1. The 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) call for major transformations in agri-food systems to end hunger, achieve food security and deliver healthy diets to all. Food safety is an essential condition of food security, healthy diets and food trade, and has an essential role to play in this transformative process. The international food safety conferences held in 2019 in Addis Ababa and Geneva under the title “The Future of Food Safety: Transforming knowledge into action for people, economies and the environment” called for political commitment to prioritize food safety. The presence of high-level officials from many countries as well as AU, FAO, WHO and WTO ensured that food safety was seen as an important priority without which SDGs could not be achieved. The events highlighted the continued relevance of the Codex Alimentarius as the international reference for food safety standards and the importance of harmonization of national food safety requirements with Codex standards and encouraged Members to continue engaging in Codex work to keep these standards relevant and up-to-date.

2. Further to the request of the FAO Governing Bodies (Committee on Agriculture in October 2020, endorsed by Council in December of the same year), FAO’s Food Systems and Food Safety Division is updating its Food Safety Strategy in alignment with the new FAO Strategic Framework for 2022-2031 and 2030 Agenda to ensure the continued relevance of our support to Members on food safety matters. Particular attention is given to involving WHO on a continuous basis through biweekly meetings to allow for the two Organizations’ respective strategies concerning food safety to be mutually supportive and complementary.

3. A process and timelines were endorsed by the Bureau of the Committee on Agriculture in April 2021. During the month of July 2021, a Draft Zero was shared during a first sequence of consultations in particular with Codex Alimentarius Members as CX/CAC 21/44/15 Add.2.  
4. As a result of this consultation process, Draft Zero was further developed into Draft One. This paper therefore aims to share this Draft One of the FAO Food Safety Strategy 2022-2031 (Appendix I) as Rev.1 of CX/CAC 21/44/15 Add.2.

5. Draft One is now subject to a sequence of consultations scheduled for October and November 2021. As the Committee on Agriculture will meet again in 2022 as its 28th Session to review the final draft Food Safety Strategy, this drafting process needs to be finalized by February 2022.

6. Codex Members and observers are invited to share any comments on the Draft One by 30 November 2021 via email to Food-Quality@fao.org, with a copy to Leonardus.Gorris@fao.org
FAO Food Safety Strategy 2022-2031

Introduction

The 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) call for major transformations in agri-food systems in terms of sustainability and resilience if we are to end hunger, achieve food security and make healthy food available to all.

If the Food and Agriculture Organization of the United Nations (FAO) is to achieve its goals and contribute towards positive transformations in agri-food systems, food safety must be positioned as a central component of such systems. In FAO’s new Strategic Framework 2022 to 2031, food safety is a Priority Programme Area (PPA). The PPA “Safe food for everyone” recognizes the importance of integrated, multi-sectoral food safety policy and legislation for sustainable and resilient agri-food systems adopted and implemented by governments. It also underscores the need to enhance food safety capacities and awareness of agri-food value chain operators and consumers. Agri-food systems by nature are complex with interconnected sectors, and so the work on food safety contributes to other FAO ambitions, such as the PPAs “One Health” and “Transparent Markets and Trade”.

The new FAO Food Safety Strategy for 2022-2031 is intended to meet and contribute to these PPAs as part of FAO’s support for transforming agri-food systems. The Strategy is a response to the rationale and the urgency to consider food safety early in the process of designing and implementing the changes and innovations that will transform agri-food systems. It builds on the important FAO’s achievements and its work with partners and collaborators, in food safety, including the achievements made under the FAO Food Safety Strategy adopted in 2014.

At its 27th Session, the Committee on Agriculture (COAG) recognized the connection between food safety and food security, and the role of food safety for FAO’s support toward sustainable and inclusive agri-food systems. COAG 27 requested FAO to develop a new Food Safety Strategy to contribute to the 2030 Agenda as an international guidance, policy and advocacy instrument for decision-makers. It underlined the importance of the World Health Assembly (WHA) resolution 73.5 and requested that FAO collaborate with the World Health Organization (WHO) to align their food safety strategies and ensure they are mutually supportive, that they follow the One Health approach and that they consider public health impacts as well as the global economic effect of the COVID-19 pandemic on the resilience of food safety systems.

WHO has been a major partner with FAO in food safety for many decades, working together on such issues as countries’ access to and engagement with Codex Alimentarius, creating international food safety guidance and standards, developing and providing scientific advice to countries and other stakeholders, and helping countries to strengthen their national food control systems. Each organization brings their own unique perspective and skillset to the process.

Several novel elements are included in the new FAO Food Safety Strategy that:

- align with the new FAO Strategic Framework 2022-2031 and the COAG ambition for food safety support in the context of achieving agri-food systems that are more sustainable and resilient;
- take a One Health approach to supporting food safety developments and considering trade-offs in decision-making related to food security and sustainability;

---

2 Agri-food system: The agri-food system covers the journey of food from farm to table: when it is grown, fished, harvested, processed, packaged, transported, distributed, traded, bought, prepared, eaten, and disposed of. The agri-food system also includes the livelihoods of the people who work in the system as well as the activities, investments and choices that play a part in producing food and agricultural products. In the FAO Constitution, the term “agriculture” and its derivatives include fisheries, marine products, forestry and primary forestry products. From: 166th FAO Council Report (Cl 166/REP, http://www.fao.org/3/nf693en/nf693en.pdf ) footnote 6
4 Paragraphs 41, 44 COAG 27th Session Report
− provide food safety support at all levels, from global to national/local level, advocating for better inter-sectoral coordination and integrated multi-sectoral approaches to food safety;

− set up innovative and broader partnerships between FAO and public and private entities to better leverage or mobilize the available expertise and resources needed to achieve the Outcomes selected in the strategy;

− pursue new approaches to better assist stakeholders that lack adequate resources and capacities (e.g., low- and middle-income countries, food business operators such as small-holder farmers, family farmers, micro-, small- and medium-sized enterprises (MSMEs) to meet food safety requirements necessary for market access;

− expand the breadth and depth of foresight concerning agri-food systems and societal developments to better identify those issues that might pose food safety risks, as well as those that might offer opportunities, in support of timely decision-making;

− strengthen assistance to countries concerning food safety data generation and information management, including providing tools for data sharing and analysis.

FAO has extensive expertise and assets in the food safety area and has developed tools and platforms to strengthen food control systems which the new Food Safety Strategy builds on, while better leveraging FAO resources that support food supply chains from farm to fork. The Strategy recognizes that food safety can enable the transformation of agri-food systems by allowing for food safety decisions to be made using the most relevant data and the latest science. It has taken the lessons learned from recent food chain disruptions and used them to develop stronger, more forward-looking approaches to food safety risks and to reduce the vulnerability of supply chains.

The Strategy provides FAO’s Members with international guidance on food safety, to leverage the increased investments made by Members and to encourage the inclusion and integration of food safety into more sustainable agri-food systems.
Context

FAO recognizes that there is no food security without food safety.5 The persistence of hunger and malnutrition in the world, and an increase in diet-related non-communicable diseases make it clear there is much work to be done to achieve food security and to ensure that healthy diets are available to everyone. High levels of food waste and the environmental impacts of farming and post-farm distribution and processing are signs that agri-food systems are as yet unsustainable. Technology, innovation, and data driven approaches to the optimization of agri-food systems are critical to ensuring enough safe food for all, as are more innovate methods of food testing, processing and agricultural production.

Food safety is a complex matter, because it is linked to for instance public health, food production practices, food quality, nutrition, trade, people's livelihood and the environment. Food safety in agri-food systems is connected to areas that are influenced by the decisions of public and private stakeholders regarding food safety risk management. The pathways and investments in one area of development may affect other areas.

Target 2.1 of the 2030 Agenda for Sustainable Development includes food safety, thus confirming that food safety is a crucial part of the 2030 Agenda: “By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.” Food safety is essential to achieving SDG 2 on hunger, food security, nutrition and sustainable agriculture as well as SDG 3 on healthy lives and wellbeing. These SDGs contribute to many other SDGs.

Reaching the goals of the 2030 Agenda will also depend on the smooth running of trade, into which food safety requirements are interwoven. Agricultural products are produced and processed in greater volumes and distributed through local and international trade over greater distances than ever before making international food safety standards more important than ever. Domestic and international trade must be underpinned by robust governance, harmonized legislation and science-based standards. Developing countries increasingly participate in international food trade as exporters and/or importers. Business operations of all sizes, from smallholder farms, over MSMEs to large food businesses contribute to food security, but market access requires that they meet food safety requirements.

Food safety incidents and outbreaks of foodborne illness continue to occur across the world. Ensuring food safety everywhere requires ongoing and inclusive food safety governance and capacities to manage food safety risk challenges.

Food safety may be compromised when known or new foodborne hazards pose an unacceptable risk to consumers. There can be food safety consequences from failures at any point of agri-food systems or from disruptions, or from fraudulent activities. It is essential to develop science and risk-based approaches that can better anticipate new and emerging food safety hazards and potential consumer risk, allowing for timely action to mitigate risks and avoid food safety crises. Concerns about food fraud and the recent disruption caused by COVID-19 on food supply chains demonstrate the vulnerability of the globalized agri-food supply.

Global trends such as climate change pose challenges to agri-food systems, but technical solutions are developed aiming to counteract or alleviate negative effects. Both trends and technical solutions, or other developments, must be assessed for potential food safety risks in a timely way.

The range of developments for which the implications on food safety need to be considered illustrated by the examples provided below. For some, the potential food safety impact is presented in a footnote.

- Some examples of global trends and other developments putting pressure on agri-food systems include:
  - Rapid population growth and displacement of people could lead countries and consumers to a trade-off between food security and food safety; such a trade-off now exists between food safety, hunger and poverty.

---

5 Food safety: assurance that food will not cause adverse health effects to the consumer when it is prepared and/or eaten according to its intended use. CAC43,2020. General Principles of Food Hygiene (CAC/RCP 1- 1969).
Disruptions to food production, processing and distribution designed for adequate food safety are being compromised due to phenomena such as foodborne antimicrobial resistance, climate change, land degradation, biodiversity loss, pandemics and depletion of natural resources.

Some examples of efforts to make agri-food systems more resilient and sustainable include:

- practices based on agroecology and pastoralism;
- developments aimed at optimizing the use of natural resources, such as those minimizing food waste and reusing food processing water;
- technical innovations to extend the life cycle of food and associated materials, such as the circular economy;
- introducing new sources of food and raw materials such as edible insects and foods based on traditional indigenous knowledge; and
- innovations in food production and processing (urban agri-food systems, vertical farming, precision agriculture, cellular agriculture, laboratory grown foods and food printing) that are partly driven by rapid population growth and urbanization.

Some examples of changes in food distribution and consumption practices include:

- new food channels, such as e-commerce, pop-up restaurants, home delivery of food; and
- new or changing consumer food preferences, practices, trends and behaviours such as home fermentation and home food services.

---

6 Due to increases and spread of foodborne antimicrobial resistance, food production and processing could be disrupted, possibly affecting the safety of consumer products.

7 Food safety could be compromised by minimizing food waste through recuperating expired food items or extending their use-by dates without due consideration of the safety risks.

8 Use and reuse of water (drinking water, process water, irrigation water) may be considered due to water scarcity, but it could pose food safety risks.

9 The circular economy and other approaches of revalorization of food associated materials could lead to a build-up of food safety hazards when not properly designed and validated.
Call to Action

Food safety is crucial for public health, trade, productivity and wellbeing. Food safety must therefore be high on the political agenda. Where strong political will is lacking, there could be negative social, health, economic and environmental effects which will impede the attainment of SDGs.

The framework of international food standards and trade rules established by FAO, WHO and the World Trade Organization (WTO) supports Members in their efforts to achieve the SDGs. "The future of food safety: Transforming knowledge into action for people, economies and the environment" meetings held in 2019 in Addis Ababa and Geneva, which were attended by many countries and international organizations, reconfirmed the commitments of FAO, WHO and WTO to advance food safety and trade for the benefit of their members. These meetings emphasized the need for political commitment to prioritize food safety and identified key actions and strategies to address current and future challenges to global food safety. These meetings particularly highlighted the magnitude of the food safety challenges ahead and underlined the crucial role that investment in food safety knowledge, human resources, institutions and infrastructure can play in achieving our food safety goals.

A significant global momentum exists supporting the transformation of agri-food systems, from UN agencies and member countries to intergovernmental programmes (e.g., Codex Alimentarius, the International Plant Protection Convention (IPPC)) and events such as the 2019 International Food Safety Conferences and the UN Food Systems Summit.

Agri-food systems transformations should consider the food safety impacts or consequences from the outset, when designing the approaches or technologies underlying a transformation (step), so that food safety is not inadvertently compromised, potentially blocking successful transformation.

By addressing food safety as a core element of the design for agri-food systems transformation and steering improvements, the stakeholders responsible for governance (governments) and operational management of food supplies (food business operators) can establish more robust approaches to managing product quality and safety that will help agri-food systems to achieve food security.

Some of the latest technological innovations may be useful. Digital transformation, big data, information management, and artificial intelligence are driving the continual modernization of agriculture, industry and society. It is important to consider that innovations requiring advanced technology are potentially costly, and such innovations may need to be tailored to the different stakeholders, including those with fewer resources and limited capacities.

Stakeholders may require new skills and resources to embrace technical innovations, i.e., depending on the type and level of existing capacities and proficiencies as well as on their context. To access and utilise these technical innovations, multiple stakeholder groups as well as capacity/resource providers may need to address challenges jointly, in a coordinated manner and at the right scale.

For any stakeholder and in any context, it is important to look ahead, anticipate what is coming and manage food safety risks in a timely fashion based on science and evidence. When developing the capacity of stakeholders (e.g., regulatory authorities, food business operators and suppliers) and growing talent (future generation of food professionals), account should be taken of forward-looking approaches able to identify future challenges and how these can support the operational preparedness of stakeholders.

The sooner we recognize and address the potential food safety impacts of global trends and developments, the more likely it is that agri-food systems transform to become more sustainable and resilient.

---

Food safety achievements and assets of FAO

FAO has unique food safety and other relevant expertise, which it uses to support stakeholder needs concerning food safety policy, legal framework and governance matters, operational management and capacity development. For example:

- FAO fully covers agri-food systems, including food chains from farm to fork, supporting aspects of land, water, environment, production, economy and society for animal, plant and aquatic products.
- FAO has international networks connecting global institutions and actors to local and vice versa, and it has national and regional offices with established connections to governments and other stakeholders on food safety matters.
- FAO is a key knowledge building and knowledge sharing organization and provides neutral dialogue and action platforms for all stakeholders.

FAO has built strong food safety assets at the global level for the common public good. For example:

- FAO’s scientific advice programme, run jointly with WHO, is a foundational asset and a point of reference for global food safety. It is supported broadly by Members, expertise organizations and experts. It underpins all other key assets, such as normative and capacity development work.\(^\text{12}\)

- FAO jointly with WHO established and supports the work of the Codex Alimentarius Commission that provides standards and guidance to protect consumer health and ensures fair practices in the food trade.\(^\text{13}\)

- FAO provides tailored support to governments with respect to drafting, amending or updating national food safety and food quality policies and regulatory instruments. FAO is the only UN agency that has a legal unit, which provides advice to Members about upgrading their national legal set up. FAOLEX is a major database of food and agriculture legislation.\(^\text{14}\)

- FAO mobilizes and deploys resources and expertise to support the development of national food control systems in countries, especially low- and middle-income countries. It also helps to build the food safety capacities of governments and their stakeholders.

- FAO has developed a range of tools, some jointly with WHO, such as the FAO/WHO Food control system assessment tool, as well as various risk assessment modelling tools, and guidance documents. The latter cover various aspects of food safety, including risk communication, early warning systems, food recall systems, risk analysis, risk ranking and resources for capacity development. All of FAOs food safety outputs are publicly available.\(^\text{15}\)

FAO has successfully worked with different partners and delivered through (multi-stakeholder) partnerships, which is important given the complexity of food safety and interconnectedness of food safety with food security and with sustainability and resilience objectives for agri-food systems.

- Some examples of food safety partners include UN agencies (WHO, United Nations Environment Programme (UNEP), World Food Programme (WFP), United Nations Industrial Development Organization (UNIDO), United Nations Educational, Scientific and Cultural Organization (UNESCO), International Atomic Energy Agency (IAEA)) as well as a range of international organizations (World Organisation for Animal Health (OIE), World Bank (WB), WTO)), non-governmental and private sectors.

- Examples of some major FAO activities developed or carried out with partners include:
  - Support to operationalizing the One Health approach, which aims to protect human, animal, plant and environmental health, jointly with several other UN agencies (WHO, UNEP) and international organizations (OIE) and other partners at regional and national levels, such as

---


agencies, financial institutions, none-governmental organizations (NGOs), and national and local authorities.\textsuperscript{16}

- The International Food Safety Authorities Network (INFOSAN) in which national food safety authorities participate, managed jointly by WHO and FAO, which facilitates the rapid exchange of information during food safety incidents in international food trade.\textsuperscript{17}

- FAO’s Action Plan on Antimicrobial Resistance, which was developed to combat antimicrobial resistance globally. FAO provides integrated and coherent assistance to countries in regulating and monitoring the use of antimicrobials and in preventing and minimizing the development and (further) spread of antimicrobial resistance across food systems, to humans and in the environment and limit its effect on the safety and integrity of agri-food supply chains.

- FAO works closely with WHO and OIE as well as other partners (private sector, academia, civil society, financial institutions)\textsuperscript{18} on this action plan. With the support of the Codex Alimentarius Commission and WHO, FAO established World Food Safety Day to raise awareness of the importance of food safety, mobilize engagement and sustained investment.\textsuperscript{19}

**The FAO Food Safety Strategy 2022 to 2031**

The FAO Food Safety Strategy 2022 to 2031 has been established based on a vision and mission articulating its aim. The overall strategy is first described, including considerations and foundational narratives behind four strategic outcomes as the core of the new strategy, and of aspects related to investment and delivery.

**Vision:** Safe food for all people at all times.

**Mission:** To support Members in continuing to improve food safety at all levels by providing scientific advice and strengthening their food safety capacities in the context of the transformation to efficient, inclusive, resilient and sustainable agri-food systems

**Considerations underlying the FAO Food Safety Strategy 2022 -2031:**

- FAO continues to provide tailored support to Members and other stakeholders related to direction and substance (e.g., normative work, science, policy advice) of various food safety matters, but given global developments, will cover food safety aspects related to agri-food system transformations. New efforts will be needed to emphasize the central role of food safety across the entire agri-food supply chain, in operational and governance decision-making at national and other levels, and to guide adequate food safety investments.

- Many countries work on continuously strengthening and improving food safety, in the context of their governance of food safety nationally and across borders. At the same time, they also are increasingly acknowledging the central role of food safety in successful agri-food system transformations. Multiple stakeholders are involved in these efforts, such as government, food industry and associated businesses (including suppliers and service providers, certification bodies, data and information management providers), international organizations and NGOs, academics and educators, researchers and consumers. In this endeavour it is essential that new and improved food safety capabilities are developed by various stakeholders and are implemented and integrated at different levels in the context of national law and regulatory provisions, as well as in the context of domestic and international trade.

- Ideally, countries have the ability to generate, interpret and maintain their own good quality data.


At the same time, sharing and pooling of such data is very important for regional and/or global decision-making purposes and to support those countries that may not yet be able to develop their own data. Countries may benefit from FAO’s support in generating their own data through capacity development (skills, expertise, infrastructure) and in accessing and utilizing relevant alternative data in case their own are not available.

- To guide agri-food system transformations in individual countries, it is useful to take a systems approach including an integral consideration of possible food safety impacts or consequences associated with agri-food systems transformations and societal changes. Potential risks to consumers may be avoided by, from early on, focusing on possible food safety risks, assessed based on relevant data and scientific evidence. Forward looking approaches such as foresight and horizon-scanning can help gather data and information on emerging issues and new developments that could affect food safety. They can help in evaluating trends and drivers, identifying food safety risks or other food issues of regulatory significance, to inform decision-making and pro-active policymaking. Many of the trends and technical developments mentioned in the background typically are not yet being systematically analysed for their possible effects on food safety.

- Because food safety is complex and is interconnected with many other areas, no single organization or sector may be able to manage it entirely on its own. Safe food relies on good coordination and collaboration among multiple stakeholders in and along the agri-food supply chain, from farm-to-fork, including public and private entities. While the responsibility for food safety policy making and enforcement is with the relevant competent authorities, other public organizations and private parties can help advance science, innovate food production and processing, and advance effective operational food safety management. Together, these various collaborators can bring their complementary expertise as well as their human and financial resources to work towards achieving the strategic ambitions of food safety.

- Partnering with governments, industries and academia, potentially can leverage and expand the resources available to FAO and to countries to underpin their food safety work, provide new tools and approaches in key technical areas (digital transformation, big data and information management, foresight, advancement of science methodologies), data management (data gathering/sharing and analysis, knowledge development and dissemination, cyber security) as well as in capacity development and education. FAO aims to leverage partnerships even more to cover the wider scope of expertise and skills required to support countries in addressing current and forthcoming food safety challenges, as well as for further improved impact and efficiency.

**Investments for delivering the Strategy.** Ensuring that safe food is “available for everyone all the time” requires efforts and investments of public and private entities, such as in:

- further strengthening national food control systems that cover many relevant food safety aspects for which governments are responsible (including food safety governance and standard development; policy, law and regulations; monitoring and surveillance; inspection and enforcement, crisis preparedness and management; risk management, risk assessment and risk communication) and that link to areas of responsibilities of national and international stakeholders (food production, processing, distribution and trade; issue and incident management; traceability and recall approaches; IT infrastructure and technologies).

- reaching out to the many groups and stakeholders relevant to food safety: policy makers, regulatory authorities, food industry and associated businesses, consumer organizations and consumers. This outreach is relevant at all levels (from global to local; from local to global) to engage and support various stakeholders to discharge their food safety related responsibilities. Various stakeholders would for instance benefit from timely information and capacities to effectively support their decision-making and trade-offs concerning food safety related investments. Balancing such decisions and trade-offs objectively and transparently may require new ways of working and new tools for governments and other stakeholders. Articulating reference points or criteria at the right governance level(s) may help such balancing going forward.

- responding to and supporting, at the operational level, developments in and along the farm-to-fork agri-food supply chains as agri-food systems transform towards better sustainability and
resilience. In this regard, there is a wide range of aspects to consider: tailored application and innovation of systems, tools, technologies; developing new food and nutrient sources; using resources more efficiently and reducing food waste; improving practices for production, processing, distribution and other agri-food value chain operations; and strengthening supply chain integrity, etc. Stakeholders involved in such aspects, either concerning operational management or governance, would benefit from a good understanding of the rationale to take food safety as an integral part of their work towards practical applications and from appreciating the importance of their contribution towards relevant data being generated, shared, compiled and evaluated to assess and address potential impacts on food safety.

- training and educating future food safety professionals in order to bring the new workforce into their jobs well prepared, with adequate knowledge and skills to respond to the challenges and opportunities regarding food safety and the transformation of agri-food systems. It is noted that gender, youth and inclusion are cross-cutting themes of the new FAO Strategic Framework 2022 to 2031.

**Delivery of the Strategy within the FAO Strategic Framework.**

- While food safety is relevant to and cuts across many FAO functions/divisions, the newly established Food Systems and Food Safety Division (ESF) provides overall technical guidance and support to the other divisions and regional offices. In that manner, it ensures that approaches developed to meet specific countries, regions or sectors are globally consistent, cross-fertilize and embed the latest technical or policy developments.

- The delivery of the new food safety strategy will be progressed and monitored within the overall FAO Strategic Framework 2022 to 2031. A draft monitoring framework is shown in Annex 1. The targets/indicators will be finalized once the Strategy has been agreed by Members and resources to implement it are defined.

- To be able to engage with new key technical areas, FAO will need to enhance its own capacity development, including concerning opportunities and challenges of digital transformations and tools. By improving the proficiency of existing staff and attracting new staff who have the relevant technical expertise, and by working together with partners that have the relative expertise, FAO can better provide up-to-date advice and capacity development support to Members and stakeholders on such aspects as generating and sharing data efficiently or innovating data analysis and interpretation in the context of advancing food control systems and transforming agri-food systems.

- Building on its current successful partnering approaches, FAO will seek such strategic partnerships in new technical and capacity related areas such as digital approaches to share, collect, analyse and interpret food safety data relevant for food safety control and policy making; proactive identification of emerging food safety issues and assessing potential risks; innovations and new technologies in agri-food supply chains.

**The four strategic outcome areas of the new FAO Food Safety Strategy 2022 to 2031**

The Strategy focuses on four food safety outcomes and the actions needed to deliver them. It emphasizes the areas of FAO’s food safety work that will be key in the next decade, and it builds on the overall work of FAO, which is frequently undertaken through partnerships. In the outcomes and underpinning actions, not all of FAO’s supportive activities concerning food safety matters are mentioned; only the areas of work that are the most relevant to achieving the specified outcomes are presented.

Four strategic outcomes:

- **Outcome 1)** Inter-governamental and inter-sectoral coordination of food safety governance is reinforced at all levels.

- **Outcome 2)** Sound science and evidence are provided as the foundation for food safety decision-making.

- **Outcome 3)** National food control systems are further strengthened and are continuously improved.
Outcome 4) Public and private stakeholders collaborate to ensure that food safety management and control support the development of resilient and sustainable agri-food systems.

**Strategic Outcome 1:** Inter-governmental and inter-sectoral coordination of food safety governance is reinforced at all levels

**Narratives:**

- The Codex Alimentarius Commission, supported by its Secretariat, provides standards and guidance with the aim to protect the health of consumers and ensure fair practices in the food trade. Codex guidance is also used as reference to establish national standards, to support harmonization and to minimize the regulatory burdens in cross-border trade. Notably, Codex is important in the context of international food trade, given that it is recognized as one of the three global-level standard setting organizations in the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) next to OIE and IPPC.

- The normative work of Codex Alimentarius remains relevant through coordination within its membership, providing timely new standards and guidance required for supporting and advancing their governance activities. The development of such Codex products receives scientific inputs from the FAO/WHO Scientific Advice Programme, countries expertise organizations and experts, typically in the form of scientific reports, guidance documents and tools. To make the Codex standards and guidance even more timely and effective, it would be beneficial to strengthen the inter-governmental and inter-sectoral coordination of food safety governance. Additionally, the SPS standard setting organizations, as well as the global groups (One Health High Level Expert Panel, OHHLEP) and organizations jointly advancing One Health approaches, could further strengthen the coordination and cooperation of their food safety and related work at relevant levels in countries.

- Prioritizing food safety as well as the active participation of countries and various stakeholders will be key going forward, given the scale and scope of the task to develop the food safety related governance and normative work globally and at all levels, in the context of continuously improving public health protection and trade, as well as considering the transformation of agri-food systems.

**Strategic Actions:**

SA1.1 To continue supporting the Codex Alimentarius standards-setting process through the work of the Codex Alimentarius Secretariat and Codex Committees to increase the level of participation of countries (especially developing countries and those in economic transition) and stakeholders in the Codex programme. A key aspect is to further enhance the effective engagement with and broader support given to the standards development programme. Examples of areas to consider are the use of new ways of working, including virtual tools for communication, information sharing, collaboration and meetings, and continue advocating for support to the Codex Trust Fund and for the use of Codex standards as the basis for harmonizing and developing national regulatory frameworks.

SA1.2 To promote more inter-organizational (international organizations, regional bodies) and inter-sectoral (food safety, public health, agriculture, animal and plant health, economy, education, trade, environment, general food law) coordination and cooperation at all relevant (inter)national levels in line with the One Health approach. Key aspects are the direction members provide to the normative work of Codex Alimentarius, the further strengthening of food safety governance, standards and advice, as well as increasing the utility and uptake by countries and relevant stakeholders.

SA1.3 To advocate, support and facilitate food safety policy dialogue on governance matters at relevant levels, including coordinating actions with regional organizations and establishing technical multi-stakeholder networks on current and emerging food safety issues, respecting responsibilities and accountabilities of various stakeholders.

---


SA1.4 To intensify communication (including through World Food Safety Day) with an aim that policy makers and other relevant stakeholders better understand and appreciate the impacts of food safety on society, such as its effect on health and livelihoods, how it underpins food security and influences the economy of countries and industries. The intention is to reach policy makers and relevant public and private parties, convincing them of the importance of prioritizing food safety such that it leads to improved and sustained investments in food safety, including for food safety capacity development, infrastructure, data, and partnerships.

SA1.5 To further enhance engagement of the private sector (incl., MSMEs, associations, consumers and consumer organizations, NGOs and civil society) on food safety as stakeholders but also to develop partnerships and closer coordination and collaboration.

**Strategic Outcome 2: Sound science and evidence are provided as the foundation for food safety decision-making**

**Narratives:**

- Over the last several decades, the FAO/WHO Scientific Advice programme for food safety has been a very authoritative point of reference at the international level. It is important that it continues to provide timely and sound advice through its expert panels (Joint FAO/WHO Expert Committee on Food Additives [JECFA], Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment [JEMRA], Joint FAO/WHO Meeting on Pesticide Residues [JMPR]), and stay up to date with new scientific developments.

- Under the auspices of FAO and WHO, the scientific advice programme has been working within the framework of risk analysis, and it has established principles and methods in food safety risk assessment. The programme has collected a wide range of expert advice, resources and tools that have proven to be invaluable for providing information and making decisions related to food safety governance.

- Given the evolution of food safety science and innovative food-related technologies, as well as new and emerging food safety issues and risks, the methods and approaches underpinning risk assessment and risk-based advice will need to be kept up-to-date and advanced, in order to remain leading-edge and meaningful as a basis for timely decision-making.

- Data and information generated and shared by governments and other stakeholders are essential for the development of food safety advice and guidance, for gathering new knowledge and making risk-based decisions, as well as providing a basis for risk communication. For such processes to be effective, relevant data and information need to be systematically collected, analysed, interpreted and made accessible as a public good through coordination between stakeholders and with the support of partnerships.

- In our interconnected world, the speed of communication is ever increasing. Achieving robust and timely communication regarding food safety risks from authoritative and trustworthy sources is as much a challenge as avoiding or mitigating potential miscommunication or misinterpretation. Countries and other stakeholders would benefit from capacities and tools supporting effective risk communication on food safety matters, and from approaches to address or even counteract miscommunication.

**Strategic actions:**

SA2.1 To maintain and improve the leading-edge scientific advice provided through the food safety expert panels jointly coordinated by FAO and WHO (JECFA, JEMRA, JMPR). By remaining a key global point of reference, the FAO/WHO Food Safety Scientific Advice programme will continue to provide a solid foundation for international and national standards development as well as for risk management and other decision-making processes concerning current and emerging food safety issues.

SA2.2 To continuously improve, tailor, innovate and modernize the science- and risk-based approaches, methodologies and expertise that form the basis for providing the authoritative scientific advice. This concerns various types of food safety hazards
(chemical, microbiological and physical hazards) and associated capacities, in order to be able to continue providing leading-edge support. Examples of approaches becoming increasingly relevant in chemical risk assessment are non-animal testing-based approaches and exposure to multiple chemicals. Microbiological risk assessment in areas in rapid development are modelling utility of data generated by gene-based technologies and big-data approaches. Across various science areas, the ability and practice of assessing both risks as well as benefits needs particular attention, especially as decision-making and managing food safety issues increasingly involves trade-offs between food safety, food security and agri-food system sustainability/resilience.

SA2.3 To foster, among countries and food safety stakeholders, an understanding and appreciation of the importance of scientific advice and guidance on food safety matters as well as the importance of the availability of data and information from countries and other relevant sources to underpin sound risk assessments. This will also be done by supporting the participation of new experts in FAO/WHO panels, to analyse food safety data from across the relevant One Health science areas so as to contribute to a better understanding of current and future food safety risks.

SA2.4 To strengthen the ability to identify emerging food safety issues associated with new trends and drivers, by applying foresight and horizon scanning approaches, and to combine these with appropriate science-based and evidence-based risk assessments to inform proactive decision-making and effective policies.

SA2.5 To further develop and more consistently consider food safety in a One Health approach by informing and communicating the breadth and depth of scientific knowledge (including principles, practices, tools, resources and capacity building, evidence and advice established by relevant standing and ad hoc FAO/WHO expert committees.

SA2.6 To maintain and further evolve the essential international databases for food safety data, information, and advice developed by the expert panels at a global level as well as to promote and help develop networks and platforms (e.g., JECFA databases, GM Foods Platform etc) for coordinating and disseminating data and information.

SA2.7 To leverage strategic partnerships with public and private entities for efficiency, added value and a better return on investment of FAO resources. To advocate investment of human and financial resources of public and private sources in partnerships that support countries and stakeholders in advancing food safety. Examples of new areas for strategic partnerships are:

- Improving local/national generation of food safety data and information to inform global risk assessment, risk management and risk communication;
- Anticipating food safety hazards and communicating associated risk and possible mitigation approaches;
- Strengthening foresight on emerging food safety issues associated with food-related trends or agri-food systems transformations in order to address food safety risks and also consider benefits/opportunities, where relevant.

**Strategic Outcome 3: National food control systems are further strengthened and are continuously improved.**

**Narratives:**

- National food control systems have the dual objective of protecting consumer health and enabling fair practices in the food trade, both domestic and international. To remain relevant in the dynamic and multifaceted context of food safety, national food control systems should have situational awareness, be proactive and they should be flexible enough to change and improve over time.\(^{22}\)

- Too often, national food control systems respond reactively to food safety hazards and their potential risks rather than anticipating and preventing such hazards and risks. It is essential,

\(^{22}\) CXG 82-2013 Principles and guidelines for national food control systems.
therefore, to build the capacity to recognize potential hazards ahead of time, assess the risks and manage them at the relevant level.

− Other weaknesses/gaps frequently observed in existing national food control systems include challenges in communications and coordination among different competent authorities involved in food control, outdated and fragmented legal and regulatory frameworks, and insufficient resources to implement basic functions such as inspection and enforcement. These systems lack stable and predictable funding to update the skills of their staff, sustain their operational costs and invest in essential analytical instruments. They lack the capacity to plan, monitor, evaluate and further improve food control programmes in a way that can create a continuous cycle of improvement. Also, they often lack the capacity, and the equipment, to use the risk analysis paradigm to guide practical food control activities, while targeting available resources to address the greater risks would be even more critical in contexts where there are resource constraints.

− The standards, guidance and other resources of Codex Alimentarius, developed following the latest science- and risk-based approaches, offer a basis for continuous improvement of national food control systems as well as for developing resources tailored to national or regional food safety governance. Countries may benefit from such approaches and resources being utilized and adequately integrated/implemented at all relevant levels by sectors as well as across sectors and across countries, where relevant. Countries do need to consider the different capabilities of various levels of small, medium to large food enterprises in their context and whether these allow such food business operations to deliver consistently safe food in line with formal requirements and practices, or whether capacity development is required. It will be essential to develop appropriate food safety capacity and resources if the countries and stakeholders that FAO works with are to adopt or utilize the above approaches for improving their food control systems, developing food safety standards and driving harmonization efforts. It is important that national food control systems consider integrating both regulatory and non-regulatory approaches to tackle food safety issues.

− Although digital and other technologies may improve food controls, for countries to use it effectively they would have to invest in the capacity development of their human resources and those of relevant stakeholders, and they would have to consider investing in related elements such as infrastructure, ways of working, data and privacy protection.

**Strategic actions:**

**SA3.1** To encourage countries, with the support of their competent authorities for food safety and associated institutions, to evaluate their national food control systems as the basis for designing integrated programmes that further strengthen their national food control systems. The FAO/WHO food control system assessment tool could be used as an example of a robust approach to such an evaluation, and it paves the way for monitoring improvements over time, which will increase accountability.

**SA3.2** To develop guidance to support creating and then continually improving a national food control system, or at least the components of one, and to assist countries as they adopt and implement risk-based food control approaches.

**SA3.3** To support countries and relevant stakeholders (particularly developing and transition economy countries), where requested, to participate in Codex Alimentarius work, bringing in a diversity of perspectives, making Codex work more globally inclusive and the resulting standards and guidance more globally applicable. This includes developing capacities at relevant levels (national to local) to adopt Codex standards and/or harmonize national or regional regulations using the products of Codex (standards, codes of practice, guidance and recommendations). This also includes developing national capacities to engage effectively with Codex Alimentarius, by establishing the proper mechanisms at the national level (and regional, where appropriate), and by targeting technical support for technical discussions.

**SA3.4** To promote and assist countries in further developing and updating their food safety standards, policies, legal and regulatory frameworks as well as to help them strengthen their risk-based food controls (including inspection and monitoring programmes, analytical services, and emergency responses relevant to food safety, in the context of domestic and
international food trade). This includes advocacy concerning policy level buy-in and considering strong coordination mechanisms at the national level on food safety matters across different sectors and competent authorities. To increase support at the regional or sub-national level as well as in particular situations, such as implementing SPS/food safety components in the context of free trade agreements.

SA3.5 To help countries generate relevant food safety data that reflects their national context/situation, which they can then use as a basis for making decisions on governance, acceptability of risks and necessary risk mitigation. Such data would include not only specific data reflecting the food safety status in terms of their hazards and food safety issues/risks at the national or other relevant level, but also data that may help with matters such as regulatory or operational food safety performance, surveillance approaches and targets, as well as research and innovation needs related to food safety. With the support of its partners, FAO may assist countries and their relevant stakeholders to upgrade the supporting infrastructures (food control laboratories, certification, accreditation services) and adopt the digital information and communication technologies that are necessary to generate and analyse data, assess the performance national food control systems, develop tailored monitoring programmes and disseminate advice on risks.

SA3.6 To support countries and relevant stakeholders to embrace relevant technological developments in food control and food safety management, by taking such actions as:

− adopting digital technologies for public and private interactions regarding food safety (digital transformation of organizations and utility of data and information exchanges, e-certification, remote audits and other interactions by virtual means);
− embedding food safety management schemes and food control into e-commerce platforms and other novel marketing channels;
− strengthening the preparedness and management of food safety emergencies, including early detection and warning of (potential) food safety incidents;
− establishing approaches to anticipate and pro-actively manage new food safety hazards and possibly associated food safety risks.

Strategic Outcome 4: Public and private stakeholders collaborate to ensure that food safety management and control support the development of efficient, inclusive, resilient and sustainable agri-food systems.

Narratives:

− FAO’s Strategic Framework seeks to support the 2030 Agenda through the transformation to more efficient, inclusive, resilient and sustainable agri-food systems for better production, better nutrition, a better environment, and a better life, leaving no one behind. Within this transformation, there is need to ensure that food safety is not compromised during the implementation of overarching programmes.

− Identifying and describing a pathway that maintains and improves those actions that food system actors with a responsibility for food safety need to adopt will require understanding of the common goals, public health and access to markets, by governments across relevant sectors, food businesses of all sizes participating in food supply chains, consumers and consumer organizations, NGOs and academia.

− Food businesses of all sizes and at all levels will need to operationally manage the farm-to-fork agri-food value chain in accordance with internationally recognised food safety standards. This can only be achieved within food systems where adequate resources are allocated to build the underlying infrastructure and where both public and private sector actors cooperate and recognise the important role of consumers and consumer organizations.

Following internationally recognised food safety practices, in accordance with Codex Alimentarius guidance and based on data guiding policy decisions, will allow for context-relevant approaches to be adopted and for lessons learned at from national and regional initiatives to inform and inspire global programmes of a more normative character. This flow of information will contribute to the prevention of trade disruptions.

The building of food safety capacities of all stakeholders remains a priority and must follow principles of inclusivity to ensure that less powerful food system actors, such as women and youth participate in capacity building programmes. The wide adoption of food safety skills will enable all actors to play their role in strengthening the resilience of agri-food systems.

**Strategic actions:**

SA4.1 To support governments, food business operators and associated industries, academics, consumers and other stakeholders, in their adoption of programmes of preventive food safety control and management. This will enable the development of integrated approaches as needed to prevent and solve complex food safety challenges affecting trade and public health.

SA4.2 To promote the use of innovative tools and technologies as part of capacity development programmes in a manner that allows for stakeholders to make informed choices and adopt food safety interventions that are tailored to the needs of the targeted food system actors and address the priority safety risks.

SA4.3 To enable stakeholders to apply innovative technologies and expertise promoted for required agri-food system transformation in a manner that does not compromise food safety. Examples would be to ensure that efforts to move towards circular economy consider food safety aspects from the start.

SA4.4 To ensure that lessons learned from country- and regional-level food safety control and operational management programmes and initiatives are captured and continue to inform global level initiatives and normative work. This will be done in a manner that strengthens the development of food safety interventions both for routine circumstances and during emergencies and crises affecting food value chains.

SA4.5 To work with governments, industry, research and academia to improve and modernize food safety curricula and training programmes in preparation for food systems approaches and to include novel areas such as data and knowledge management and ensuring that these curricula and training programmes remain inclusive and do not leave any stakeholders behind.

The four strategic outcomes are interrelated and interdependent. They are closely interlinked, feeding into and supporting each other, providing a multidimensional strategic direction for strategic actions, resource deployment, work product delivery and other outputs required for achieving the outcomes. Examples of these linkages include:

**Outcome 1.** The course of the normative work at a global scale receives direction as well as data and information on national, regional and global requirements identified in the context of Outcome 3. This includes requested normative work regarding food safety aspects of the agri-food systems transformation, as per Outcome 4. To base the products of normative work (standards, recommendations, guidance) on the latest knowledge and evidence, scientific advice is needed, requested and provided through Outcome 2. The products of normative work are the benchmarks and resources for the realization of Outcomes 3 and 4.

**Outcome 2.** The scientific advice and resources (data, information, guidance, capacities) concerning food safety to be established are based on directional inputs from Outcomes 1, 3 and 4. Data and information as part of national food control systems or from science and technical studies provided through Outcomes 3 and 4 are key inputs into the science- and risk-based assessments carried out in Outcome 2. The outputs of Outcome 2, especially those developing better insight in current and future food safety challenges, are essential resources for Outcomes 1, 2 and 4.
- **Outcome 3.** Inputs (including data and information, other resources) are provided to Outcomes 1 and 2 and the work products of these outcomes are used as resources for further strengthening national food control systems. Direction is also provided for developing food safety capacities and other support required to provide inputs and utilize the outputs of Outcomes 1, 2 and 4. Of particular importance in this regard are the interpretation and communication concerning realistic food safety risks and potential new hazards (as per Outcome 2) in the national context, as a basis for understanding food safety risks, considering the need for new normative work (as per Outcome 1) and identifying needs and opportunities to improve the resilience and sustainability of food systems (as per Outcome 4).

- **Outcome 4.** The insights gathered related to achieving and maintaining food safety and quality in the context of agri-food systems transformation and coordination of stakeholders and collaboration with partners provide direction to Outcomes 1, 2 and 3, while the work products of these outcomes (standards and guidelines, scientific data and information, capacity building) are resources for Outcome 4.
### Annex 1. Draft monitoring framework

<table>
<thead>
<tr>
<th>Strategic Outcome</th>
<th>Strategic Activity</th>
<th>Indicator type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SO1.</strong> Strategic Activity</td>
<td><strong>SO1.</strong> Strategic Activity</td>
<td><strong>SO1.</strong> Strategic Activity</td>
</tr>
<tr>
<td><strong>Inter-governmental and inter-sectoral coordination of food safety governance is reinforced at all levels</strong></td>
<td><strong>SA1.1 Support work of CAC, including effective participation of countries</strong></td>
<td>The Codex Alimentarius Strategic Plan Monitoring Framework is under discussion and will inform as soon as possible the proposal of a specific indicator for this activity</td>
</tr>
<tr>
<td></td>
<td><strong>SA1.2 Promote increased inter-organizational and inter-sectoral coordination and cooperation in line with One Health approach</strong></td>
<td><strong>SA1.2</strong> Number of events, workshops, projects, programmes, organized by FAO jointly with other organizations and/or bringing together different sectors and multiple stakeholders showcasing concrete advantages of collaboration to food safety</td>
</tr>
<tr>
<td></td>
<td><strong>SA1.3. To advocate, support and facilitate food safety policy dialogue on governance matters</strong></td>
<td><strong>SA1.3.</strong> Number of networks, events, projects or programmes implemented by FAO (or in close collaboration with FAO) supporting food safety policy making dialogue and contributing to food safety governance</td>
</tr>
<tr>
<td></td>
<td><strong>- Number of publications, dialogues, guidance documents, reviews on trade-offs between food safety and other policy objectives (such as food security etc)</strong></td>
<td><strong>SA1.4 To intensify communication (including through World Food Safety Day) for policy makers and other relevant stakeholder on food safety</strong></td>
</tr>
<tr>
<td></td>
<td><strong>SA1.4 To intensify communication (including through World Food Safety Day) for policy makers and other relevant stakeholder on food safety</strong></td>
<td><strong>SA1.5 To further enhance engagement of the private sector</strong></td>
</tr>
<tr>
<td></td>
<td><strong>SA1.5 To further enhance engagement of the private sector</strong></td>
<td><strong>SA1.5</strong> Number of dialogues, collaborations and partnerships in which FAO participates to strengthen private sector engagement and appropriate involvement into food safety governance, in standard setting and implementation</td>
</tr>
<tr>
<td><strong>SO2.</strong> Strategic Activity</td>
<td><strong>SO2.</strong> Strategic Activity</td>
<td><strong>SO2.</strong> Strategic Activity</td>
</tr>
<tr>
<td><strong>Sound science and evidence are provided as the foundation for food safety decision-making</strong></td>
<td><strong>SA2.1 To maintain and improve the leading-edge scientific advice provided through the food safety expert panels jointly coordinated by FAO and WHO (JECFA, JEMRA, JMPR).</strong></td>
<td><strong>SA2.1</strong> Number of expert meetings to provide scientific advice on current and emerging food safety issues.</td>
</tr>
<tr>
<td></td>
<td><strong>SA2.2 To continuously improve, tailor, innovate and modernize the science- and risk-based approaches, methodologies and expertise that form the basis for providing the authoritative scientific advice</strong></td>
<td><strong>SA2.2</strong> Number of guidance publications to continuously upgrade the FAO/WHO Scientific Advice Programme principles and procedures for risks assessments</td>
</tr>
<tr>
<td></td>
<td><strong>SA2.3 To foster among countries and food safety stakeholders an understanding and appreciation of the importance of scientific advice and guidance on food safety matters as well as the importance of the availability of data and information from countries and other relevant sources to underpin sound risk assessments.</strong></td>
<td><strong>SA2.3</strong> Number of events, workshops, projects, communication materials in which FAO is involved to showcase the scientific advice programme and its support to policy-making, and inform about the need to contribute to it with data/information/resources etc</td>
</tr>
<tr>
<td></td>
<td><strong>SA2.4 To strengthen the ability to identify emerging food safety issues</strong></td>
<td><strong>SA2.4</strong> Number of guidance publication, events, workshops, projects, communication materials</td>
</tr>
<tr>
<td>Strategic Outcome</td>
<td>Strategic Activity</td>
<td>Indicator type</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td>associated with new trends and drivers, by applying foresight and horizon scanning approaches, and to combine these with appropriate science- and evidence-based risk assessments to inform proactive decision-making and effective policies</td>
<td>on emerging food safety issues, new food safety risk trends and drivers that FAO contributed to address</td>
</tr>
<tr>
<td>SA2.5</td>
<td>To further develop and more consistently consider food safety in a One Health approach by informing and communicating the breadth and depth of scientific knowledge (including principles, practices, tools, resources and capacity building, evidence and advice established by relevant standing and ad hoc FAO/WHO expert committees.</td>
<td>Number of projects, publication, communication materials integrating food safety as a key component within the One Health approach that FAO participated in</td>
</tr>
<tr>
<td>SA2.6</td>
<td>To maintain and further evolve the essential international databases for food safety data, information, and advice developed by the expert panels at a global level as well as to promote and help develop networks and platforms (e.g., GM Foods Platform) for coordinating and disseminating data and information.</td>
<td>Number of updates and upgrades made to the food safety databases and platforms (partly/jointly) owned and coordinated by FAO</td>
</tr>
<tr>
<td>SA2.7</td>
<td>To leverage strategic partnerships with public and private entities for efficiency, added value and a better return on investment of FAO resources</td>
<td>Number of new strategic partnerships on food safety in which FAO participates</td>
</tr>
<tr>
<td>SO3</td>
<td>National food control systems are further strengthened and are continuously improved.</td>
<td>- Number of countries having used the FAO/WHO food control system assessment tool - Number of strategic plans, policy, legal acts (or similar documents) adopted by countries to support continuous improvements of their national food control systems - New editions of the FAO/WHO food control system assessment tool (and supporting guidance materials for use by countries), showing continuous upgrade in line with Codex Alimentarius newest guidance and international best practice</td>
</tr>
<tr>
<td>SA3.1</td>
<td>To encourage countries to evaluate their national food control systems as a basis to plan continuous improvement</td>
<td>- Number of guidance publications, supported by training packages, at global, regional and national levels to enhance national food control systems that FAO participated in, for instance on policy making processes, legal and regulatory framework development, specific approaches to food control, such as the further development of food safety inspection, monitoring and sampling guidance.</td>
</tr>
<tr>
<td>Strategic Outcome</td>
<td>Strategic Activity</td>
<td>Indicator type</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
|                  | SA3.3 To support countries to participate in Codex Alimentarius work | - Number of events, projects and programmes under the auspices of FAO, including those funded through the FAO/WHO Codex Trust Fund programme, supporting effective participation of countries in Codex Alimentarius work  
- Number of national and regional consultation frameworks (similar to national Codex Committees) feeding into CAC’s work, but also facilitating the appropriate use at national or regional level of Codex standards and guidelines |
|                  | SA3.4 To promote and assist countries in further developing and updating their food safety standards, policies, legal and regulatory frameworks as well as to help them strengthen their risk-based food controls | - Number of countries and regional organizations supported with FAO involvement for the advancement of their policy environment, legal and regulatory frameworks for food safety and food control, strengthening of food control functions based on the risk analysis paradigm  
- Number of events (seminars, workshops) at national, regional or global level (with FAO engagement) to strengthen specific aspects for food control, promote regional harmonization and dialogue |
|                  | SA3.5 To help countries generate relevant food safety data that reflects their national context/situation | - Number of initiatives (incl. projects, programmes) that FAO participates aimed at advancing data generation to support the use of the risk analysis paradigm as a basis for food safety governance, food control decisions and identification of regulatory and non-regulatory measures to ensure food safety |
|                  | SA3.6 To support countries to embrace the latest technological developments in food control and food safety management | Number of initiatives, projects and programmes with FAO involvement that support the identification of potential, development or use of digital technology/newest technologies:  
- for public and private interactions regarding food safety (digital transformation of organizations and utility of data and information exchanges, e-certification, remote audits and other interactions by virtual means);  
- to encourage the use of food safety management schemes and food control instruments into e-commerce platforms and other novel marketing channels;  
- to strengthen the preparedness and management of protocols for dealing with food safety emergencies, including early detection and warning of food safety incidents; and  
- to establish approaches to anticipate and pro-actively manage any new or potential food safety risks. |
<table>
<thead>
<tr>
<th>Strategic Outcome</th>
<th>Strategic Activity</th>
<th>Indicator type</th>
</tr>
</thead>
</table>
| SO4. Public and private stakeholders collaborate to ensure that food safety management and control support the development of resilient and sustainable agri-food systems. | SA4.1 Supporting preventive and integrated approaches of food safety management and control involving all relevant stakeholders | - Number of country projects which promote an integrated approach to food safety within agri-food systems  
- Number of publications describing collaborative efforts between stakeholders to advance food safety |
| | SA4.2 Promotion of innovative tools and technologies as part of capacity development programmes tailored to the needs of the targeted agri-food system actors and address priority food safety risks. | - Number of innovative tools and guidance materials on food safety practices developed  
- Number of training events that promote science-based/risk-based food safety practices |
| | SA4.3 Enabling the use of innovative technologies and expertise for making agri-food systems more resilient and sustainable without compromising food safety | - Number of case studies describing synergies and potential conflicts between innovative approaches and food safety  
- Number of countries where joint agri-food system inclusiveness, resilience and sustainability have been promoted through food safety programmes |
| | SA4.4 Ensuring that lessons learned from national/regional food safety programmes are captured for continuous learning (both for routine circumstances and during emergencies and crises) and inform global level initiatives and normative work. | - Number of experiences from national/regional food safety initiatives, publications and lessons learned shared with Codex Alimentarius and relevant other global platforms/channels. |
| | SA4.5 Improving and modernizing food safety curricula and training programmes to include novel approaches and ensuring their inclusivity | Number of engagements with food safety training institutions and training programmes designed to reach all relevant stakeholders, including youth and women |