

### **Accreditation:**

## Improving food safety



## **World Accreditation Day**

9 June 2020

(#WAD2020)

# Accreditation: Improving Food Safety

#### Context

For consumers around the world, access to safe and nutritious food is an essential requirement for maintaining their overall health and well-being. The term food safety describes all practices that are used to keep our food safe. Food safety relies on all players involved in the supply of foodneed, from farmers and producers to retailers and caterers.

Increasingly, there is an international aspect to food and water production, as ingredients, products or parts of products, may come from several countries around the world requiring more and more proofs of conformity to the requirements of the importing economies. Food producers also face pressure from regultors to reduce food waste and to be efficient in their use of natural resources such as clean water, and they use the services of inspection bodies, Certificationbodies and Validation/Verification bodiesto monitor and proof compliance to regulatory requirements.

Standards and accreditation are referenced in the WTO TBT Agreement and play an important role in trade facilitation. However, 30% of trade concerns related to ISO, 12% to the IEC, and 10% to ILAC. The appropriate application of standards and accredited conformity assessment therefore has the potential to resolve these concerns to the benefit of both industrialized and developing economies.

In April 2019, a Joint Statement issued by the Food and Agriculture Organization of the United Nations (FAO), the World Health Organisation (WHO) and the World Trade Organisation (WTO) stated that:

"Foodborne diseases have a significant impact on public health, food security, productivity and poverty. Nearly 600 million people fall sick and 420 000 die prematurely each year because of foodborne diseases, and 30% of foodborne deaths occur among children under five years of age."

Accredited conformity assessment activities contribute to the prevention and treatmen of the adverse effects of unsafe and Adulterated food.

WHO estimated that 33 million years of healthy lives are lost due to eating unsafe food globally each year.

#### The Role of Accreditation

It is important that the market has assurance that conformity assessment bodies themselves operate to acceptable standards and this is the purpose of accreditation. The accreditation process determines, in the public interest, the technical competence and integrity of these organizations.

Conformity assessment is the demonstration that what is being supplied actually meets the requirements specified or claimed. Conformity assessment can be applied to a product, a service, a process, a system, a body or persons and includes activities such as testing, inspection and certification.

## Supporting Food Chain Security in Europe

European Regulation (EC) No 2017/625 relies on accreditation to support food security in Europe. It requires that all analytical results from laboratories that carry out Official controls must be accredited in accordance with ISO/IEC 17025. It also extends to the whole food chain, with more specific rules for dealing with fraud, including the obligation of Member States to carry out regular, unscheduled checks to ensure integrity and authenticity throughout the food chain. The requirements for accredited laboratories are reflected in article 37, which directs the laboratory to include every one of the methods of analysis necessary for the realisation of Controls that are required, for example by operators.









Food laboratories are accredited to carry out a wide range of chemical and microbiological scopes. It also covers aspects such as packaging and environmental testing, sensory analysis, plant health, and veterinary microbiology.



#### Certification

Certification bodies are accredited to carry out compliance audits of food handling sites throughout the supply chain, from farm to processing to restaurants. These include national and international quality assurance schemes, FSSC food safety management system, GlobalGAP Integrated Farm Assurance, Organic certification and HACCP, and Food Safety Management Systems Certification to ISO 22000.





#### Inspection

Inspection bodies are accredited to carry out activities in the food industry such as pre-shipment inspection, plant health, meat and slaughterhouses.





#### **Proficiency Testing**

Proficiency testing providers (PTP) are accredited for the establishment and conduct of proficiency testing programs using ISO/IEC 17043. Proficiency testing is a tool used extensively in the food processing and production industries to help ensure food products are safe for human consumption.

#### **Food Safety Schemes**

The Global Food Safety Initiative (GFSI) improves food safety and business efficiency by ensuring the mutual acceptance of GFSI-recognised certification programmes across the industry, enabling a simplified "once certified, recognised everywhere" approach. This reduces inefficiencies from duplication of audits and helps reduce trade barriers. The GFSI Benchmarking process is now the most-widely recognised in the food industry worldwide.

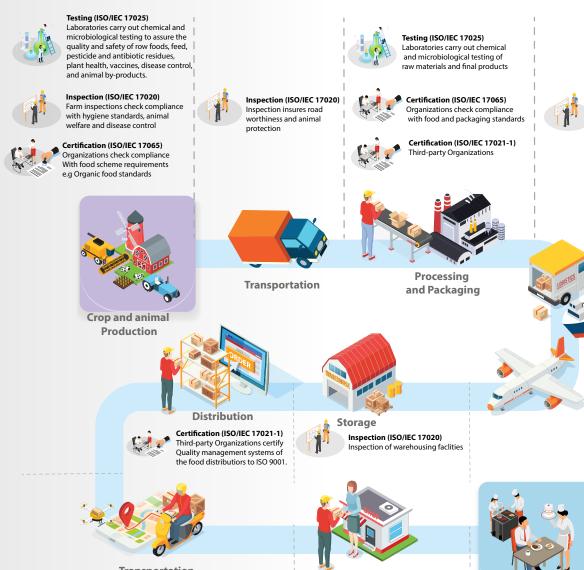
#### **Feed Safety Schemes**

FAMI-QS is designed for organizations that manufacture feed additives and/or supply individual components to the feed industry. It is designed to guarantee safety and good hygienic conditions throughout the entire food production chain, to include all components. The assessment provides manufacturers of feed components and suppliers from developing economies with an opportunity to demonstrate the safety of their processes and their conformity with the requirements of FAMI-QS.

#### Food safety supported by accreditation in China

The Food Safety Law of the People's Republic of China (adopted at the 7th Session of the Standing Committee of the 11th NPC on February 28, 2009 and revised at the 14th Session of the Standing Committee of the 12th NPC on April 24, 2015) states that the food inspection agency engaging in food inspection activities shall obtain qualification approval in accordance with relevant provisions of certification and accreditation, except as otherwise provided by law.

## Accreditation in the Food Supply Chain



**Transportation** 



Testing (ISO/IEC 17025) Softwares managing the storage and safe transportation of food are tested and validted by specialised laboratories



Certification (ISO/IEC 17065) Food delivery Services are certified for safe handling and delivery of food Retail



Testing (ISO/IEC 17025) Testing the safety and efficacity of ingredients, additives and nutritional content, laboratories do also carry out sensory analysis.



Catering Inspection (ISO/IEC 17020) Inspection of food handling and hygiene standards



Certification (ISO/IEC 17021-1) Catering organizations' management systems are certified according to ISO 9001 and food quality scheme requirements.

Inspection (ISO/IEC 17020)

Scheduled aircraft inspection

Vehicule inspection

Distribution

Pre-Shipment Inspection of Cargo

The production of food involves complex supply chains and processes requiring different types of accredited conformity assessment activities. A number of Food Schemes require certification for the production of crops, animal feed and practices involved with sourcing, harvest and slaughter. Industry and regulators require Inspection and sample testing for other activities like storage, treatment and processing, and in turn packaging and distribution. The retail environment in terms of storage and display benefits also from Certification activities of their services, processes and management systems.

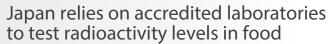
#### **Supporting Procurement Officials**

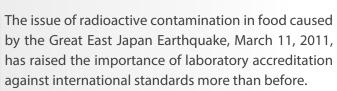
ensure the safety of the global food supply chain



Since food safety hazards may be introduced at any stage of the process, every company in the food supply chain must exercise adequate hazard controls. In fact, food safety can only be maintained through the combined efforts of all parties: governments, producers, retailers and end consumers.







Accreditation of laboratories under ISO/IEC 17025 is the system to accredit the laboratory with the technical competence to the international compliance. Test reports issued by the laboratory accredited by accreditation body as the signatory to the ILAC Multilateral Recognition Arrangement (MRA) supports the smooth logistics and can make a contribution to the export of agriculture products or food.

The Japanese Ministry of Agriculture, Forestry and Fisheries (MAFF) issued the notification that laboratories accredited under ISO/IEC 17025 are reliable analysis organizations for the measurement and analysis of radioactive materials in food, .



Accredited testing opens up meat export markets to UK products

Manufacturing beef from the UK can now be exported to the Canadian market after approval was given by inspectors, following work involving the Agriculture & Horticulture Development Board (AHDB), Defra, the FSA, UK Export Certification Partnership (UKECP), Quality Meat Scotland and HCC Meat Promotion Wales.

The agreement covered both primal cuts and manufacturing beef, and UK officials have been working to ensure manufacturing beef is tested to the required microbiological standards required by the Canadian authorities. This regime is now in place and has been robustly evaluated to UKAS standards, allowing shipments to begin immediately.

#### Accredited Inspections support Food Safety in commercial catering in France

The application of the European regulation opened the way for the implementation of new inspection tools for food safety. Official inspections occur throughout the food chain to confirm the level of conformity of the facility. In accordance with regulatory requirements, the NF V01-015 standard relating to the inspection of hygiene levels in commercial catering facilities was issued in May 2016.

Regulatory requirements will specify to what extent the results of this inspection activity could be taken into account by the relevant authority in the framework of official inspections for food safety. Accreditation of inspection bodies will help ensure a high level of hygiene and, as a direct consequence, the protection of consumers.

## Food Safety Related Sustainable Development Goals

## Accreditation supporting the achievement of SDGs related to food safety

#### No Poverty



Foodborne disease (FBD) is a major cause of ill-health among the poor and is associated with a range of costs affecting them, including lost workdays, out-of-pocket expenses, and reduced value of livestock and other assets. The services of ISO/IEC 17020 accredited Inspection Bodies are used in different stages of the supply chain to detect unsafe food and monitor hygiene levels. Services of ISO/IEC 17025 accredited testing laboratories are used to test the samples taken from the supply chain.

Unsafe food has multiple complex interactions with nutrition. For example, toxins may directly lead to malnutrition, some of the most nutritious foods are the most implicated in FBD, and concerns over food safety may lead consumers to shift consumption away from nutritious foods. Product Certification bodies according to the ISO/IEC 17065 audit the production and supply chain of diverse nutritious foods and judge about their conformity to the local and international schemes (e.g GFSI Benchmarking Requirements)

#### Zero Hunger



#### **GOOD HEALTH &WEEL-BEEING**



The global health burden of FBD is comparable to that of malaria, HIV/AIDS, and tuberculosis, and the people most vulnerable to FBD are infants, pregnant women, the elderly, and those with compromised immunity. ISO 15189 accredited medical laboratories have the competence to improve health services for patients affected by the FBD.

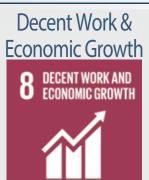
Certified food safety management systems ensure that the Hazard Analysis and Critical Control Points (HACCP) for food safety are well documented, implemented and monitored in the different stages of the food supply chain.

Lack of clean water increases the risk of food being unsafe, injudicious use of chemicals in food production can pollute water sources, and infectious FBDs can be transmitted via water. Environmental and chemical testing are well established according to internationally agreed testing methods used by the ISO/IEC 17025 accredited testing laboratories.



#### Accreditation, SDGs & Food safety

Food safety is directly and indirectly linked to achieving many of the Sustainable Development Goals (SDGs), especially those related to ending hunger and poverty, and promoting good health and well-being. Food and nutritional security are realized only when the essential elements of a healthy diet are safe to eat, and when consumers recognize this. The safety of food is vital for the growth and transformation of agriculture, which are needed to feed a growing and more prosperous world population, for the modernization of national food systems, and for a country's efficient integration into regional and international markets.



Inclusive food markets provide livelihoods and are a way out of poverty for many poor people. Preventing FBD allows workers to perform better and have a better opportunity to contribute to the economic growth. The certification of persons according the ISO/IEC 17024 allows the valuation of the workers' competence and provides employers a trusted tool for the selection of competent personnel. GFSI benchmarked schemes, which recognized by the world's leading retailers, provide food processors and manufacturers with access to export markets.

Least developed countries have immense potential for industrialization in food and beverages (agro-industry) with good prospects for sustained employment generation and higher productivity, but Inadequate infrastructure in food industry, including conformity assessment services, leads to a lack of access to markets, jobs, information and training, creating a major barrier to doing business.

The Quality infrastructure is positively related to the achievement of social, economic and political goals. Accredited conformity assessment services support the efforts to upgrade the technological capabilities of the food industry and the development of sustainable and resilient infrastructure.



## Indian Food Agency uses accreditation to improve standards

The Indian Food Safety and Standards Authority (FSSAI) relies on NABCB accreditation to improve standards of food production. FSSAI has produced third party auditing regulations which prescribe NABCB accreditation for food safety audit agencies. Food Businesses that receive satisfactory audit results may be subjected to less frequent inspection by Central or State licensing authorities. Hence, Third party Audits will reduce the burden on the regulatory inspection conducted by Central or State Licensing Authorities and encourage the efficient self-compliance by the food businesses

## Sustainable Cities & Communities



Hundreds of millions of poor people work in urban agriculture and food-related services, and vibrant traditional food markets and street food make important contributions to culture, tourism, and livable cities. Accredited management systems certification services allow the economic operators to demonstrate the sustainability of their business and to satisfy the stakeholders.

# Accreditation supporting the global trade of safe food

Safe food is essential for nutritional security, human development, the broader economy, and international trade. The global trade of food, which has become highly complex and interconnected, now accounts for \$1.5 trillion (Source: WTO).

The purpose of the IAF and ILAC Mutual Recognition Agreements is to provide users with confidence in data and certificates as a result of the assessment of the technical competence and impartiality of the conformity assessment activities. Accreditations granted by Accreditation Bodies that are signatories to the agreements are accepted worldwide based on their recognised accreditation programs, therefore reducing costs and adding value to industry and consumers. Testing results, Inspection reports and Certificates in the fields of Management Systems, Products (including processes and services), Personnel, Validation/Verification and other similar programs of conformity assessment issued by bodies accredited by signatories are therefore relied upon in international trade. The Mutual Recognition Agreements contribute to the freedom of world trade by eliminating technical barriers. IAF and ILAC work together to find the most effective way of achieving a single system to meet the objective: "Accredited once, accepted everywhere".



The National Health Service, Food Safety and Quality (SENASICA) and the Mexican Accreditation Entity (EMA) work in partnership to coordinate efforts to promote the standardization and harmonization of procedures, requirements and related accreditation, and approval of certification bodies, verification units and testing laboratories. Accreditation strengthens the prestige and competitiveness of agrifood products produced in Mexico, which account for 6.2% of exports. Accreditation drives better performance of bodies and delivers a high degree in reliability of results.



WTO reported that global trade in food products has expanded more than threefold over the last two decades. Developing economies are increasingly participating in global food trade, both as exporters and importers. At the same time, global agricultural value chains have become complex, and food products are often grown, processed and consumed in different countries. While these trends have contributed to increasing the quantity and diversity of foods available to consumers throughout the world, they have also raised concerns with regard to the safety of the traded food.

Consumers have the right to expect that both locally produced and imported food is safe. In this context, the development of international food safety standards for industry, testing, inspection and certification has become more important than ever before.

A 1% saving in trade transaction costs is estimated to result in a global trade benefit of USD 43 billion. The benefits are especially great on the trade of perishable products, including fresh food. (Joint Statement by FAO, WHO and WTO - April 2019)

With over two hundred diseases spread through the food chain, it's clear that safe, sustainable food production is one of our greatest challenges. Globalization of the food trade further complicates food safety and the new edition of ISO 22000 on food safety management systems presents a timely response. (source: ISO)

Accreditation supports food safety and food crime prevention

In response to the Horsemeat scandal in Europe, the UK Government published a report to recommend that accredited testing, inspection, and certification provides a mechanism to ensure food integrity and to prevent food crime.

#### US Regulator uses accreditation to oversee imported food

ILAC and IAF Membership map

The U.S. Food and Drug Administration has adopted the use of accreditation in its oversight of imported foods. The FDA recognises accreditation under the voluntary Accredited Third-Party Certification Program.

Accreditation bodies recognised by FDA have the authority to accredit third-party certification bodies, which once accredited, can conduct food safety audits and issue certifications of foreign food facilities (including farms) and the foods – both human and animal – that they produce.

## Economic and public health burden without Accredited Conformity assessment services:

### World The World Bank guide

#### Bank

The World Bank published a guide to avoiding the burden of unsafe food. The guide argues that much of the burden of unsafe food can



be avoided through practical and often low-cost behavior and conformity assessment infrastructure changes at different points along food value chains, including in traditional food production and distribution channels. The absence of effective mechanisms for the accreditation and certification of businesses was identified as one of the problems in food safety capabilities in low and middle income countries.

The guide highlighted the need to ensure that food testing laboratory systems are internationally accredited, effectively networked, and financially sustainable. So where investments in testing capacity are made, strict attention should be given to quality control, through proficiency testing, staff training, and ultimately,

#### WHO

### WHO Report on foodborne diseases' burden



The global burden of foodborne disease report conducted by WHO in 2015 was the first initiative on such an expansive global scale. The study has not only highlighted the impact of foodborne disease but also the need for action in order to address the issue.

#### **WTO**

Low and Medium Income countries are the most affected

The total productivity loss associated with FBD in Low and Medium Income countries LMICs is estimated at US\$95.2 billion a year. Of this, upper-middle-income countries account for US\$50.8 billion, or 53 percent of the total. Lower-middle-income countries account for US\$40.6 billion (43 percent), and low-income countries for US\$3.8 billion (4 percent).

(the Geneva International Forum on Food Safety and Trade)

## **ISO Standards**

Conformity assessment is based on International Standards and schemes for food safety

ISO has over 1600 standards for the food production sector designed to create confidence in food products, improve agricultural methods and promote sustainable and ethical purchasing.

## Consumers in Poland protected from trichinosis through accreditation

Pork and venison produced in Poland are covered by the Trichinella monitoring programme. In accordance with the legal requirements, species susceptible to trichinosis infection are subject to mandatory testing – in addition to swine and wild boar meat, this also concerns, among others, horse meat.

Accreditation of laboratories involved in trichinosis diagnostics makes it possible to obtain reliable test results, and the procedures developed and implemented by the laboratories not only provide greater confidence in the results obtained, but also help ensure their comparability.

#### Accreditation Supporting the safety of meat products in Australia and New Zealand

JAS-ANZ, the New Zealand and Australian Accreditation Body, supports PrimeSafe the regulatory authority for the safety of meat, seafood and pet food. A Food Safety Management Scheme (FSMS) supports PrimeSafe in it's management of establishments' compliance to the Victorian Meat Industry Act 1993, the Victorian Meat Industry Regulations 2015, the Seafood Safety Act 2003, and the Seafood Safety Regulations 2014 through accrediting conformity assessment bodies that audit the compliance of meat establishments to the prescribed standards.



Many case studies on major outbreaks of foodborne disease or food adulteration scandals show that using the accredited conformity assessment services allows a shift from reactive behavior to preventive and proactive systems in many countries around the world. Investing in a competent conformity assessment infrastructure aligns with the World Bank recommendation for sustained investments in prevention, including ones that build countries' core competencies to manage food safety risks, and motivate and empower many different actors, from farm to fork, to act responsibly and with consumer health in mind.

# World Accreditation Day 9 June 2020

#### Find a Supplier

IAF "CertSearch" was launched in September 2019 during the Joint ILAC and IAF General Assembly. This Database is a tool that supports procurement officials. The platform currently contains around 400,000 management system certificates from accredited suppliers and will allow purchasers to check if their potential suppliers hold such certificates. It will also help to distinguish between certificates issued by accredited conformity assessment bodies (CABs) from the certificates issued by non-accredited CABs, and to check the authenticity of a certificate.

#### **Further Information**

Accreditation provides a globally-recognised tool to not only assess and control risks of the internal operation of businesses, but also the products and services that they place on the market. In this way, Regulators, purchasers and employees can demonstrate confidence that accreditation delivers a safer world.

Visit https://publicsectorassurance.org/topic-areas/food-safety-agriculture/ to access research, case studies and supporting information relating to the positive benefits of accreditation in the delivery of health and safety policy.

Visit www.businessbenefits.org for further examples of how businesses can benefit from standards and accreditation.



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