CHAPTER 23

PRIVATE FOOD SAFETY AND QUALITY STANDARDS IN INTERNATIONAL TRADE

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Trade liberalisation is a factor that induced a change in policy and development strategy, the substitution of imports by export in the Mediterranean and elsewhere. This transition has led to the involvement of a large number of producers in export activities and in global or regional supply chains. Many food supply chains span across countries or regions and involve a variety of different operators. Ensuring food safety and production quality, processing and trading practices all along these global chains is a real challenge. This is why, food and safety standards have proliferated in the past decades and are increasingly used to govern food safety and quality issues related to agro-food value chains.[1] Compliance with food standards can be quite challenging for a producer or exporter. In addition, the need for the supply of large volumes while maintaining the same quality and food safety standards often requires costly investments. This is due to the demanding requirements set by food standards. This chapter will also address issues of food safety and quality in the Mediterranean agricultural sector.

The role of food quality and safety standards in international trade

Private food and safety standards have increased in recent decades and are increasingly used in food safety and quality issues in agro-food value chains in the Mediterranean and elsewhere. This is due to several reasons. Agro-food value chains have become more complex and fragmented than in the past and more difficult to manage. Food safety scandals have increased awareness among consumers thus leading to increased competitive positioning based on food quality and designation of origin. Finally, the responsibility for food safety has become de facto a responsibility in many markets.

1 - For more detailed information on the standards mentioned in this paper, visit the Standards Map website (www.standardsmap.org).

The harmonisation of standards is an important objective for several reasons. Countries that comply with international standards referenced in the SPS Agreement (Commission of the codex Alimentarius [CAC], *Office International des Epizooties* [OIE] and the International Plant Protection Convention [IPPC], are automatically considered to be in compliance with the SPS Agreement. In other words, if the WTO members comply with these standards and their respective guidelines, the application of the SPS Agreement is facilitated. For exporters, this represents a big leap in terms of access to market.

Given the potential for increased efficiency in international trade and positive impact on welfare, governments are working towards a multilateral coordination of food safety regulations. An important step towards more harmonised public food regulations has been taken by different countries. The adoption of the Sanitary and Phytosanitary Agreement (SPS) related to Technical Barriers to Trade (TBT) by the WTO has been an important step towards the harmonisation of food regulations.

These agreements establish rules on the application of standards by member countries and aim to minimise the trade distorting effects of food standards. They also oblige the countries to consider the impacts of the regulations adopted on trade since they have formally agreed to do so. The SPS Agreement also defines procedures for the resolution of disputes related to the establishment of food standards (Caswell and Henson, 1999). The new standards or technical regulations defined by the WTO members must be notified prior to their implementation in accordance with the terms of the SPS and TBT Agreements.

Another important step towards the harmonisation of global food standards has been taken with the development of the Codex Alimentarius as it sets a benchmark for international food quality and safety standards. It is also used by the WTO as a guideline to evaluate national standards and their possible impact on trade restrictions. Additionally, the United Nations Economic Commission for Europe (UNECE) has developed a set of standards used as a basis for quality standards and grades. The Organisation for Economic Co-operation and Development (OECD) provides international standards for seeds, forestry reproduction material and fruits and vegetables.

Although the harmonisation of public standards has advanced considerably in the past decade, national governments continue to implement measures that are not always aligned with international standards as evidenced by the amount of notifications that WTO members must provide in such cases (WTO, 2011).

The harmonisation of standards is all the more important, as the profits it can induce are immense. It is estimated that about one third of the world traded goods are affected by private standards and that the impetus to trade through a total international harmonisation of product standards would lead to the reduction of tariffs (Büthe and Walter, 2011). The harmonisation of public standards make trade more efficient; exporters would be able to comply with internationally accepted standards instead of complying with different standards for each target market. Hence, export opportunities would grow and the consumers would also have a wider range of –

probably cheaper – products and services to choose from. Standards that have been subject of an international agreement lead to an increase in trade and exports.

Box 1: Euro-Mediterranean bilateral agreements and convergence with EU standards

The regulatory convergence of Mediterranean Partner Countries (MPCs) with the Community's acquis becomes an important issue in regards to agricultural negotiations of Euro-Mediterranean bilateral agreements. This is also an area for cooperation in the framework of the European Union's (EU) new European Neighbourhood Policy (ENP) that was revised in 2011 following the revolts in some Arab countries of the Mediterranean region[2]. In view of the establishment of a Euro-Mediterranean free trade area, the ambition of the EU is to create the medium term conditions for the application of common standards that are favourable to health security and fair competition between producers of MPCs and the European Union.

The negotiations underway for the reciprocal liberalisation of trade are undergoing major changes. In 2011, the European Council has authorised the European Commission to open negotiations for deep and comprehensive free-trade bilateral agreements. Compared with the bilateral agreements currently in force, the "perimeter" of the negotiations is expanded. In addition to the negotiations on tariff dismantling, new issues are being discussed, namely, trade facilitation, non-tariff barriers, intellectual property rights (Geographical Indications for example), sanitary and phytosanitary standards and investment protection. These new directions show the willingness of the EU to go beyond the merely commercial perspective that has so far dominated Euro-Mediterranean relations.

In the framework of the bilateral neighbourhood action plans[3], the ENP is simultaneously implementing schemes (institutional and financial) to support internal reforms in MPCs. On the one hand, these reforms are necessary to allow these countries to limit the negative effects of a greater openness of their markets and on the other hand, to enable them to take full advantage of the improved access to the European market. The MPCs' approximation of laws on standards with EU rules especially in the sanitary and phytosanitary fields is one of the cooperation axes of the ENP's new approach. As for agriculture, the European Commission has mobilised additional funds dedicated to a European Neighbourhood Programme for Agriculture and Rural Development (ENPARD programme). Food security and quality standards are included among this programme's areas of cooperation. This initiative essentially aims to cooperate and support the necessary reforms to upgrade agriculture in southern countries[4]. The objective is to strengthen the institutional and operational capacity of institutions and private actors to align the MPCs legislations with European standards and the effective enforcement of these regulations.

2 - European Commission, *A New Response to a Changing Neighbourhood: A Review of the European Neighbourhood Policy. Joint Communication by the High Representative of the Union for Foreign Affairs and Security Policy and the European Commission*, Brussels, European Commission, 2011 (http://ec.europa.eu/world/enp/pdf/com_11_303_en.pdf).

3 - Established on the basis of major strategic directions outlined by the Country Strategy Papers the action plan provides a timetable for reforms and actions in the short and medium terms (3-5 years).

4 - Dacian Cioloş European Commissioner for Agriculture Founding Speech: "Agriculture at the Heart of the European Neighbourhood Policy", 31/05/2012 (http://europa.eu/rapid/press-release_SPEECH-12-405_fr.htm?locale=EN); European Commission, ENPARD Conference on Strategic Modernisation of Agriculture in EU Neighbourhood Countries, press release, Brussels, Uropean Commission, 03/05/2012 (http://ec.europa.eu/agriculture/events/enpard-workshop-2012_en.htm).

The MPCs are not all involved in this convergence process in the same way. Benefiting from the "advanced status" granted by the EU in 2008, Morocco is the most advanced country. Since the beginning of 2003, negotiations are underway for the conclusion of a Deep and Comprehensive Free Trade Agreement (DCFTA). It is therefore very important for this country to engage in the process of convergence of sanitary and phytosanitary standards. Since 2010, the EU has engaged the "Succeeding the Advanced Status"[5] programme with Morocco. The strengthening of the convergence process of sanitary and phytosanitary regulations is one of the ten priority areas of this programme. The national legal and regulatory framework related to sanitary and phytosanitary matters is being upgraded in view of its approximation with EU standards. The actions implemented aim at strengthening the role of government agencies such as the National Committee for Sanitary and Phytosanitary Measures (CNMSP)[6] and the National Office for Food Safety (ONSSA)[7] that were established in 2009 (Law n° 25-08). The instruments mobilised are largely based on the agricultural pre-accession instrument (SAPARD – Special Accession Programme for Agriculture and Rural Development) established for central and eastern European countries in the framework of the EU enlargement policy. We can mention for example the Twinning programmes between public institutions and technical assistance institutions (TAIEX)[8] that provide for the exchange of expertise, for the upgrade of food law and the support for compliance with the obligations of the WTO (World Trade Organization) agreement on Sanitary and Phytosanitary Measures (SPS).

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Description of the key food safety and quality standards

A multitude of food safety and quality standards, codes of good practice and guidance documents have been developed in the last ten to fifteen years in response to specific needs of certain industries including fisheries and aquaculture, agricultural commodities, livestock as well as food processing. Some of these private standards were developed by non-governmental organisations and are based on international standards and frameworks such as the Codex Alimentarius and the internationally recognized Hazard Analysis and Critical Control Point (HACCP) approach or on the ISO standards. Other private standards were developed directly by industry associations to monitor more closely the issues of food safety and quality in their supply chain. While most of these initiatives are international, they have a strong impact on the Mediterranean and its regional and global agricultural trade.

5 - This multisectoral program with a budget of 180 million euros, aims to support the implementation of key reforms included in the "advanced status" roadmap and Action Plan (2013-2017) of Morocco. Support for regulatory convergence with the EU is one of the axes of this cooperation program.

6 - Comité National des Mesures sanitaires et phytosanitaires (tranlator's note).

7 - Office national de la sécurité sanitaire des aliments (tranlator's note).

8 - TAIEX is an instrument for technical assistance and exchange of information established in 2006 in the framework of the ENP. It is used to strengthen political and economic cooperation with several regions, mainly in the field of harmonisation and implementation of Community law.

Introduction to the main food safety and quality standards

The influence of food safety and quality standards is measured by the number of food enterprises that know and apply them. The main standards include the Food Safety System Certification 22000 (FSSC 22000), the Safe Quality Food Code (SQF), the British Retail Consortium Global Standards for Food (BRC), the International Featured Standards for Food (IFS), GlobalG.A.P. PrimusGFS, the Global Aquaculture Alliance Best Aquaculture Practices (BAP), the Aquaculture Stewardship Council (ASC), the Global Red Meat Standard (GRMS) and the CanadaGAP™. These standards can be grouped into different categories depending on their scope of requirements, sector coverage, regional application, and their possible recognition by other initiatives as being "equivalent" or similar in scope and outreach. Such recognition programs – also called benchmarking programs – aim to harmonise the standards' requirements and facilitate inter-operability between their audit processes and implementation methods.

The Global Food Safety Initiative (GFSI) is an example of a recognition and benchmarking programme initiated by food safety experts working for retailing, manufacturing and food service companies, as well as service providers associated with the food supply chain. GFSI aims to build a global approach to food safety issues by benchmarking and recognising food safety standards.

Mission, objectives and implementation of the main food safety standards

The *Food Safety System Certification 22000 (FSSC 22000)* is an ISO-based certification scheme for food safety management systems in the whole supply chain. FSSC 22000 uses the existing standards ISO 22000, ISO 22003 and technical specifications for sector prerequisite programs. The ISO 22000 international standard specifies the requirements for a food safety management system that involves the following elements: interactive communication, system management, prerequisite programs and HACCP principles. The FSSC 22000 certification scheme is accredited according to the ISO guide 17021 and recognised by the GFSI.

The *SQF Code (SQF)* is a food safety and quality management certification standard that utilizes the United States National Advisory Committee on Microbiological Criteria for Food (NACMCF) and the FAO CODEX Alimentarius and HACCP guidelines. The SQF Code has been redesigned for use by all sectors of the food industry from primary production to transport and distribution.

The *British Retail Council Global Standards for Food (BRC)* covers aspects of safety and quality management in the packing and processing of food products. This BRC was one of the first schemes references by the GFSI and is used around the world with certificates in over 100 countries.

The *International Featured Standards for Food (IFS)* are used to audit food safety and quality of processes and products of food manufacturers. IFS operates through five regional offices worldwide that coordinate technical working groups in different languages (German, French, American, Spanish and Italian) with different stakeholders, retailers, industry representatives, certification bodies and food services.

The *GlobalG.A.P.* referencing system is used for the certification of production processes of agricultural and aquaculture products. The GlobalG.A.P. standards are "pre-farm-gate" standards. They cover the entire agricultural production process with the exception of processing, manufacturing or slaughtering, except for the first level of product handling in aquaculture. Only products listed by the GlobalG.A.P Product List, published on the GlobalG.A.P website can be certified. Wild-catch and wild-harvest are not covered by GlobalG.A.P. standards.

PrimusGFS is a private scheme that establishes food safety requirements for the certification of fresh or barely-processed agricultural products intended for human consumption – from growing operations to barely-processed (fresh-cut) products. It defines a series of requirements for management of the production, handling, processing and storing operations to ensure product safety at each stage of production. The standard has defined three key areas that any company in the agricultural sector must consider at the time of production or manufacture of its products: Food Safety Management System, Good Agricultural and/or Manufacturing Practices and the HACCP System. PrimusGFS is recognised by GFSI.

The *Global Aquaculture Alliance Best Aquaculture Practices (BAP)* standards address community and employee relations, conservation of biodiversity, soil and water management and management of chemical products. Applicants are requested to carry out a self-assessment against the BAP standards to determine whether they are ready for external evaluation. The Global Aquaculture Alliance expects its members to strive for the benefit of the life and prosperity of local communities through the diversification of the local economy, the promotion of employment and contributions to the tax revenues.

The *Aquaculture Stewardship Council* is responsible for working with independent, third party entities to certify farms that comply with the standards that were developed through the Aquaculture Dialogues, eight roundtables initiated by the World Wildlife Fund (WWF) and launched in 2004. These Dialogues gathered aquaculture producers, conservationists, industrial processors, retailers, scientists and others who have set standards aiming to minimise the negative environmental and social impacts related to twelve aquaculture species: salmon, shrimp, tilapia, trout, pangasius, seriola, cobia, abalone, mussels, clams, oysters and scallops.

The *Global Red Meat Standard* (GRMS) is a scheme specifically developed for the red meat industry: it sets out the requirements for all production processes related to meat and meat products and focuses especially on the aspects on which the required levels of safety and quality depend. GRMS is recognised by GFSI.

CanadaGAP™ is a food safety certification program for companies that produce, pack and store fresh fruits and vegetables. Launched by the Canadian Horticultural Council, this certification program now comprises two manuals, one for greenhouse production, the second for other methods of fruit and vegetable production. It is based on a rigorous analysis of risks that apply the seven principles of HACCP. CanadaGAP™ has also been evaluated in terms of the GFSI Guidance Document, but not under the GlobalG.A.P. standards.

The *Codex Alimentarius* is a collection of internationally adopted food standards presented in a uniform manner: the standards include provisions of an advisory nature in the form of codes of practice, guidelines and other recommended measures to achieve the purposes of the Codex Alimentarius, i.e. to protect the health of consumers and to ensure fair practices in food trade. According to the FAO/WHO Codex Alimentarius Commission, these standards and codes of practice provide useful checklists of requirements for national food control or enforcement authorities and promote the elaboration and establishment of definitions and requirements for safe food production, to assist in their harmonisation and hence, to facilitate international trade.

Description of harmonisation efforts

The harmonisation of food safety and quality standards is more advanced than the harmonisation of social and environmental standards. While some claim that food safety standards establish another layer of governance and undermine harmonisation, some coalitions and internationally recognised standards such as ISO 22000 promote the process of harmonisation and equivalence (FAO and WTO, 2010). Examples include the BRC Global Standard for Food Safety in the U.K or the GFSI at the global level. The objective of the GFSI is to foster the convergence between different food safety standards through a continuous benchmarking process for food safety management schemes. In February 2013, the GFSI benchmarked six schemes, including the BRC Global standards, the International Featured Standard (IFS), Safe Quality Food standards (SQF), Canada G.A.P., Food Safety System Certification 22000 (FSSC 22000), and the Global Red Meat Standard (GRMS). This means that these standards are now considered as equivalent and suppliers need to comply with only one of these standards. Four additional standards are currently under review (FAO and WTO, 2010).

Harmonisation through benchmarking and mutual recognition of standards is an important strategy and an effective way to fight the potential barriers to trade. Such harmonisation of standards could be the subject of intergovernmental treaties but is seems more realistic and efficient that coalitions of firms and consortia of companies take the lead. Harmonisation is also supported by the development of "meta systems" such as the HACCP (Hazard Analysis Critical Control Point), Good Manufacturing Practices (GMP), Good Agricultural Practices (GAP) and traceability systems. Compliance with these systems is a prerequisite in the global trade of agricultural food (Henson and Reardon, 2005). Several standards incorporate these "meta systems", such as the food safety management system ISO 22000 and ISO 9000 developed by the International Organization for Standardisation (ISO), the SQF standard or Tesco Nature's Choice, which have been developed by individual firms (Jaffee *et al.*, 2011).

Comparison and analysis of some private food safety and quality standards

The analysis presented in this chapter is based on the ITC Benchmarking Tool, a recently developed MS Excel tool that extracts data sheets from the ITC Standards Map database on voluntary standards. This diagnostic tool allows for the

identification of levels of equivalence and difference between standards and comparison based on a set of 700 variables covering socio-economic, environmental, ethical and traceability issues as well as food quality and safety concerns. Currently, the ITC Benchmarking Tool is used to analyse five food safety and quality standards, namely PrimusGFS, FSSC 22000, IFS, SQF, and GlobalG.A.P. This analysis focuses on food quality and safety concerns, whereby the benchmarking tool distinguishes between the quality management system and the food management system in different standards.

Quality Management Systems

The quality management system is composed of different elements including company quality policy, technical quality requirements, product safety (excluding food safety), packaging and transportation requirements, availability of quality manuals, documentation and control processes, defined objectives, performance indicators, periodic review system, audit system, documented corrective actions and a purchasing and supplier approval system, with a total of thirteen criteria.

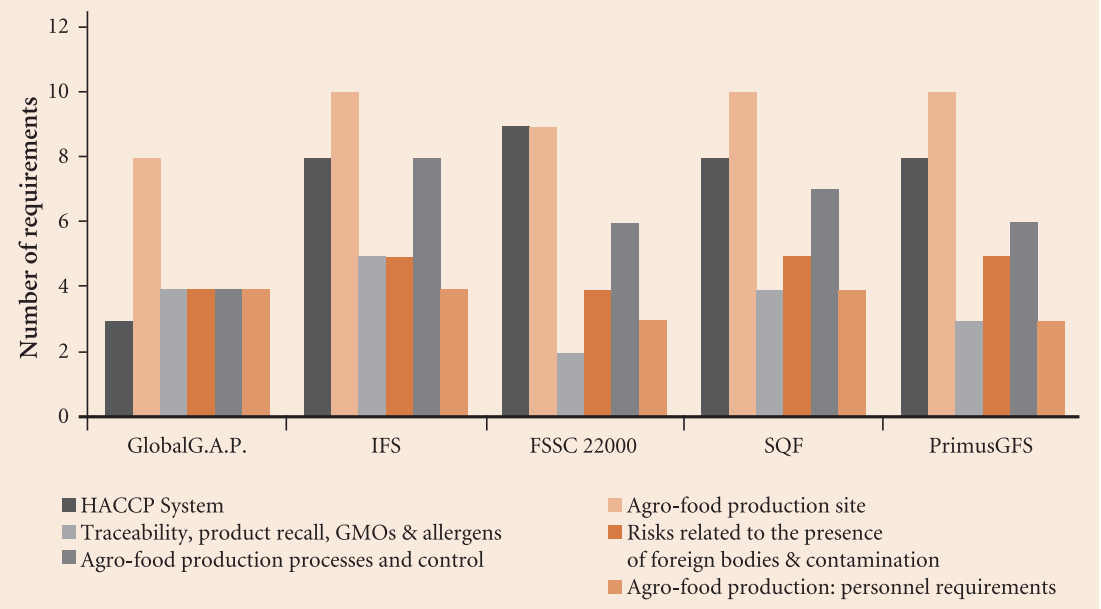
The comparison of the five standards among these components allows one to draw a differentiated picture of each standard. Our analysis shows a significant overlap between the five standards on QMS criteria. The five standards require the implementation of policies for handling and packaging of products, record keeping systems, processing of claims, periodic reviews of the QMS (quality management system), internal audit systems, monitoring and incident management and documentation of corrective actions which are all prerequisites for compliance with these five standards. However, some criteria are not required by all standards, e.g. quality policy statements (not covered by PrimusGFS, FSSC 22000), product safety excluding food safety (not covered by IFS, SQF, GlobalG.A.P.) or purchasing and supplier approval systems (not required by GlobalG.A.P.).

Food Management System

The ITC Benchmarking Tool defines the food production system as a set of seven core elements that will be discussed in further detail below, with the HACCP system as the core element. These elements correspond to 41 criteria, such as conditions on the production site, the traceability system, handling of food contamination risks, product analysis and testing, management of tests on non-compliant products and product transportation procedures.

HACCP systems. The HACCP (Hazard Analysis and Critical Control Point) system is a food safety management system that addresses physical, chemical, and biological hazards related to food products. The HACCP system allows operators involved in food supply chains to implement preventive control mechanisms at food production and processing levels. It makes it easier to identify potential food security risks, to stop corrective actions, to identify critical control points throughout the production process, to establish minimum and maximum levels for potentially harmful substances, to implement monitoring processes, to define corrective actions when critical levels are not met and to keep records. HACCP applies to several food categories including seafood, dairy products, meat and corn products.

Figure 1 - Food Management System (FMS) criteria comparison



Source: ITC Santards Map Benchmarking Tool.

As such, the HACCP system is not the only basis for food safety regulation worldwide, but it at the heart of every food safety standard, including those analysed in this chapter. None of the five standards grant compliance in the absence of a HACCP system. IFS and SQF also define the skills and knowledge required from the staff developing and maintaining the HACCP system. All standards except the Global G.A.P. also require employees dealing with the HACCP to receive adequate training for the application of the HACCP principles. Lastly, all standards reviewed in this chapter require plans and programs to verify the effectiveness of the system.

Food production site. The conditions on the food production site and precautions are essential measures in the proper management of food safety. All standards have strict requirements on the land adjacent to the cultivated land and the hygiene of the factory (manufacture, handling, storage, delivery). These requirements also include provisions for the entry points of farms, storage and packaging sites to prevent the access of unauthorised persons and the intrusion of rodents, birds and other animals. All standards focus on pest control procedures, the quality of water and microbiological monitoring, procedures for cleaning procedures, routine maintenance of facilities and the presence of sufficient hand and washing facilities and toilets. Primus GSF, IFS and SQF standards provide additional criteria for employees and visitors and raw materials and their potential for contamination, for packaging an for semi-processed and finished products. These standards (such as the FSSC 22000) also contain provisions about the condition of the premises, equipment and surfaces that should be easy to clean, free of toxic materials, peeling paint and forms of corrosion and rust.

Traceability systems. Traceability systems are the second pillar of food management systems. All five standards considered here require the implementation of a documented traceability system enabling the identification of all product inputs (including packaging) throughout the supply chain, from raw material suppliers to the customer. SQF requires the annual testing of the effectiveness of the system.

Handling of GMOs. Among the standards presented in this chapter, two explicitly refer to the issue of handling GMOs, IFS and GlobalG.A.P. The IFS requires the establishment of production site procedures for the identification of GMOs the definition of specifications required for raw materials and delivery documents that clearly identify products containing GMOs. The GlobalG.A.P. standard adopts an approach to compliance with applicable legislation in the country of production and requires documentation of the handling and use of GMOs.

Risk of foreign bodies and cross contamination. The risks of contamination and introduction of waste, chemicals, and other potentially hazardous elements in the production cycle are addressed by all the standards analysed. The criteria adopted by these standards can be classified as follows: glass and wood, chemical storage, site and equipment, waste disposal, and detection of foreign bodies. The FSSC 22000 follows the ISO 22000 guidelines for the application of the criteria in this section. For glass and wood, both PrimusGFS and GlobalG.A.P. require the implementation of written management policies whereas the IFS adopts a risk-based approach. The SQF requires the identification and special handling of wood materials where appropriate. All standards require adequate storage condition for chemicals to avoid contamination. With regards to the production site and equipment, the IFS provides for inspections via a risk analysis. The PrimusGFS requires daily pre-operational inspections with systematic record keeping of all corrective actions as well as inspections of cutting surfaces and production areas. The SQF requires that all utensils and other items used in the production process be identified, maintained in good conditions and in a manner to avoid contamination. All standards discussed in this chapter provide for strict requirements regarding waste disposal according to domestic legislation (IFS), waste disposals in areas specifically provided for this purpose (GlobalG.A.P.) and prohibiting faecal material in production areas (PrimusGFS). Lastly, the PrimusGFS, IFS, and SQF all provide conditions to detect the presence of foreign bodies in the production process.

Production processes and product control. This section tackles the processes used downstream of the primary production. As such, standards that only cover primary production (e.g. GlobalG.A.P.) do not address certain criteria. This section addresses aspects such as raw material, intermediate and final product specifications, the product development process, packaging material and procedures, product analysis and testing, quality control, management of non-compliance, verification/calibration of monitoring devices and product transportation procedures. The IFS is the only standard that covers all the above-mentioned criteria. The IFS guidelines require either compliance with applicable national laws or the application of recognised standards or specifications (e.g. HAACP). Quality control is not specifically addressed by the GlobalG.A.P. but the equipment used in the GlobalG.A.P. critical control

points must be verified to ensure accuracy and proper functioning. With regards to product specifications throughout the production process, PrimusGFS, IFS, and SQF all require appropriate documentation. In terms of packaging, most standards either follow national legal requirements for packaging specifications or stipulate that packaging must be clean (uncontaminated) and specifically designed for the particular product produced. The same requirements also apply to the product transportation criteria covered by the standards. Product analysis and testing (based on national legal requirements and specific programmes) requirements are present in the PrimusGFS, IFS, and SQF. The GlobalG.A.P. sets out requirements related to residue levels in various product categories (crops, livestock, aquaculture, etc.). All the standards deal with non-compliance through a combination of reminder systems (PrimusGFS), management of specific non-compliance that may arise (IFS), quarantine products (SQF), or the management of certified or uncertified products (GlobalG.A.P.). Similarly, all standards addressed include requirements for the proper calibration of equipment and record keeping. As for the previously discussed criteria, FSSC 22000 requirements are based on ISO 22000 and ISO/TS 22002-1.

Personnel requirements. In addition to the criteria related to the product itself, private food quality and safety standards also contain important criteria for personnel that are crucial to the integrity and reliability of the overall production process. These criteria include training, staff hygiene, medical examinations and protective clothing. In this regard, all standards require training and accurate documentation of training content and frequency of training sessions. Moreover, all standards consider staff hygiene of primary importance requiring written policies (PrimusGFS, GlobalG.A.P., IFS) and prohibiting product handling by ill employees (PrimusGFS, SQF). Both GlobalG.A.P. and IFS require the existence of instructions that employees must follow in case of infections and communicable illnesses. The SQF standard requires the implementation of medical examination for all employees, contractors, and visitors. With regards to protective clothing, all standards require the wearing of protective clothing for workers in contact with products. However, GlobalG.A.P., IFS and SQF also specify the need for clean clothing and washing procedures. The PrimusGFS addresses the storage of protective clothing outside working hours, during breaks or when employees go to the toilet. Again, FSSC 22000 follows the requirements of the ISO 22000 standard.

Box 2: The agriculture negotiations for the accession of Algeria to the WTO

The WTO has received Algeria's application in June 1987 and negotiations for accession began in 1998, seven years after the abandonment of the country's socialist economic policies in favour of reforms focused on market economy. Algeria has resumed negotiations in April 2013. The WTO members have reviewed the situation in the bilateral negotiations on goods and services and continued the examination of the Algerian trade regime and related legislation. This examination is based on reports issued by a working group composed of non-Algerian UN ambassadors assigned to cover the liabilities of the candidate country in the application of WTO rules and the opening of its markets.

Algeria must still resolve a number of issues, such as monetary and fiscal policies, state ownership and privatisation, pricing policies, foreign exchange and payments,

competition policy, investment regime and trading rights. Other issues to be addressed include customs tariffs, other duties and charges, tariff quotas, fees and charges for services, the application of internal taxes, quantitative restrictions on imports and customs valuation. More specifically, members stated that substantial work needs to be done with regards to export subsidies, industrial policies and subsidies, technical barriers to trade, sanitary and phytosanitary measures, investment measures related to trade, procurement, transit, agricultural policies, trademarks, geographical indications and plant variety protection.

The agricultural sector in Algeria has enormous potential and is already one of Europe's world's largest food importers. Government efforts seek to develop the sector by granting long-term concessions to farmers, reducing the dependence on cereal and milk imports, reforming the important fishing industry and boosting exports. To increase agricultural exports, reforms have focused on the promotion of those goods that have a comparative advantage such as olives, wine and dates, as well as ensuring that the quality of those goods that comply with international standards. While the export potential of olives, wine and dates is considerable, in the past, the government has mainly focused on the goal of self-sufficiency in staple food. This explains why the country does not yet have general export structures. However, the government subsidizes wine and milk to improve the quality and competitiveness of these goods. Thus, Algeria still needs capacity building to improve agricultural trade and better manage food safety.

On the other hand, the prospect of trade liberalisation worries some Algerian and international experts, who fear that food exports, may not be up to international competition. Besides, Algeria may risk paying even more for its food imports on which it is heavily dependent. The EU – with which Algeria signed an association agreement in 2005 imposing reforms in the energy, agricultural and services sector – supports the accession of Algeria to the WTO that was expected in 2009. Negotiations were initiated in parallel to the creation of a free trade zone between Algeria and the EU by 2017. China, along with several Asian and Latin American countries, have also recently voiced support in favour of the accession of Algeria to the WTO. The eventual WTO accession means that Algeria is expected to eliminate some taxes, liberalize imports and exports, meet quality standards (regarding SPS) and protect intellectual property rights. The accession of Algeria to the WTO is now well under way. Nonetheless, the country still has to resolve a number of problems in key areas such as export subsidies for non-oil products. Among these efforts, agriculture plays a pivotal role, reflecting its importance for Algeria's socio-economic development.

Conclusion

Over the past decade, the private sector has developed standards for the governance of food safety and quality in global agro-food value chains. Although this is a global trend, it has a strong impact on agricultural trade in the Mediterranean region. These standards aim to manage compliance with national and international food safety and quality requirements in the production, processing and transportation of food. This is why they mainly focus on requirements for the application of standards and conformity assessment.

Although it is only based on five standards, our analysis shows that harmonisation efforts are well advanced. These standards share a set of common elements, such as the HACCP and traceability systems, precautions to be taken on the production site,

in product handling and packaging, a record keeping system and a system for claims management. The GFSI is certainly the main driver of this harmonisation.

However, despite the progress made in the harmonisation of food safety and quality standards, the considerable amount of notifications to the WTO related to food safety issues is a source of concern. The surveys carried out by the ITC program on non-tariff measures, reveal that food safety standards are a recurring issue for exporters worldwide. Their strict requirements, the costs of compliance and the limited access to testing facilities are among the most prohibitive burdens for exporters.[9]

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9 - For more information about the ITC program on non-tariff measures, visit the International Trade Centre website (www.intracen.org/Non-tariff-measures-increasing-transparency-and-understanding).