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COMMITTEE ON AGRICULTURE

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Rationale for a new FAO Food Safety Strategy

Executive Summary

Without food safety, there is no food security: what is not safe is not food and when people are at risk of starvation, they will consume the food available, even if it is unsafe. Food security for all is a cornerstone of the 2030 Agenda for Sustainable Development and the statutory goal of FAO. When governmental policies neglect food safety, high social, health, economic and environmental costs result impeding the achievement of the Sustainable Development Goals (SDGs).

The pressing need to feed a growing population drives changes in food systems, affecting the safety of the globalized food supply and the food trade now valued at USD 1.6 trillion.

The outcomes of recent conferences¹, including the First FAO/WHO/AU International Food Safety Conference and the International Forum on Food Safety held in 2019, have underlined how changes in food systems require a critical need for re-thinking the place of food safety in sustainable development. The relevance of food safety to society, economic development and sustainable food systems needs to be better understood and promoted. In 2018, the UN General Assembly formally recognized the importance of food safety by proclaiming the annual observance of a World Food Safety Day.

Developing a new FAO Food Safety Strategy presents an opportunity to focus support on achieving the 2030 Agenda with consideration for food safety issues as the transformation of food systems accelerates. A new food safety strategy should further address One Health issues, such as antimicrobial resistance, emerging zoonotic diseases, climate change, agricultural intensification, new technologies, innovation, food fraud, digitalization of food systems and circular economies. The COVID-19 pandemic also demonstrates the increased relevance of food safety in emergency food assistance and humanitarian food aid.

A new food safety strategy will align with new developments in food systems and provide advice on managing unforeseen global challenges and crises that may affect the food supply. The new strategy will serve as an international policy and advocacy instrument to call for increased consideration for food safety in FAO programmes and its integration across the entire food chain and in decision-making to guide adequate investments for sustainable, safe and resilient food and agriculture.

¹ <https://www.who.int/news-room/events/international-food-safety-conference>

Suggested action by the Committee

The Committee is invited to:

- Recognize the interdependency between food safety and food security and the critical need for increased consideration of food safety in FAO's support of more sustainable, inclusive and resilient agricultural and food systems.
- Note that a new FAO food safety strategy is needed to align with the SDGs and reflect the on-going major transformation in food systems.
- Request FAO to develop a new food safety strategy to serve as an international guidance, policy and advocacy instrument for decision-makers to encourage increased investments and integration of food safety into the development of sustainable food systems, food security policies and agriculture development strategies.
- Encourage FAO, in line with the principles of UN reform, to further increase inter-agency collaboration in supporting the membership to develop capacities of national food control systems.

Queries on the substantive content of the document may be addressed to:

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I. Introduction

1. Recognizing the intrinsic interconnectivity between food safety, food security and nutrition, the 24th Session of the Committee on Agriculture in 2014 endorsed FAO's Strategy for Improving Food Safety Globally (COAG/2014/5)².
2. Hunger³, increasing prevalence of diet-related non-communicable diseases, high environmental impact of food production and distribution, food losses and waste, and spreading antimicrobial resistance indicate that current food systems are not sustainable⁴. Food safety incidents and food fraud threaten the complex, globalized food supply⁵.
3. The 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs)⁶ aims to stimulate action in areas of critical importance for people, planet and prosperity with robust consideration of the economic, social and environmental dimensions of development.
4. The SDGs call for major transformations in agriculture and food systems to end hunger, achieve food security and deliver healthy diets to all. The COVID-19 pandemic has raised new challenges to food security and demonstrated the need to ensure food safety in global crises that disrupt food supply chains.
5. The transformations required will need FAO's guidance and support, as well as focused investments, coordinated multi-stakeholder actions and partnerships at global, regional, national and local levels.

A. The social, economic and environmental burden of unsafe food

6. Unsafe food imposes a heavy and multi-dimensional price on societies that includes disease, death, economic loss and environmental degradation.

Social cost of unsafe food

7. Every year more than 600 million people fall ill and 420 000 die from foodborne diseases related to the consumption of food contaminated with bacteria, parasites, toxins and chemicals. Globally, unsafe food is responsible for some 33 million lost years of healthy life – the same order of magnitude as major infectious diseases such as HIV/AIDS, malaria or tuberculosis.
8. Foodborne diseases have a higher impact on the most vulnerable: an estimated 40 percent of foodborne disease burden is associated with children under five with 125 000 deaths each year. People in developing regions and poorest areas of the world bear over 70 percent of the global burden of foodborne diseases⁷.
9. Furthermore, foodborne diseases can cause or exacerbate nutrient deficiencies. FAO and WHO have identified food safety as an essential pre-condition of healthy diets⁸.

² The five key areas of work of the 2014 FAO Strategy for Food Safety include the support to strengthening national food control systems and global trade facilitation, provision of scientific advice to Codex, countries and partners, support to enhancing food safety management along food chains, provision of food safety platforms and databases and developing food safety intelligence and foresight.

³ FAO SOFI-2018, FAO SOFI-2019.

⁴ Global Panel on Agriculture and Food Systems for Nutrition, 2016. Food systems and diets: Facing the challenges of the 21st century. London. UK. <http://glopan.org/sites/default/files/ForesightReport.pdf>

⁵ Report 31st session of FAO/WHO CCEURO. FAO Technical consultation. Nov 2019.

⁶ UNGA. 2015. Transforming our world: the 2030 Agenda for Sustainable Development.

⁷ WHO. 2015. WHO estimates the global burden of foodborne diseases. Countries in Africa and South-East Asia have highest incidence and mortality from foodborne illnesses across all ages
https://www.who.int/foodsafety/publications/foodborne_disease/fergreport/en/

⁸ FAO and WHO. 2019. Sustainable healthy diets – Guiding principles. Rome

Economic toll of unsafe food

10. Due to unsafe food, an over USD 110 billion is lost annually by low- and middle-income countries alone, including USD 95 billion in lost productivity, USD 15 billion of medical expenses and USD 5 billion in lost trade⁹. Any impact on food trade is economically significant considering its global value of USD 1.6 trillion.

Environmental impact of unsafe food

11. Ensuring food safety has environmental costs as food is grown, transported, stored and marketed. Impact factors include the transfer of antimicrobial resistance to the environment, energy-intensive processing and preservation technologies, wide use of plastic and damage of micro-plastics to soils, water and food. Food losses and waste, including the destruction of unsafe food that has been recalled or confiscated and fraudulent food are a source of greenhouse gas emission.

12. In recognition of the critical role of food safety for sustainability, achieving the SDGs and for transforming food systems, the UN General Assembly adopted in December 2018 resolution 73/250 proclaiming 7 June to be World Food Safety Day.

**B. Aligning FAO's Food Safety Strategy to the 2030 Agenda:
opportunities to highlight the key role and contribution of food safety**

Food Safety and the Sustainable Development Goals

13. Without food safety there cannot be food security, with the latter being a cornerstone of the 2030 Agenda for Sustainable Development. Ensuring food safety means avoiding social, economic and environmental costs.

14. Implementing the 2030 Agenda for Sustainable Development critically needs increased consideration of food safety. The relevance of food safety to society, economic development and sustainable food systems needs to be better understood and promoted. While important for all SDGs¹⁰, food safety is a critical contributor to achieving the Member Nations' commitments expressed in SDGs 1, 2, 3, 8, 12, 13, 17¹¹.

II. High time for a new FAO Food Safety Strategy

15. FAO's work on food safety has delivered successfully in all the focus areas outlined by the 2014 food safety strategy with normative and guidance materials produced, field capacity development projects implemented, policy and scientific advice provided. Emphasizing the importance of FAO's work on food safety scientific advice and standard setting, the 41st Session of the FAO Conference in June 2019 increased funding for the scientific advice programme by USD 1 million for the Programme of Work and Budget (PWB) 2020-21.

16. In line with their collaboration in global efforts to promote safe food and ensure consumer trust in the food supply, FAO and WHO jointly organized two global food safety conferences in 2019

⁹ Jaffee, S., Henson, S., Unnevehr, L., Grace, D. & Cassou, E. 2019. The Safe Food Imperative: Accelerating Progress in Low- and Middle-Income Countries. Agriculture and Food Series. Washington, DC: World Bank. © World Bank. License: CC BY 3.0 IGO. <https://openknowledge.worldbank.org/handle/10986/30568>

¹⁰ UNGA. 2015. Transforming our world: the 2030 Agenda for Sustainable Development.

¹¹ The updated strategy will detail the specific food safety relevance and contribution to the referenced SDGs: "End poverty in all its forms everywhere" (SDG 1), "End hunger, achieve food security and improved nutrition and promote sustainable agriculture" (SDG 2), "Ensure healthy lives and promote well-being for all at all ages" (SDG3), "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (SDG8), "Ensure sustainable consumption and production patterns" (SDG12), "Take urgent action to combat climate change and its impacts" (SDG13), "Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development" (SDG17).

under the theme “The Future of Food Safety: Transforming knowledge into action for people, economies and the environment”.¹² The conferences underlined the on-going changes in food systems and the critical need to identify actions and strategies to address the emerging challenges and to strengthen the political will for scaling up food safety in the 2030 Agenda for Sustainable Development¹³.

17. The 2019 FAO/WHO Regional Coordinating Committees encouraged FAO and WHO to build on the momentum created by the two conferences and continue to support Members in raising their commitments for food safety. The meetings urged a renewed focus on food safety within the governing bodies of FAO and WHO with a high level of commitment by Members.

18. The Executive Board of the World Health Organization in February 2020 at its 146th session adopted the resolution “Accelerating efforts on food safety” calling for an update of the WHO Global Strategy for Food Safety, strengthening WHO capacities and investing resources in food safety, together with FAO. The resolution is included in the agenda of 74th World Health Assembly.

19. Developing a new FAO food safety strategy will help align FAO’s work on food safety with its broader support to food system transformation, ensuring that food safety considerations are built in from scientific, regulatory and capacity development perspectives, and ensuring synergy with WHO’s new food safety strategy.

III. Food safety within sustainable food systems

A. Structural changes of food systems and economies

20. Food safety is a core enabling factor to successfully transform food systems, making supply chains more robust, diversifying value chains and promoting circular economies.

21. Strengthening high-level political commitment for food safety, prioritizing sustained investments in robust national food control systems and mobilizing adequate public and private resources are essential within the dynamic systemic transformations.

22. Private sector engagement is essential to ensuring food safety, through implementing food safety management systems and sharing food safety-related intelligence along the food chain.

Population growth and rapid urbanization

23. The rate of urbanization often outpaces the development of a food market infrastructure. This results in the deterioration of an enabling environment for food safety, reducing the availability of and access to nutrient-dense, safe fresh produce and food of animal origin for the urban poor.

24. With urban population growth comes more demand for food diversity and an increased volume of food traded, both requiring further strengthening of food safety and capacities of national food control systems.

B. Major transformations in food systems with impacts on food safety

25. Food systems will need to transform to achieve the SDGs. At production level, factors that may affect food safety include climate variability and extremes, intensification of agricultural production and emerging antimicrobial resistance. Technological advancements, science and innovation drive changes in food processing, value addition and packaging that need thorough food safety considerations. Furthermore, globalization, new digitalized distribution channels, e-commerce, informal markets can all disrupt food safety if not managed carefully. Furthermore, the values,

¹² The First FAO/WHO/AU International Food Safety Conference held in Addis Ababa in February 2019 in Addis Ababa, Ethiopia and the International Forum on Food Safety held in April 2019 in Geneva, Switzerland.

¹³ The participating in the conference high-level officials from many countries as well as AU, FAO, WHO and WTO ensured that food safety is important priority without which SDGs could not be achieved.

principles and preferences of the youth – the next generation of consumers – as well as the role of social media, need to be considered in the new global food safety strategy of FAO.

Science, innovation and new technologies

26. Scientific advances and technological innovations can help attain more efficient and resilient food systems and will require a regulatory response that neither restrains innovation, nor puts consumers at risk.

27. Knowledge sharing, technology transfer and capacity development are essential for reducing the disparities between developed and developing countries in their abilities to benefit from new technologies and regulatory options. Synergies need to be sought across local, traditional, scientific and technological progress for inclusive and resilient food systems.

Climate variability and exposure to climate extremes

28. Microorganisms harmful for plants, animals and humans are influenced by environmental conditions¹⁴. The effects of climate change on food safety have often been over-looked and need to be better investigated and addressed.¹⁵

29. Sharing intelligence at global level is imperative to understanding trends and supporting preparedness to manage climate-induced food chain safety risks.

Food fraud within increasingly globalized food supply chains

30. Food fraud undermines the sustainability of food systems. It is a global, trans-national problem with potentially significant food safety implications. Furthermore, food fraud negatively affects consumer trust and contributes to food loss.¹⁶

31. Addressing food fraud requires effective national food control systems that integrate policy, strategy and enforcement instruments, and which are supported by robust capacities. New technologies open perspectives for a more proactive, preventative and effective approach for the verification of food authenticity.

Digital transformation of food systems

32. The highly dynamic nature of ICT makes it critical to identify opportunities and challenges in relation to food safety.

33. Digitalization may facilitate international food trade with faster, more cost-efficient electronic certifications, increased food safety and traceability, and reduced vulnerability to food fraud. E-certification may reduce lengthy and cost-intensive clearances for official certification and border control by streamlining processes and involving extensive food classification and composition databases. Digital traceability of food based on block chain may offer faster and more efficient food safety risk management options globally.

34. E-commerce, while potentially promising opportunities to low-income countries and smaller businesses, may result in new food safety problems if specific and new approaches for food safety checks will not be enacted by food control competent authorities.

¹⁴ For example, increasing temperatures and humidity can influence fungal contamination and the accumulation of mycotoxins; flooding contributes to the emergence and transmission of zoonotic diseases.

¹⁵ *Climate change: Unpacking the burden on food safety* (<http://www.fao.org/documents/card/en/c/ca8185en>).

¹⁶ Report 31st session FAO/WHO Coordinating Committee for Europe. 2019. FAO Technical consultation on food fraud, November 2019.

Ensuring food safety in times of global crises

35. In times of crises, it is essential to ensure both the safety and fluidity of food supply. A new FAO food safety strategy will provide guidance on both tested and new ways to achieve food safety in fast-changing conditions by promoting related regulations.

Global governance integrating a One Health approach

36. Recognizing and understanding how food safety is influenced by factors in agricultural and livestock production, by environmental factors and how these link to human health, make sound food safety governance more complex and underline the importance of global capacities for standard-setting, monitoring, surveillance, international and inter-agency cooperation for integrated intelligence sharing.

37. Consumers, youth, women's organizations and other civil society groups need to participate and contribute to policy dialogues for a thorough understanding of the context-specific key food safety issues and linkages to food security and healthy diets.

IV. Conclusions

38. A new FAO food safety strategy aligned with the 2030 Agenda for Sustainable Development is needed to ensure that food safety is an integral and tangible part of FAO's support to agricultural and food systems transformation.

39. A new FAO food safety strategy will provide strategic orientation for FAO's support to Members in the development of more sustainable food systems, leading to investment, actions and partnerships to promote food safety around the world.

40. Additional insights and directions to consider in this new strategy may emanate from the 2021 UN Food Systems Summit, given the focus of its Action Track on Ensuring Access to Safe and Nutritious Food for all.