farms since 1997, coexistence between private and public standards is a crucial issue in the case of Switzerland. The potential duplication of control and excessive burden on farmers is avoided by the cross-accreditation of private control bodies and the cost-efficient design of conformity assessment.

The dominance of a single private standard in the Swiss organic retail market does not mean that the access to market is closed to imported organic foodstuff. Instead, the development of a federal regulation in 1997 and the subsequent recognition of foreign legislations as equivalent with Ordinance 910.18, e.g. the European Union in 2002, Canada in 2012, have contributed to the opening of the Swiss market for organic food products.

**IP-SUISSE**

*Brief outline of the case*

IP-SUISSE is one of the most widely used farm certification scheme in Switzerland. Since its launch more than two decades ago, the standard has continued to incorporate the concepts and the requirements of several Federal voluntary programs, including those related to biodiversity maintenance (Ecological Compensation Area), to “integrated production” and “extenso” production. The case highlights the complementarity between private standard and governmental policy, both mutually strengthening each other in a dynamic fashion over the years. In addition, as a result of the interactions of public and private strategies, the level of sustainability requirements for farmers thus tends to grow.
Background information

Description of the standards

The IP-SUISSE standards and related certification scheme and label have been developed by the Swiss Farmer Association for Integrated Production (Association Suisse des paysannes et paysans pratiquant la production intégrée, in abbreviate form IP-SUISSE), a non-governmental professional organisation founded in 1989.

The standards for agriculture are covering crops (cereals, rapeseed, potatoes, cider fruits, and speciality crops) and livestock production (bovine, porcine, ovine, poultry, rabbits, milk, eggs, silk). Although the scheme was initially designed to govern business-to-business transactions, a logo could be used on food products. For example, flour and bread made from certified cereals may carry the “Ladybird” label owned by the association. The trademark and logo are registered at the Swiss Federal Institute of Intellectual Property.

The farm requirements are structured in three tiers. The first tier is a prerequisite to register in the scheme. Producers have i) to comply with the Confederation’s social and environmental regulations, ii) to fulfil the Proof of Ecological Performance (PEP), part of cross compliance regulation mandatory to receive any direct payments from the Federal government; and iii) to follow a set of additional requirements related to livestock husbandry and feeding (use of “sustainable” soybeans, e.g. for example RSPO certified feed, or or “Lait des prés” without soya), the prohibition of all input from genetic engineering. As regards to the PEP, one of the important criteria is that at least 7% of utilized agricultural area (UAA) must be allocated to ecological compensation areas (3.5% for speciality crops).

Last but not the least, the production has to come from Switzerland (including the Principality of Liechtenstein), however with some flexibility for livestock: animals born abroad may qualify if most of their weight gains occur in Switzerland or if they spend most of their life in the country (IP-SUISSE, 2007).

The second tier deals with whole-farm requirements, compliance criteria being related to farm labour safety and training, waste management, soil protection and energy savings (IP-SUISSE, 2012). Of particular interest are the biodiversity requirements, introduced in 2009 through a Credit Point System. Farmers receive credit points by meeting various requirements, and to receive the label, they need to reach a minimum number of points (Box A10).

On top of the two first tiers of IP-SUISSE standards (thereafter IPS), there are commodity-specific guidelines. For cereals and rapeseed, farmers should follow the requirements of “extenso” production, i.e. the ban of growth regulators, fungicides, insecticides, and synthetic elicitor of plant defence mechanisms.

For a milk predominantly made from meadow and with little maize or concentrated feed (Lait des prés), dairy farmers are required to register their practices and again need to score points for meeting various criteria: on a 80 point-scale, a minimum of 40 points is required. For example, the system evaluates the proportion of feed produced on farm: farmers get 10 points if 100% of feed dry matter is made of meadow fodder (i.e. grazing, hay and grass silage only, ban of soja), 5 points for 75% and zero point if the proportion is below 50% (IP-SUISSE, 2013).

In addition to agricultural standards, the association has drafted a standard for the processing and marketing of IPS products. Processors and traders must identify ingredients and trace IPS products and avoid mixing with non-IPS lots. All ingredients from agricultural origin need to come from certified farms under contract with IP-SUISSE or from certified food operators. As regards to labelling, for non-processed food (e.g. potatoes), the logo could only be used if 100% of the mass of agricultural ingredients are certified. For processed food, the threshold is 70%. When the percentage in the food
recipe lies between 50% and 70%, the logo may be used, but with the list of IPS ingredients; between 20% and 50%, the exact percentage of IPS ingredients has to be mentioned (IP-SUISSE, 2012).

**Box A10. The Credit Point System to assess biodiversity at farm-scale**

The Credit Point System (CPS) was developed to assess the efforts of farmers for biodiversity at the farm-level. The project is a joint effort of the Swiss Ornithological Institute and the Research Institute of Organic Agriculture (FiBL), with partial founding from agricultural organisations IP-SUISSE and Bio Suisse, as well as other public and private sponsors.

From the filling of the CPS by farmers, a point score is returned which is a proxy for all biodiversity efforts. Farmers can “score points” by applying 34 different habitat management options, related to the maintenance of ecological compensation areas (ECA), their practices on arable land (e.g. over-winter cover crops, no herbicides) and on grassland (e.g. no silage in intensive grassland) (Swiss Ornithological Institute, 2014).

The amount and the diversity of ECA are important criteria in the Credit Point System. The different categories of ECA used to score biodiversity are referring to the categories of the Swiss Federal Ordinance on direct payments: extensive pastures, flower strips, standard fruit-tree orchards, etc. (OR, 2014c).

A farmer that is allocating ECA slightly above the governmental threshold (7-9% of UAA) is scoring only one point, whereas a farmer that increases ECA may score up to 6 points (if > 21% of UAA). Moreover, the scoring system take into account the “ecological quality” of ECA, again as there are appreciated in the governmental regulations. A farmer will receive up to 6 additional points if “high-quality” ECA are making more than 7% of UAA. Finally the size and spatial distribution of ECA (e.g. number of ECA which are larger than 0.1 hectare) and their enrichment by stone walls, ponds and pools also important criteria in the Credit Point System (Jenny et al., 2011).

According to a study on 133 farms (2009-2011 period), scored points seem to be positively correlated with the majority of biodiversity outcome indicators, such as plant, grasshopper, butterfly and bird richness and density. The credit points explain a substantial proportion of the variation in 13 out of 19 indicators, although not for Red-List species (Birrer et al. 2014, Jenny et al., 2013).

IP-SUISSE has included the point system in their guidelines in 2007; it has been applied on farms since 2009, the control of compliance starting in 2011, with the minimum number of points being 12 in 2012 and 17 from 2013 onwards. In the second year of controls (2012), 10,283 farms had to comply with IPS biodiversity requirements. On those, 6,101 (60%) were already reaching the final objective of 17 points, 36% were scoring between 12 and 17 points and 4% were not reaching the 12 points minimal requirement for that year and received a sanction (IP-SUISSE, 2012). In case of sanction, farmers should notify the association on additional measures they will introduce to reach the threshold. In mid-2013, on the 10,220 IPS farms, 8,829 (86%) are reaching 17 points (against 60% in 2012), whereas 1,391 farms (14%) are not recorded as compliant with the final objective, either because they have not been controlled or because they have already been sanctioned (IP-SUISSE, 2013).

**History of the standards**

Integrated production (IP) is a farm-scale approach developed from the concepts of biological control and integrated pest management (IPM). The International Organisation for Biological Control (IOBC) has been established in 1956 by scientists and crop protection practitioners, to promote environmentally safe methods of pest and disease control.

The conceptual framework of IP was originally developed by IOBC in the early 1990s and redefined over the years, incorporating new developments in the field of sustainable agriculture, and extending further from its initial focus on crop production and on pest management, to the livestock sector, biodiversity management (e.g. maintenance of ecological reservoirs and compensation areas) and social accountability. In contrast to organic farming, IP does not ban chemical inputs, but promotes a wise use of pesticides and fertilisers.

The current IOBC definition of IP is rather broad: “Integrated Production/Farming is a farming system that produces high quality food and other products by using natural resources and regulating mechanisms to replace polluting inputs and to secure sustainable farming. Emphasis is placed on a holistic systems approach involving the entire farm as the basic unit, on the central role of agro-ecosystems, on balanced nutrient cycles, and on the welfare of all species in animal husbandry. The preservation and improvement of soil fertility, of a diversified environment and the observation of ethical and social criteria are essential components. Biological, technical and chemical methods are
balanced carefully taking into account the protection of the environment, profitability and social requirements” (OIBC, 2014, p.4)

The Swiss Farmers Association for Integrated Production has been founded in 1989. The prospects of Swiss agricultural policy reform in the late 1980s, with a foreseeable switch from market price support to direct payments to farmers, was the trigger to establish the association (Demierre, 2012). The IP-SUISSE association is an active lobby and tries to push the support to IP practices in agricultural policy. In Switzerland, the system of implementation of policy changes is a rather lengthy but well-structured procedure, which provides an opportunity to participate in the decision making process to all stakeholders and representatives of various elements of the society (OECD, 2015).

From 1993 to 1998, payments for integrated production were a voluntary scheme part of the newly introduced general direct payments. The criteria were related to biodiversity, soil conservation, manure, fertiliser application, cultivation program, cultivar selection, integrated pest management, and the holding of livestock; at least 5% of the land had to be cultivated as ecological compensation area (extensive meadows or floral fallow). A supplement was granted if IP applies to the whole farm.

In 1999, these payments for integrated production were discontinued. On the other hand, the proof of ecological performance (PEP) introduced in the system of environmental cross-compliance (mandatory to receive any of the direct payments) was largely based on the requirements for integrated production (OECD, 2004).

The development of IP has also been stimulated by the concerns of conservation NGOs over the destruction of natural habitats and landscape fragmentation. The Swiss Ornithological Institute is an active NGO and a technical partner of IP-SUISSE on biodiversity issues (Box A10) and Pro Natura, the largest organisation for nature conservation in Switzerland.

The deployment of IP in the country has also built upon the strategies of Swiss retailers. As early as 1973, Migros created and developed its first line of sustainable products called “Migros-sano” (Réviron and Chappuis, 2005). Today, the retailer is relying on a long-term partnership with the IP-SUISSE association and the IPS standard, within a line of food products called “TerraSuisse”.

**Standard design**

According to the statutes, the objectives of the IP-SUISSE association are to i) promote an agriculture treating carefully the environment and respecting the needs for animals; ii) defend the interests of its members on the national and international level; iii) develop standards for the production under label; iv) promote the production and the marketing of products under label, in Switzerland and abroad; v) represent the interests of the members towards business partners, authorities and legislation application bodies (IP-SUISSE, 2009).

The association is a policy lobbyist, a standard-setter, as well as a commercial intermediary for its affiliated producers. Farmers are contractually tied with IP-SUISSE and the fulfilment of IPS standards is part of the agreement. In the case of cereals, the contract is renewed every year; it stipulates the area, the variety and the collection centre, which itself also needs to be IPS certified. At delivery, farmers transfer ownership to the association, few months later they receive an advanced payment (80-90% of forecasted price), and then, according to market conditions, the final receipts including the IPS premium (IP-SUISSE, 2014).

The production is sold by the association to food processors and retailers through auctions (e.g. cereals) or marketing contracts. The association has also established subsidiaries: since 1996, the IPS-Kuvag is collecting, trading and organising the slaughtering of IPS certified pigs, sheep and beef cattle. The association has also developed agreements and long-term partnerships with the main food retailers (Migros, COOP, Spar), as well as bakery chains (Hiestand, Naturel, Fleur des pains, Fredy’s), McDonald’s, and the meat processing industry.
Products are sold under the “Ladybird” label or under the private brands of commercial partners. Migros, the first partner of IP-SUISSE, has developed a full range of food products with IPS ingredients (“TerraSuisse”), including meat, bread, pasta, oil, potatoes, and more recently sustainable milk (Lait des prés). Another example is bread made IP cereals sold in a chain of bakeries under the “Naturel” brand.

In its annual report, the association reports more than 20 000 members, around half of them being active producers under the label. Members are active and retired farmers from all cantons of Switzerland, other people interested in IP and legal entities. The association is financed by members’ fees, gifts, revenues from activities and levies on marketed products (IP-SUISSE, 2013). The Head Office is located in Zollikofen (Bern canton), with subsidiaries in Lausanne (Vaud) and Pianezzo (Tessin).

The General Assembly is meeting at least once a year. It has the power to elect and revoke the President and other members of the Board, and is responsible for financial issues (e.g., approval of budget, decisions on levies). The General Assembly is composed of the members of the Board and of delegates elected in 19 local councils (Cercles de représentation), which generally corresponds to a Swiss canton. To be eligible as delegate, members must be farmers compliant with IPS standards. The members of the Board and its President are elected by the General Assembly. Each local council has generally at least one representative in the Board, the number of seats depending on the number of producers in the canton. Two-third of Board members need to be active farmers compliant with IPS. The Board is responsible for all executive duties, such as the nomination of the General Manager and permanent staff, the external representation of the association, the adoption of production standards and marketing rules, and the development of sales promotion measures. Technical matters related to standard development and other issues may be delegated to committees (IP-SUISSE, 2009).

**Conformity assessment and certification**

The registration of producers is managed by IP-SUISSE, whereas the overseeing of control bodies is delegated to Agrosolution AG, a private farm service company founded in 2006 by several professional organisations. Note that Agrosolution is also overseeing SwissGAP control bodies.

ProCert Safety AG (Bern) is the only certifier providing conformity assessment according to IPS. It is accredited by the Swiss Accreditation Service (SAS) and is also certification operators according to organic standards (Bio Suisse, Federal Ordinance, Demeter) and several private standards in agriculture and food processing (SwissGAP, GlobalGAP, IFS, BRC, ISO 22000), as well as protected geographical indications (Indication Géographique Protégée, Appellations d’Origine Protégée).

**Key data**

In 2013, 11 141 certified producers of barren cows (i.e. retired dairy cows), 1 459 of male mature cattle, 2 260 producers of veal, 614 pig breeders and 1 169 pig fatteners, 276 lamb producers, and 50 rabbit producers were registered with IP-SUISSE. On the crop side, the certification system included about 4 600 producers of wheat, 200 of rapeseed, 79 of potatoes, and 200 of cider fruits (IP-SUISSE, 2013).

Certified production is receiving a price premium in comparison to conventional production, although the premium is more limited than for organic production. Over the last years, certified cereals were receiving a 10% price premium on average. In IP, yields are significantly lower, for example 8 to 18% lower than conventional crop for milling wheat, but the extensive management allows savings in chemicals and machinery (IP-SUISSE, 2012); and farmers are eligible to specific direct payments from Federal government (See below). As regards to livestock products, in 2012 the premium per ton was 40 CHF for milk (Lait des prés), 40-60 CHF for one cull cow (dead weight), 300 CHF for one veal, and 12 CHF for one lamb (Demierre, 2012).
Government involvement with the standards

The Swiss Federal administration is not involved in the development and revision of IP-SUISSE standards, which are discussed essentially between the association’s delegates, their technical and commercial partners. On the other hand, the strategy of the association and the policy objectives of the Federal government to promote an environmentally friendly agriculture (OECD, 2015) had quite naturally converged over the last twenty years.

Payments for extensive cereal and rapeseed farming (“extenso” payments) have been introduced in 1990 as part of the ecological direct payments. The support has been extended in more recent programs, including the current policy package for 2014-2017, as part of the payments for production systems, which also includes the support to organic farming. According to article 68 of the Federal Ordinance on direct payments, eligible crops are cereals, sunflower, protein pea, faba bean and rapeseed (OR, 2014c). Producers receive a compensation of 400 CHF per ha of eligible land.

For other farm practices, the requirements of IPS and those of the federal programs are not exactly the same. IP-SUISSE is applying a credit point system for biodiversity which allows scope for action according to farmers’ preferences. As noted above, the different categories of ecological compensation area (ECA) used to score biodiversity in IPS are based on the governmental definition of ECA, a core element of Swiss agricultural policy since the early 1990s. ECA are also an important part of the voluntary programs targeting biodiversity.

Biodiversity quality payments are payments targeted to specific farming practices or biodiversity outcomes (OECD, 2015). Support is granted by hectare of land or by tree (Art. 55 of Federal Ordinance on direct payments). The amount of payment depends on the type of the agricultural region (e.g. plain, mountain) and the stringency of requirements. There are two levels of requirements, farmers having to comply with entry-level criteria to be eligible to high quality-level. For example, for extensive meadows, the entry-level forbids the use of fertiliser and pesticides, grass mulching and the use of stone rotary slasher (Art. 58). To implement the meadows, farmers must use recommended seed mixes. Local hay flower or seeds from hay threshing have to be preferred. The scheme requires at least one mowing per year, not before June 15 in the plain region. For high quality-level, the floristic quality of the pasture is assessed with indicator species.

Synergy between standards and public policies

The IP-SUISSE case highlights the complementarity between governmental action and private standards, mutually strengthening each other in a dynamic fashion over the years. As described in more detail above, the IPS label has continued to incorporate the concepts and the requirements of governmental voluntary programs (e.g. “integrated production”, “extenso” production, high quality ECA). For the members of the association, this has two main advantages: while they benefit from public support, the credibility of the label is increased by building on public standards developed in close association with research institutes.
With more than 20,000 farmers currently enrolled, the IP-SUISSE scheme indirectly contributes to the achievement of the governmental objectives to promote environmentally friendly agriculture. Besides, the inclusion of the requirements of voluntary governmental programs in a private certification facilitates their adoption by reducing the risk for the producers: indeed, the criteria retained in the IP-SUISSE label are chosen according to their commercial potentialities, after discussion with the clientele, and according to the capacity to value the farmers’ efforts and to obtain a price-premium.

In addition, with the minimum statutory standards in Switzerland continuing to rise, requirements under the private certification scheme also need to tighten over time in order to continue to differ enough from “conventional” agriculture (see example of biodiversity). The level of sustainability requirements thus tends to rise as a consequence of the interaction between the public and private strategies.

**SwissGAP**

*Brief outline of the case*

The SwissGAP private standards are widely used in Switzerland in the sectors of horticulture and specialty crops. Major retailers including leaders COOP and Migros require their domestic suppliers to be certified under this scheme. The SwissGAP standard for the production of fruits, vegetables and potatoes is building simultaneously on the GLOBALGAP standard and on the Proof of Ecological Performance (PEP), a set of environmentally-friendly practices developed by the Federal government as part of the Swiss agricultural policy reform.

*Background information*

*Description of the standards*

The SwissGAP standards are owned and developed by the SwissGAP association (*Verein SwissGAP*), a private not for profit organisation founded in Bern in 2003.

The association manages a process standard for the horticultural value chain, and another for the sector of fruit, vegetables and potatoes. The related “SwissGAP” trademark and logo are registered with the Swiss Federal Office of Intellectual Property. Both standards are based on the GLOBALGAP standard developed by a consortium of Northern European retailers in the late 1990s (OECD, 2006). The SwissGAP standard for horticulture is similar in all respects to GLOBALGAP and is considered by the GLOBALGAP association as fully equivalent.

To take into account the peculiarities of the specialty crop value chain in Switzerland, the SwissGAP association has developed a specific scheme for fruit, vegetables and potatoes (French acronym: FLP). The standard for growers fully incorporates the control points and compliance criteria of GLOBALGAP. It covers a comprehensive series of topics related to record keeping, traceability, workers health, safety, and welfare, waste management, soil management, fertiliser application, crop protection, and food safety (e.g. pesticide residues, microbiological hazards).

There are four main differences between SwissGAP and GLOBALGAP: i) coverage of the value chain, ii) quality management and certification systems, iii) frequency of control at farm level, and iv) extra requirements for growers enrolled in the scheme.

GLOBALGAP is a pre-farmgate standard, whereas SwissGAP FLP also covers the marketing of fresh and processed produce, with several requirements for first gathering entities (e.g. traders of fruits and vegetables, cooperatives) as well as food processors, and a detailed monitoring of pesticide residues along the chain, with systematic sampling in the packing station and processing plant.
Under SwissGAP, the certificate is granted to traders and not to individual farmers. Farmers have to fill a self-assessment checklist every year, but they are only inspected by the control bodies the year of application and then once every three years. As regards to compliance points, there are three additional requirements that make the SwissGAP standard somewhat more stringent than GLOBALGAP for growers: i) all crops within the same category (e.g. vegetables) have to be produced according to the standard guidelines, for example it is not permitted to certify carrots and not onions; ii) safety devices have to be monitored for all farm machinery, and not only for fertiliser and pesticide application machines; iii) prohibition of resale: a farmer can only sell to certified traders a produce that has been cultivated on his farm (SwissGAP, 2013).

Most importantly, farmers enrolled in SwissGAP have to fulfil the Proof of Ecological Performance (PEP), a set of requirements introduced in Switzerland by the Federal government as mandatory for benefitting from support payments. The PEP include balanced nutrient use, crop rotation, and the targeted use of pesticides (Box A11).

Box A11. The Proof of Ecological Performance

In Switzerland, eligibility for farm support payments depends on adherence to general type of requirements (e.g. only farm managers who run a private farm and have their place of residence in the country are entitled to receive direct payments) and on environmental legislation specific to agriculture as defined in the Laws on water protection, pollution control, nature conservation and protection of rural landscape (OECD, 2010b). Another component is the mandatory fulfilment of Proof of Ecological Performance (PEP), in French Prestations écologiques requises. Requirements are listed in the Federal Ordinance on direct payments, art. 11 to 25 (OR, 2014c). The main PEP criteria are the following (OECD, 2015):

- Balanced nutrient use: maximum 10% surplus of nitrogen and phosphorus as shown by a farm’s nutrient balance (based on crop requirements).
- Minimum share of ecological compensation areas (ECA): at least 7% of a farm’s utilised agricultural area has to be allocated as ecological compensation area (e.g. extensive meadows, low intensity pastures, traditional orchards, hedgerows, wild flower strips, and low intensity cropping strips).
  - Crop rotation: at least four different crops have to be cultivated per year on those farms where arable land area exceeds 3 ha and maximum shares of individual crops must be respected.
  - Soil protection: field parcels that are harvested before 31 August must be sown with main or cover crops by 15 September so that periodical soil erosion is minimized.
  - Targeted application of pesticides: restrictions on the use and timing of various herbicides and insecticides, consideration of early warning systems and pest forecasts, frequent tests of sprayers.
  - Animal welfare: farm animals have to be kept according to legal requirements (compliance with the Animal Protection Ordinance).

The Federal government is overseeing the system of direct payments. Politically and administratively, Switzerland is a Confederation of 26 Cantons (Helvetic Confederation). The Cantons (member states of the federation) enjoy a large degree of autonomy (OECD, 2015). As regards to agricultural policy, they are responsible for the verification of eligibility to support, the payment to farmers and the imposition of penalties in case of deficiencies. They are also responsible for on-farm control, including the inspections of the Proof of Ecological Performance. However, they can, and indeed often do, delegate the inspections to control bodies accredited for that purpose (Federal Ordinance on direct payments, Art. 104, 3). For instance, while the Canton Grisons runs the control office, in Zurich inspections are out-sourced to the private organisation Agrocontrol (OECD, 2007).
In addition, farmers as well as first gathering entities and processors also have to comply with the Federal Ordinance on foodstuff (OR, 2014d). The Ordinance set up the general rules for food labelling, traceability and food safety. In case of a control by the cantonal food inspection agencies (CFISs), the operators need to show that they have introduced internal procedures following Hazard Analysis and Critical Control Points (HACCP) or an industry code of good practice approved by the Federal Office of Food Safety and Veterinarian Affairs (Ordinance, Art. 53).

The SwissGAP association implements the Ordinance on foodstuff with detailed requirements for traders and processors, for example on water disinfection, the proper storage of cleaning products and lubricant oils, the cleaning of waste containers, etc. Pesticide residue sampling has to be conducted according to SwissGAP guidelines and the analysis must be done by a laboratory recognised by the SwissGAP association (SwissGAP, 2014a).

**History of the standards**

In the early 2000s, the introduction of standards in the Swiss specialty crop production was pushed forward by food retailers, in particular by the leaders COOP and Migros. Switzerland imports a substantial share of its domestic consumption of fruits and vegetables. In order to guarantee safety to their consumers, retailers therefore requested third-party certifications from their foreign suppliers, such as the EurepGAP standard developed by North European retailers in 1997 (renamed GLOBALGAP in 2007). At that time, sporadic problems with pesticide residues (for example in peppers) had occurred on the European food markets, and Swiss retailers wanted to protect themselves against any potential incident that could damage their reputation. To provide the same quality assurance in local sourcing, they requested their domestic suppliers to comply with EurepGAP or other equivalent third-party certification of good agricultural practices. In consequence, Swiss retailers and national producer associations engaged in a dialogue around standardisation and the best ways for developing the required farm assurance schemes.

The SwissGAP association was founded in 2003 by the main producer and trader associations. According to the statutes (Art. 1), the association “aims at introducing and implementing the EurepGAP standards and other recognised international standards in Switzerland, for fruits and vegetables and other agricultural products” (SwissGAP, 2003).

The association chose to develop its own scheme for fruits, vegetables and potatoes, to take into account the specific structures of production in Switzerland: a high number of relatively small diversified family farms, with several fruits or vegetables in their portfolio, as well as other productions (for example combined livestock-orchard), and a marketing chain predominantly managed by private traders. Under the GLOBALGAP scheme, the certificate is granted to individual farmers. There is also an option for group certification (option 2), in which farmers form a group and adhere to a Quality Management System (QMS) that governs the production. However, this system was not considered to fit well with the structure of the Swiss fruit and vegetable sector. The bulk of the domestic production is bought by private traders and there is often no full supply to cooperatives from their members; so that running a quality management system with a permanent pool of growers proves challenging for operators. The other main reason for developing a national standard was that the use of existing schemes would be costly due to high fees.

Eventually, two standards were developed in parallel, including the standard for fruits, vegetables and potatoes, and the standard for horticulture. The first versions of the standards were released in 2006.

From 2008 to 2010, the retailers Migros, COOP and VOLG supported SwissGAP with an annual contribution of CHF 1.5 million to the association, to pay the fees of the farmers enrolled in the scheme (SwissGAP, 2011). The participation of the farms in the scheme was also supported by payments from the Swiss Federal government from 2009 to 2013.
In 2008, the SwissGAP standard for horticulture was officially recognised as equivalent to GLOBALGAP, through a benchmarking process conducted by the GLOBALGAP association. It is recognised as fully conform to the general regulations and control points and compliance criteria of GLOBALGAP Integrated Farm Assurance standard V4.0. Since 1 January 2014, the standard for fruits, vegetables and potatoes is recognised by the GLOBALGAP association as a “resembling scheme”, which means that it conforms to GLOBALGAP to a large extent, with some exceptions.

**Standard setting**

Seven national professional associations are members of the SwissGAP: the association for trade of fruits, vegetables and potatoes (Swisscofel), the association of fruit producers and processors (Fruit-Union), the association of vegetable producers (UMS), the association of the potato sector (Swisspatat), the association of horticultural businesses (Jardin Suisse), the association of organic agriculture organisations (Bio Suisse) and the association of integrated farming producers (IP-SUISSE). Apart from the Head Office in Bern, SwissGAP is organised around a General Assembly and a Board of directors. Three active working groups discuss technical matters related to standard development and the management of the scheme, including residue monitoring, quality management system, and technical requirements. Data management and the overseeing of control bodies are delegated by the association to Agrosolution AG, a private farm service company.

**Conformity assessment and certification**

SwissGAP inspections must be carried out by a certification body approved by SwissGAP and accredited by the Swiss Accreditation Service (SAS). In February 2014, two private organisations were approved to audit and certify organic farmers according to SwissGAP: ProCert (Bern) and q.inspecta GmbH (Frick). The latter is a subsidiary of Bio.inspecta AG, the leader of organic certification in Switzerland (see also the Bio Suisse case in this chapter).

The checklist of inspection is a document that producers and traders may use for their annual self-assessment. It also provides the basis for inspections by the recognised control bodies: annually for certified traders; the year of application and then once every three years for farmers, with additional random sample controls (square root of producers). Compliance criteria are labelled as requirements (“major must”, “minor must”) or recommendations. All criteria labelled as “major must”, and 95% of those labelled as “minor must”, have to be met.

The checklist is common for compliance to: i) Proof of Ecological Performance (PEP), ii) additional SwissGAP requirements, iii) requirements of SUISSE GARANTIE, another private standard that guarantees origin from Switzerland and GMO-free produce (SwissGAP, 2014b). Therefore, CBs can combine their audits and avoid duplication when inspecting farms.

**Key data**

In December 2011, 250 Swiss operators, of which 127 traders and 123 farmers with trading activities were certified; and 4,082 other farmers were recognised by the SwissGAP scheme (SwissGAP, 2012). As the scheme is required by the largest retailers, most Swiss producers of fruit, vegetables and potatoes are today enrolled in the scheme.

**Government involvement with the standards**

In the early years of the scheme, the enrolment of farmers was supported by the Federal government. In 2009 and 2010, the Federal Office for Agriculture (FOAG) granted a CHF 100 subsidy to farmers that were recognised by the SwissGAP scheme, to compensate for registration and conformity assessment fees. From 2011 to 2013, the programme was extended, with a direct financial contribution to SwissGAP, passed on to producers through a discount on the fees (SwissGAP, 2011).
The support to the initiative was part of a pilot project for quality assurance run by the FOAG in accordance with the 1998 Agricultural Law (Art. 11), which states that the “Confederation supports collective action of producers, processors or traders that improve or ensure the quality and sustainability of agricultural products, processed agricultural products and processes” (OR, 2014e).

The financial support to SwissGAP expired at the end of 2013 and will not be integrated in the programmes eligible for federal funds under the new Ordinance on the promotion of quality and sustainability in the food sector issued in October 2013 (OR, 2014f). For the FOAG, the support to SwissGAP was supposed to be temporary, to foster a quick development of participation in the scheme, and not be become a permanent payment to farmers.

**Synergy between standards and public policies**

The case of SwissGAP illustrates how the private sector may complement the requirements of a private farm standard, with a set of agri-environmental practices developed by the government.

With the reform of Swiss agricultural policy and the related strong reduction of market price support, high production costs were not covered by market price alone, so that the direct payments were a strong incentive to adhere to the Proof of Ecological Performance introduced by the Federal government in 1999 – although PEP are not part of mandatory environmental regulations. Therefore, at the time of the development of the SwissGAP standard in the mid-2000s, the “baseline” level was set rather high in Switzerland, especially in comparison with the checklist of EurepGAP standard, more focussed on hygiene and risk management than on environment conservation, and developed by retailers to be suitable to all sourcing countries. In addition to the requirements of EurepGAP, and rather than developing environmental requirements from scratch, the professional bodies involved with SwissGAP build the normative base on the PEP.

To be recognised as SwissGAP producers, farmers shall attest that they fulfil the PEP and they are audited by control bodies on PEP requirements. Note that conversely, the Cantons, which are responsible for the control of PEP as part of the Federal Ordinance on direct payments, are not using the adherence to SwissGAP as a criterion to select samples of farms to be checked in their risk analysis.
### ANNEX 5.

**ORGANISATIONS INTERVIEWED**

#### Country case studies

<table>
<thead>
<tr>
<th>Country</th>
<th>Organisation</th>
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</thead>
</table>
| CHE     | Association Bio Suisse  
Office Fédéral de l’Agriculture  
Verein SwissGAP |
| FRA     | Association Biocohérence  
Association Bio Partenaires  
Carrefour S.A.  
Consortium 2BSvs  
Coop de France  
Ministère de l’Agriculture, de l’Agroalimentaire et de la Forêt  
Val’Hor |
| KOR     | Ministry of Agriculture, Food and Rural Affaires  
Stichting EKO-keurmerk |
| NLD     | Ministry of Economic Affairs |

#### Survey on organic agriculture certification and policies

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<th>Country</th>
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<td>ARG</td>
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<td>Australian Government Department of Agriculture</td>
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<td>AUT</td>
<td>Ministry of Agriculture, Forestry, Environment and Water Management</td>
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<tr>
<td>BEL</td>
<td>Beleidsadviseur Biologische Landbouw (Flanders); Service public de Wallonie (Wallonia)</td>
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<td>CAN</td>
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<td>USA</td>
<td>European Commission, DG Agriculture and Rural development</td>
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125


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