







THE FUTURE OF FOOD SAFETY

Transforming knowledge into action for people, economies

THE FIRST FAO/WHO/AU INTERNATIONAL FOOD SAFETY CONFERENCE

Addis Ababa 12-13 February 2019

INTERNATIONAL FORUM ON FOOD SAFETY AND TRADE

Geneva 23-24 April 2019



TECHNICAL SUMMARY BY FAO AND WHO

THE FUTURE OF FOOD SAFETY

Transforming knowledge into action for people, economies and the environment

TECHNICAL SUMMARY BY FAO AND WHO











Required citation:

FAO and WHO. 2020. The Future of food safety – Transforming knowledge into action for people, economies and the environment. Technical summary by FAO and WHO. Rome. https://doi.org/10.4060/ca8386en

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) or World Health Organization (WHO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO or WHO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO or WHO.

ISBN 978-92-5-132340-3 [FAO] ISBN 978-92-4-000640-9 (print version) [WHO] ISBN 978-92-4-000639-3 (electronic version) [WHO]

© FAO and WHO, 2020



Some rights reserved. This work is made available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo/legalcode).

Under the terms of this licence, this work may be copied, redistributed and adapted for non-commercial purposes, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that FAO or WHO endorses any specific organization, products or services. The use of the FAO or WHO logo is not permitted. If the work is adapted, then it must be licensed under the same or equivalent Creative Commons licence. If a translation of this work is created, it must include the following disclaimer along with the required citation: "This translation was not created by the Food and Agriculture Organization of the United Nations (FAO) or WHO. FAO/WHO are not responsible for the content or accuracy of this translation. The original English edition shall be the authoritative edition.

Disputes arising under the licence that cannot be settled amicably will be resolved by mediation and arbitration as described in Article 8 of the licence except as otherwise provided herein. The applicable mediation rules will be the mediation rules of the World Intellectual Property Organization http://www.wipo.int/amc/en/mediation/rules and any arbitration will be conducted in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL).

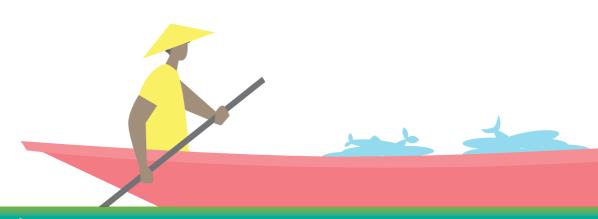
Third-party materials. Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

Sales, rights and licensing. FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org. Requests for commercial use should be submitted via: www.fao.org/contact-us/licence-request. Queries regarding rights and licensing should be submitted to: copyright@fao.org.

CONTENTS

CONTRIBUTORS	vi
ABBREVIATIONS AND ACRONYMS	vii
INTRODUCTION	1
THE FIRST FAO/WHO/AU INTERNATIONAL	
FOOD SAFETY CONFERENCE ADDIS ABABA, 12-13 FEBRUARY 2019	5
OPENING SESSION	7
OPENING MINISTERIAL PANEL	12
Overcoming food safety challenges	12
Key messages from the Opening Ministerial Panel	13
SUMMARY OF THEMATIC SESSIONS	14
THEMATIC SESSION 1 The burden of food-borne diseases and the benefits of investing in safe food	14
Highlights from panellists	
Key messages from presentations and discussion with audience	
THEMATIC SESSION 2 Safe and sustainable food systems in an era of accelerated climate change	20
Key messages from presentations and discussion with audience	
mosages mem procentations and discussion than dations members	

THEMATIC SESSION 3 Science, innovation and digital transformation at the service of food safety
Key messages from presentations and discussion with audience
THEMATIC SESSION 4 Empowering consumers to make heathy food choices and support sustainable food systems
Key messages from presentations and discussion with the audience35
PANEL DISCUSSION CIVIL SOCIETY AND THE PRIVATE SECTOR
PANEL DISCUSSION POLICYMAKERS AND HEADS OF NATIONAL AGENCIES
PANEL DISCUSSION PARTNER ORGANIZATIONS 45
CLOSING SESSION 47



INTERNATIONAL FORUM ON FOOD SAFETY AND TRADE GENEVA, 23-24 APRIL 201949
PRE-EVENT SESSION 1 Estimation of the national burden of food-borne diseases – an investment for better food safety systems, 23 April, 10.00-11.30
PRE-EVENT SESSION 2 Trade, food safety and healthy diets, 23 April, 11.30-13.00
OPENING SESSION
SUMMARY OF THEMATIC SESSIONS
THEMATIC SESSION 1 Digitalization and its impact on food safety and trade
THEMATIC SESSION 2 Ensuring synergies between food safety and trade facilitation
THEMATIC SESSION 3 Promoting harmonized food safety regulation in a period of change and innovation 63
CLOSING SESSION
ANNEXES6

CONTRIBUTORS

Technical Summary Coordinators and Editors:

Food and Agriculture Organization (FAO)

Renata Clarke, Eleonora Dupouy, Hilde Kruse, Jeffrey Lejeune, David Massey, Georgios Mermigkas, Roland Poms, Mia Rowan, Kosuke Shiraishi, Andrea Zimmermann

World Health Organization (WHO)

Kazuaki Miyagishima, Lisa Scheuermann

African Union (AU)

Amare Ayalew, Winta Sintayehu, Wezi Chunga, Mahlet Sileshi

World Trade Organization (WTO)

Rolando Alcala, Christiane Wolff

Graphic design and layout:

Pietro Bartoleschi/BCV Associati



ABBREVIATIONS AND ACRONYMS

2030 Agenda	2030 Agenda for Sustainable Development	
AfCFTA	African Continental Free Trade Area	
AMR	antimicrobial resistance	
AU	African Union	
CFI	Center for Foodborne Illness Research and Prevention	
DALY	disability-adjusted life year	
EUFIC	European Food Information Council	
FAO	Food and Agriculture Organization of the United Nations	
FBD	food-borne disease	
FSSAI	Food Safety and Standards Authority of India	
GAIN	Global Alliance for Improved Nutrition	
GFSI	Global Food Safety Initiative	
GFSQA	Gambia Food Safety and Quality Authority	
IFPRI	International Food Policy Research Institute	

ILRI	International Livestock Research Institute
INFOSAN	International Network of Food Safety Authorities
ITC	International Trade Centre
MSMEs	micro, small and medium enterprises
NDC	national determined contribution
OECD	Organisation for Economic Co-operation and Development
OIE	World Organisation for Animal Health
SDG	Sustainable Development Goal
SMEs	small and medium-sized enterprises
SPS Agreement	WTO Agreement on the Application of Sanitary and Phytosanitary Measures
UNIDO	United Nations Industrial Development Organization
WGS	whole genome sequencing
WHO	World Health Organization
WTO	World Trade Organization



INTRODUCTION

Today an unprecedented combination of pressures and trends are changing the ways we consume, produce, process and distribute food. These pressures and trends – whether they concern lifestyle, income, technology, trade or the climate – have the potential to disrupt or enhance the safety of our food. Foodborne hazards, which are numerous and can occur in any part of the food chain anywhere in the world, can cause illness, disability or even death.

Our food systems need to keep pace with the rapidly changing world. By 2050, two out of three people will live in megacities with 10 million residents or more. As the population and cities grow, strong commitment and adequate investment are necessary to address challenges of the food supply, sanitation and hygiene, food waste and water scarcity.

An essential part of human health and food and nutrition security, food safety can also determine market access and spur economic growth. Though its role in sustainable development is increasingly recognized, progress on food safety governance and delivery has been fragmented. Foodborne diseases continue to hinder productivity and pose a public health burden on par with

those of malaria, tuberculosis or AIDS, especially in developing countries.

This pivotal moment in 2019 provided impetus for two major conferences to identity key actions and strengthen commitment to scale up food safety. Under the theme, "The future of food safety – Transforming knowledge into action for people, economies and the environment", the discussion started in February in Addis Ababa, Ethiopia with the First FAO/WHO/AU International Food Safety Conference and continued in April in Geneva, Switzerland at the International Forum on Food Safety and Trade.

The two events brought together more than 1 500 food safety leaders from over 140 national governments and agencies, academia, international organizations, civil society and the private sector. The various sessions highlighted how ensuring food safety can help countries reach the goals set forth in the 2030 Agenda for Sustainable Development as well as support the UN Decade of Action on Nutrition.

In Addis Ababa, participants discussed how to align food safety approaches across sectors and borders to tackle emerging food safety challenges. The discussions unfolded through five



themes, centred on the importance of changing practices to ensure everyone has access to sufficient amounts of safe food, while also mitigating climate change and minimizing environmental impacts. The Conference set out the actions and strategies to address current and future challenges to food safety globally including empowering consumers with the knowledge required to drive change.

In Geneva, participants delved further into the trade-related issues of food safety. The Forum highlighted the continued relevance of the Codex Alimentarius as the international reference for food safety standards, both in relation to public health and to trade, as well as the interlinkages between trade and food safety. Participants discussed the challenges and opportunities arising from technological change and digitalization, as well as the importance of partnerships and crosssectoral, international approaches to keep food safe for everyone. The resulting strengthened commitment will guide countries in scaling up



food safety in the 2030 Agenda for Sustainable Development.

The purpose of this Technical Summary is to support governmental officials, food safety professionals, research, academia and the broader food systems stakeholders in understanding both the emerging food safety threats and the available opportunities and solutions. This document can be used to enhance food safety risk management, engage in food safety risk communication and advocate for food safety while

keeping in mind current global trends and changes in food systems with implications for food safety.

The key messages, presentations and outcome documents shared in this publication are an invaluable resource for future food safety policy and practice. Readers will gain a better understanding of the current issues affecting food safety thanks to wide range of expertise provided by the participants.

ADDIS ABABA 12-13 FEBRUARY 2019



The First FAO/WHO/AU International Food Safety Conference

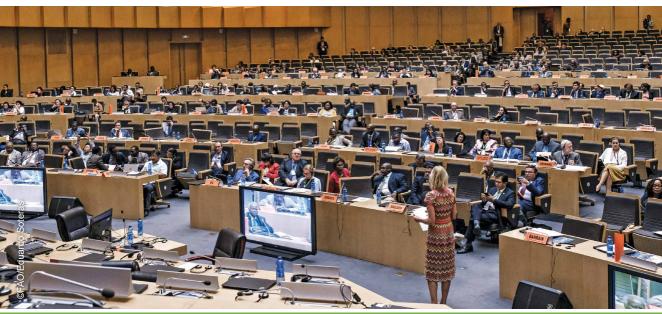


The First FAO/WHO/AU International Food Safety Conference was held in Addis Ababa on 12-13 February 2019 with a twofold objective: (i) to identify key actions and strategies to address current and future challenges to food safety globally; and (ii) to strengthen the commitment at the highest political level to scale up food safety in the 2030 Agenda for Sustainable Development. The conference had high and multisectoral attendance with more than 600 participants representing over 120 governments, including 40 Ministers and Deputy Ministers. Delegates represented the agriculture, health, trade, environment and tourism sectors. There was broad representation of non-state actors (civil society, private sector, academia, research), and representatives of United Nations agencies and

The conference had an extensive multidisciplinary format with a high-level opening session, four thematic panels, and expert panel discussions with the participation of Ministers, heads of food safety authorities, consumers, and representatives of the private sector and partner agencies. The Conference Programme is presented in Annex 1.



international governmental organizations attended the event.





The First FAO/WHO/AU International Food Safety Conference was opened by the African Union (AU) Commissioner for Rural Economy and Agriculture, who was followed by the Directors-General of the Food and Agriculture Organization of the United Nations (FAO), World Health Organization (WHO) and World Trade Organization (WTO), and the Chairperson of the African Union Commission. Ibrahim Assane Mayaki (Conference Chairperson) chaired and moderated the high-level Opening Session. Executive heads of the three organizations that convened the conference provided opening addresses.¹



Josefa Leonel Correia Sacko (African Union Commissioner for Rural Economy and Agriculture) warmly welcomed the participants on behalf of the AU and thanked the Government and people of Ethiopia for hosting the event, as well as the co-organizers, FAO and WHO, acknowledging the unwavering support of the European Union and other partners that

had supported this Conference.
H.E. Sacko reminded attendees that participants representing different constituencies are all united by a common denominator – the quest to assure food safety in our food systems. Food safety has a direct impact on the global goal of ending hunger in all its forms by 2030 and achieving food security, and no country or region can

¹ Opening speeches are presented in Annex 2.

exist in functional isolation in the quest to address food safety challenges, including antimicrobial resistance (AMR) and climate change. Heightened commitment to enhance food safety management in all countries of the world is required, and the need for strategic and smart partnerships for the safe and environmentally friendly production of food is urgent. Addressing contemporary food safety issues will require changes in policy and practice across multiple sectors and disciplines, and the AU remains committed to continue engaging in strategic partnerships to support its Member States to establish and operate functional and effective institutional structures, to provide policy guidance, and to create a policy environment that assures the delivery of safe and nutritious food.





José Graziano da Silva (former FAO Director-General) thanked the Government of Ethiopia and the African Union Commission for hosting and co-organizing, together with FAO, WHO and WTO, this very important Conference. He stressed that there is no food security without food safety. Food safety is a fundamental element of the 2030 Agenda for Sustainable Development (2030 Agenda) as it is directly related to many of the Sustainable Development Goals (SDGs). Without food safety, it is not possible to eradicate hunger and all forms of malnutrition (SDG 2); without food safety, there is no chance of healthy lives for all (SDG 3); without food safety there are no sustainable production and consumption patterns (SDG 12). And without food safety, there is no international food trade that can help sustained economic growth (SDG 8). The former FAO Director-General stressed the importance of the food safety standards-setting work of the joint FAO/WHO programme Codex Alimentarius, both to support the international food trade and to protect public health. He underscored the fact that this Conference was a great opportunity for the international community to strengthen political



commitments and engage in key actions. The key messages of the Conference would help guide the international community on the way forward. World Food Safety Day, to be celebrated for the first time on 7 June 2019, would also provide a good opportunity to raise public awareness and inspire actions to promote food safety around the world.



Tedros Adhanom Ghebreyesus (WHO Director-General) in his opening speech stressed the importance of food for life, as a source of health and enjoyment, as an expression of culture and faith, and as a form of art that helps people socialize and liaise. Therefore, unsafe food turning a source of nourishment and enjoyment into a source of disease and death is not acceptable. Tedros Adhanom Ghebreyesus underlined the fact that, as part of the United Nations Decade of Action on Nutrition, many countries have made commitments on nutrition, but very few have made commitments on food safety, noting the importance of the "One Health" approach that addresses food safety holistically. To connect national food safety systems, WHO and FAO created the International Network of Food Safety Authorities (INFOSAN) more

than ten years ago. INFOSAN helps countries manage food safety risks by sharing information, experiences and solutions. Tedros Adhanom Ghebreyesus addressed three requests to participants. First, learn from past mistakes, and use this meeting to share experiences, understand problems and identify solutions. Every outbreak of food-borne disease (FBD) is an opportunity to ensure the same thing never happens again. Second, build bridges, using this meeting as an opportunity to create strong networks within and between countries, and within and between sectors. Third. innovate for investment - the world needs a mechanism for investing in food safety in a sustainable way, adapted to national and regional circumstances. Tedros Adhanom Ghebreyesus called the Conference an opportunity to lay the foundations for that mechanism. His rallying cry to participants was: learn, build, innovate!



Roberto Azevêdo (WTO Director-General) welcomed the opportunity the Conference provided to highlight the centrality of food safety for public health and for achieving the SDGs, and stressed that it matters for trade as well. The WTO underpins global

trade - complemented by important regional initiatives such as the African Continental Free Trade Area (AfCFTA) and it is important to ensure that trade works together with vital public policy and health imperatives such as food safety. The WTO Director-General stressed the need to maintain effective food control systems to ensure that imported food is safe. Consumers need to be able to trust the food that they import, just as they would trust the food that is supplied domestically. Importing food helps to lower prices, particularly for goods that are consumed by the poorest in society, and they need to be confident that their food is safe. Equally, exporters must know what the food safety standards are and be able to comply with them. The WTO Sanitary and Phytosanitary and Trade Facilitation Agreements help to achieve all this. Food safety is in everyone's interest; therefore, capacity development is essential for taking full advantage of the trading system. This recognition was the driver for FAO, WHO and WTO to jointly, together with the World Organisation for Animal Health (OIE) and the World Bank, establish the Standards and Trade Development Facility. With its tools, the WTO is helping small businesses, traders and other stakeholders stay informed about food safety and other requirements. Azevêdo stressed the need for all actors to be fully ready to meet the challenges and seize development opportunities.



H.E. Moussa Faki Mahamat

(Chairperson of the African Union Commission) welcomed the initiative of the African Union Commission and specialized agencies of the United Nations to address together a common challenge in a strategic way. Reinforcing this, in January 2018, the AU and the United Nations signed the framework for the implementation of Agenda 2063 and the 2030 Agenda. One of the central projects of Agenda 2063 is the African Continental Free Trade Area (AfCFTA), a continental market for goods and services, with free movement of people and investments, which also aims to accelerate intra-Africa trade through better harmonization and coordination of trade liberalization. He stressed that food safety had become an important precondition to export markets and, if not addressed proactively, could be an impediment to the AfCFTA, particularly in agricultural goods and services, and the competitiveness of the agriculture sector in Africa. This first AU/FAO/WHO International Food Safety Conference is an illustration of their unrelenting partnership, and the African Union Commission greatly appreciates this alliance. The food safety agenda is important for all stakeholders. Each year, millions of people contract



Maria Helena Semedo, Deputy Director of FAO. Closing session.

food-borne illnesses. However, the African continent is disproportionally affected by food safety challenges daily. The numbers of FBDs and related deaths are among the highest in the world. According to the WHO, currently in Africa, FBD accounts for more than 91 million cases of illness each year. Meanwhile, stunting and underweight affect 39 percent of the African population under the age of five years. It is therefore no coincidence that this meeting was held here in Africa. It is a necessity – Africans deserve

safe food. Countries must build their food safety systems through human and infrastructural capacity building, by creating vibrant food safety culture to bring about behaviour changes and ensuring better regulatory frameworks. In conclusion, H.E. Moussa Faki Mahamat stressed that while continuing to work towards the "Africa we want", he pleaded with governments to take ownership of the African continental agenda and to work together in building strong alliances and institutions to protect and improve the lives of Africans.

OPENING MINISTERIAL PANEL



OVERCOMING FOOD SAFFTY CHALLENGES

Eight Ministers and Deputy Ministers, representing China, Egypt, Ethiopia, Guyana, Kyrgyzstan, Malaysia, Saint Lucia and Sierra Leone, highlighted food safety experiences in their countries and shared their views on how to address the current and future challenges of food safety, advocating for high-level political will and better coordination to ensure food safety globally.

All Ministers converged on the timeliness of this International Food Safety Conference, on the importance of regional cooperation and integration for food safety, learning from successes and mistakes, and contributing with innovation, investment and shared experiences to food safety. They also agreed on the leading role that the conference organizers - FAO, WHO and AU – should play to assist countries in establishing food policies and programmes.

Morning session of the First FAO/WHO/AU International Food Safety Conference.





KEY MESSAGES FROM THE OPENING MINISTERIAL PANEL

Food security is achieved only when food safety as an essential determinant of health is realized. Access to sufficient amounts of safe and nutritious food is not only a basic requirement for health and well-being, it also contributes to economic development.

The many challenges that developing countries in Africa face to secure their food safety systems include weak inter- and multi-sectoral cooperation, weak implementation of regulations, low technical capacity and public awareness, and a lack of financial resources to invest in food safety nationally.

Food safety capacity building should be more coordinated, adapted to the local context and integrated into supply chains to meet the needs of developing countries, considering the vulnerability of poor to FBDs.

Food safety is a public concern, and food scares worldwide damage consumer confidence. Establishing single food safety authorities at high governance level to address countries' demand for safer foods is embraced and ongoing in many countries.

Prioritization of food safety by governments and political will are essential, with due importance being given to investing in food safety infrastructure in legal, institutional and regulatory frameworks. Even with scarce resources, a country's food safety capacity can be enhanced.

Enhanced public-private partnerships and the participation of all countries in setting international food safety standards are important.

Climate change raises new challenges for food safety, and effective mitigation includes raising community awareness as well as promoting and encouraging sustainable practices.

Trade expansion may contribute to the exacerbation of food-borne illnesses; therefore, rapid and reliable traceability for all traded foods is necessary.

High political and policy commitment and prioritizing food safety can bring tangible advances in the development of regulations. Key elements for achieving greater compliance are: establishing national intersectoral and sector-wide mechanisms for food safety oversight and coordination; and improving monitoring and inspection.

Knowledge of food safety principles and food safety literacy are key for consumers in choosing their food. It is of utmost importance to engage the consumer in food safety decision-making.

SUMMARY OF THEMATIC SESSIONS

THEMATIC SESSION 1 THE BURDEN OF FOOD-BORNE DISEASES AND THE BENEFITS OF INVESTING IN SAFE FOOD²

Quotes from speakers

"Foodborne diseases can be avoided and they must be avoided. "

"We know what to do, but need to implement interventions that we know work" (A.Havelaar)

"Cost of unsafe food is voiceless affecting most the poorest that don't have a voice" (Jaffee)

Session 1 was moderated by Nathan Belete, Agriculture Global Practice Manager, World Bank Group. The session consisted of five presentations, followed by discussion with the audience. The panel underscored and converged on the following key points:

 Access to sufficient amounts of safe and nutritious food is not only a basic requirement for health and well-being, it also contributes to economic development. However, the impact of unsafe food and resulting FBDs

on human health and a country's productivity and economy is largely unknown and greatly underestimated. Without due consideration of food safety, there is no nutrition and food security, and the SDGs will not be achieved.

 Investing in food safety is money well spent and will have a broad impact on health and development in a country and on increasing trade opportunities. Evidence-based, country-specific, smart and

² http://www.fao.org/3/CA2789EN/ca2789en.pdf



forward-looking investments are necessary. Focusing only on trade without due consideration of the domestic food supply will result in enormous public health and socioeconomic costs.

- There is a need for smarter investment with high-level commitment to food safety on a political, financial and scientific level. Public investment needs to provide the policy framework and enabling environment to attract private-sector investment, leading to innovative partnerships that bring together business, government, smallholder farmers, and other players along the food chain.
- Areas of sustained investment include the capacity to generate scientific evidence, food safety infrastructure, trained human resources and leadership, food safety awareness, enforceable regulations, networks of institutions, and services needed to mitigate the food safety risks faced by the poor. It is important that policies, institutional and regulatory frameworks be designed to consider the needs of small-scale actors in food systems and of investing in areas with collateral effects on reducing the burden of FBDs, such as on environmental health and public health systems, and urban upgrading.
- As one size does not fit all, priorities and actions need to be adapted to the local and regional circumstances.
 Food safety also has an element of equity, in that often the poorest are

those most affected by unsafe food. Therefore, people-focused food safety investments are important to also leverage inequity and to help achieve SDGs 5, 8, 10, 16 and 17.

HIGHLIGHTS FROM PANELLISTS

Arie A. Havelaar, University of Florida, the United States of America, presented highlights on the public health burden of unsafe foods - a need for global **commitment.** He informed participants that the high burden of food safety is similar to that of HIV AIDS, TB or malaria. One third of global FBD is borne by Africa. Increasingly, FBD is associated with stunting globally, particularly in Africa, and many more hazards are potentially important but not quantified. The FDBs are unequally distributed, with children under five years and people in poorest areas of the world being most affected. The burden represented by enteric pathogens equates to 17 million disability-adjusted life years (DALYs), include 1.5 million DALYs by Taenia solium. Aflatoxininduced diseases are responsible for 0.6 million DALYs. Food-borne diseases can and must be avoided - there are some good practices in high-income countries, where the burden is ten times lower than the global average. The main challenge is how to adapt and implement successful interventions in economically and culturally appropriate ways.

This demands multisectoral approaches and a One Health strategy in practice.

Steven Jaffee, Lead Agricultural Economist from the World Bank, pleaded in favour of the economic case for investments in food safety. Domestic food safety has tended to appear on national radar screens only during crises, in major outbreaks of FBDs resulting in deaths, scandals involving deliberate food adulteration. or other such events, which result in popular outrage and, thus, political attention. Jaffee highlighted three dimensions of the economic case for investment: (i) international competitiveness: trade-related issues; (ii) food market performance: including value chains and post- harvest losses; and (iii) cost avoidance: public health cost and productivity loss. Unsafe food results in an estimated USD 110 billion in productivity losses and costs of treating FBDs. These costs will rise in the coming years for many countries in a "business as usual" scenario. Addressing the FBD challenge depends on available capacity. For example, the burden of FBDs from animal-sourced food is related to veterinary service capacity and public spending. Jaffee underlined three points. First, in low income countries, while the cost of FBD / food safety is not measured, it relates mainly to poor water and sanitation. The population mainly consume staple starchy crops. Second, middle-income countries are exposed to more hazards due to dietary

changes with more consumption of animal-sourced food, yet investments in food safety do not match these changes. Third, in upper-middle-income countries, the food system is formalized with some investments in food safety, but these are not adequate. Countries experience difficulties in complying with food safety standards due to many challenges. Jaffee concluded with four main recommendations. First, governments in low- and middleincome countries must prioritize food safety. Second, there is a need to invest more, and more smartly, in domestic food safety. Third, exploit synergies among goals and interventions. Fourth, better motivate and leverage privatesector investment and initiatives. In the area of trade development and research, his recommendations were to: (i) strengthen incentives for preventive forward looking actions; (ii) invest in addressing knowledge gaps to inform priorities, strategies and investments; and (iii) better coordinate and evaluate assistance, and promote active experience sharing.

Ed Mabaya, African Development Bank, gave a presentation on leveraging private-sector investment for safe food value chains. He noted that in some cases FBDs may not kill immediately but can create long-term and irreversible health consequences, and that, therefore, it is necessary to change the paradigm on how we view food safety. He invited three reflections along the following lines. First, what happens between the harvest and eating depends





Maria Helena Semedo, Deputy Director of FAO.

on the private sector (unless people grow their own food, which may happen less with increasing urbanization). However, the private sector is not often represented in the food safety dialogue and agenda. Second, the private sector is geared more towards profit than safe food. Third, there is a need for an enabling environment and engagement in strategic partnership to enable the private sector to deliver safer foods. Hence, government should develop and enforce policies and regulatory frameworks, develop infrastructure, provide incentives and consider the private sector a strategic partner. Therefore, there is a need for publicprivate partnerships and a vibrant private sector.

John McDermott and Delia Grace,

International Livestock Research Institute (ILRI), shared their reflections on people-focused food safety investment in low- and middle-income countries. Recalling the unequal distribution of the FBD burden, they stressed the need for multisectoral and multistakeholder engagement for food safety, including water and sanitation, health, agriculture, social protection, etc. This requires risks-tradeoff analyses. The common assumption is that food safety should be led and owned by food-system actors with systematic stakeholder consultation and engagement. Solutions need to be more dynamic and forward-looking.

Chibundu Ezekiel, Associate Professor and International Institute of Tropical Agriculture IITA Nigeria, gave a presentation on the need for integrated approaches to address food safety risk - the case of mycotoxins in Africa. Mycotoxins pose serious obstacles to about 15 SDGs. They affect all ages and all functions of food systems. Mycotoxins affect critical crops consumed in Africa, such as maize, sorghum and groundnuts. They pose serious threats to animal and human health, food security and economies. Stunting, cancers and cognitive development issues are synergistic effects of mycotoxins. Prof Ezekiel underscored a set challenges in mycotoxin control in Africa, such as: (i) underreporting of negative impacts; (ii) invisible nature of mycotoxins and their spaced effects from the moment of consumption; (iii) low awareness of the problem; (iv) ineffective and poorly enforced regulations, which requires the right set of data and coordination; and (v) poor

coordination between researchers and policymakers. The proposed solutions include: (i) multipronged sustained efforts / value chain approach; (ii) good agriculture practices; (iii) a crop-specific approach; (iv) the need for a diagnosis approach – crops, methodology; and (iv) transparent and responsible sharing of data. Prof Chibundu suggested using the "three Es" for prioritization: effectiveness, efficiency and equity (taking into consideration the interests of different stakeholders, including the most vulnerable consumers). The speaker clarified his approaches to smart investment, which include: (i) a forward-looking approach with a unified strategic framework; (ii) a prioritization process with clear equitybased criteria; (iii) the importance of considering the sustainability aspect in all its dimensions; and (iv) monitoring the impact of the investments, and governments to leverage private-sector investment.



KEY MESSAGES FROM PRESENTATIONS AND DISCUSSION WITH AUDIENCE

Food-borne diseases (FBD) pose a threat to human health and economies – without food safety, the SDGs will not be met.

To keep food safe, there is a need for high-level commitment to food safety on a political, financial and scientific level. For smart investments to improve food safety, synergies with other sectors and developments are critical, such as urban upgrading and environmental health initiatives.

There is a need for greater and better investment in food safety that is evidence-based, forward-looking and responds to a country's situation.

Governments have a role in leveraging private-sector investment in food safety. Focusing only on trade without due consideration of the domestic food supply will result in enormous public health and socio-economic costs.

It is essential to create the space and opportunities for a whole-society dialogue on food control systems, with the involvement of the government, knowledge actors, civil society organizations and the private sector.

Access to safe and nutritious food is a fundamental human right and element of local culture. Food safety also has an element of equity, in that often the poorest are those most affected by unsafe food. Therefore, people-focused food safety investments are important to also leverage inequity and to help achieve SDGs 5, 8, 10, 16 and 17.

A food and nutrition rights watch, like Human Rights Watch, could contribute to improvements, while considering ethical aspects of today's food safety policy measures with their disproportionate emphasis on exported food – similar standards should be extended to domestic markets.

The equivalence principle should be used in shaping the accreditation criteria for food safety testing methods.

A global framework, a supranational mechanism for accountability that will allow countries to develop food safety strategies and track countries' progress, is a necessity.

THEMATIC SESSION 2 SAFE AND SUSTAINABLE FOOD SYSTEMS IN AN FRA OF ACCFI FRATED CLIMATE CHANGE³

Session 2 was moderated by Abebe Halle-Gabriel, FAO Assistant **Director-General and Regional** Representative for Africa. Five panellists shared their views on challenges and ways the countries may address food safety issues in relation to climate change, considering the expected growth in food demand related to population rise and the need to intensify agrifood production.

Cristina Tirado, Director, Climate Initiative, Loyola University, gave a presentation on climate change and implications for food safety. She emphasized that ongoing climate change affects temperature and humidity, and increases both the risk of food contamination with bacteria and natural toxins, such as aflatoxins, and the risk of animal and plant diseases. Higher ocean temperatures have huge impacts on fisheries and correlate with the rise of toxic species of algae that affect fish. Climate change and variability will have direct and indirect impacts on the occurrence of food safety hazards at various stages of the food chain to decrease food production, and may lead to global food prices rises of from 3 percent

to 84 percent by 2050, thereby contributing to food insecurity and malnutrition. Through monitoring and surveillance, it is important to spot emerging food safety issues that may result from climate change. There is a need for evidence-based data and assessments to inform actions. Rapid detection methods and surveillance systems are essential. Monitoring and surveillance programmes in food safety need to consider climate change research data. Nationally determined contributions (NDCs) guide actions on climate change, but very few countries have indicated food safety in their NDCs. The revision of these plans and commitments would help countries effectively integrate issues of food safety and climate change.

Howard-Yana Shapiro, Chief Agricultural Officer, Mars Inc., the United States of America, gave a presentation on safe, sustainable crop production: meeting the goals. He noted that sustainable crop production for safe and nutritious food requires resilient production systems that are in balance with the functioning ecosystems. He posed the question of how it is possible to balance the

³ Ibid.



imperative to provide the planet's inhabitants with safe, nutritious food with the imperative to preserve the planet's ecological systems. He noted that the availability of fruits, vegetables, grains, tubers and legumes, and the systems used to produce them, play a critical role in human and animal nutrition and people's livelihoods.

Resilient food production systems require water-use efficiency and modern tools. Climate change will increase water scarcity and reduce the availability of freshwater. There is a need for pest- and disease-resistant crops. Political will for sustainability is an essential condition. The speed of climate change is outpacing society's ability to grasp and adapt to change. Shapiro stressed the need for sharing data on food contaminants (biological, chemical, cross-contamination) and urged for a rapid response in the right direction of food safety in the era of climate change.

Tim McAlister, Principal Research Scientist, Agriculture and Agri-Food Canada, shared his views on safe and sustainable livestock production in the context of climate change. He noted that, despite the reality of livestock impact on climate change, increasing wealth in emerging economies would lead to higher meat production and consumption. Globally, the demand for animal-derived protein is expected to double by 2050. The subsequent shift from extensive to intensive livestock systems will require significant changes

in management and market practices, while integrating the One Health consideration of humans, animals and the environment to ensure food safety from the farm to the consumer. This requires important policy action on promoting effective nutrient management in feeds and nutrient recycling, enhancing the biosecurity and resilience ability of animals. Special attention will need to be given to waste management. Nutrients going into water pose serious concerns, and the recycling of such nutrients is needed (composting, biodigesting). Important policy areas for action are: harmonized and regulatory food systems; information and education of consumers; equity in production (smallholder reliant pastoralists and intensive commercial producers); and express methods for pathogens detection. Humanity needs to accept sustainable livestock production intensification, and tackle food safety measures from a holistic perspective.

José Burgos, Researcher, University of Chile, and former Director, Sernapesca, shared highlights on safe and sustainable aquaculture intensification, drawing attention to the instability of the state of world fisheries and expected increase in fish demand. With their social, economic and nutritional benefits, fisheries and aquaculture play a key role in providing food security and livelihoods to hundreds of millions of people. Because the great majority of fish stocks remain fully fished or overfished, future increases in fish

and shellfish supplies must come from aquaculture. To increase production, intensification seems the most realistic prospect for sustaining future growth. However, the mainstreaming of environmental, health, nutritional, food safety and economic factors is essential for success. The advantages of fish are the lower amounts and higher conversion rates of feed compared with livestock. He stressed that aquaculture is a global public good that needs good aquaculture practices, adequate biodiversity measures and a holistic view of taking care of environment and research. He also stressed that is important to learn from past mistakes. and that it is critical to predict future development. He shared some examples from Chile in this respect. First, the need to grow sustainably and in a resilient way requires policies to monitor and address the new challenges due to climate change, such as: (i) increases in rainfall and winds with related risks from washing of waste materials, effects on ocean waters, and impacts on reproductive processes; and (ii) increases in ocean temperatures disturbing the growth of some species, and increasing mollusc production due to acidification. The difference with ocean-based systems is that production is linked to upstream activities. Veterinary services need to be strengthened as public goods. Further education in this sector is needed. Second, regarding antibiotics, he stressed that, as animals' immune systems are weak, antibiotics need to be used carefully at all stages of

production. Last, he emphasized the fact that the challenges facing production systems call for more than one agency, and that the approach and useful concept of One Health need to be stressed.

Eva Maria Binder, Chief Research Officer, ERBER Group, Austria, highlighted the perspective of alternative food and feed products. Globally, the demand for traditional protein sources (livestock and fish) is expected to grow rapidly by 76 percent from 2007 to 2050 due to a growing population, but also to changing diets in developing countries. These changes will have an increasing impact on the environment and climate. While land that is not suitable for crop cultivation can often be used more efficiently to graze livestock, overgrazing can have detrimental effects on the environment and natural ecosystems. There is a critical need to provide additional food and animal feeds that are both safe and nutritious, while at the same time minimizing environmental footprints. Alternative food and feed products are receiving growing attention to fill this gap, but will require adequate oversight and control to ensure their safe and appropriate application. Alternatives include:

 Livestock: there is a need for better understanding of livestock feeding needs. Well-nourished animals are healthier and more resistant to infections. It is important to consider both feed efficacy and safety.





Opening session of the First FAO/WHO/AU International Food Safety Conference.

- Insects: intensified production can provide a source of protein. More investigation is needed on risks related to accumulation of dangerous chemicals. Science and evidence are necessary to inform food safety guidelines and standards.
- Algae: these are rich in proteins, carbohydrates, minerals, etc.
- Cycling food for feed: food loss is a waste and puts pressure on the environment. Strict regulation of cycling of food for feed is needed.

 New food and feed: the use of bio-products needs to be carefully regulated.

The discussion with the audience evolved around questions on how food safety can receive enough attention in public policy on climate change: What are the challenges faced by countries? What are incentives to enhance action and investment? Opinions converged towards the importance of integrating food safety into national policies, strategies and investment strategies (including NDCs), and providing

incentives by demonstrating the value of this investment (for example, by how much losses in public health, market value and development opportunities would be prevented). The impacts of climate change on malnutrition, food safety and water-borne diseases call for supporting modelling systems. Even if predictive models exist for aflatoxins, the entry data related to changing climate should be made available. Strengthening data and research is important - there is a need fo evidence/data/research, risks assessments and surveillance data. The absence of food safety in the NDCs of most countries is due to poor or nonexistent multisectoral collaboration and insufficient interministerial interaction on food safety and climate change issues. The discussion highlighted how the imperative on safe food is to build resilient systems and technologies, using a comprehensive approach for inclusive agriculture-trade-healthenvironment policies and the One Health approach.

Questions raised related to: the need for more investment from governments and the private sector in research,

such as on new methods for detoxifying aflatoxins in affected food and feed, increasing the resilience of local crops to climate change effects, etc.; assisting smallholder farmers to benefit from technological advancements, such as precision agriculture; considering alternative food sources; empowering consumers to change perceptions and food choices (the example of the Eurobarometer to gauge people's interest in food safety was mentioned); and identifying food safety sensibilities in a farm-to-fork continuum in relation to climate change for targeted food control.

There is still much to learn about the implications of climate change. Smart adaptations of livestock, aquaculture and crop production systems, availability and safety of feed, and alternative feed sources need to consider implications for food safety management. It is important that food safety be integrated into national adaptation plans and national commitments on climate change. This session emphasized that, to maintain safe and sustainable food systems, there is a need for risk-based mitigation and adaption strategies that are informed by monitoring and surveillance data.



KEY MESSAGES FROM PRESENTATIONS AND DISCUSSION WITH AUDIENCE

Climate change is a reality with proven implications for food safety. As food production systems transform to adapt, there is a need for vigilance to assess emerging food safety issues and strategies for appropriate management of potential risks.

Crop production is facing an urgent need to balance the imperative to provide safe, nutritious food and to preserve ecological systems. The speed of change is faster than the ability to adapt. The future lies in the adoption of resilient crop production systems.

Globally, the demand for animal-derived protein is expected to double by 2050. The consequence is a shift from extensive to intensive livestock production, with increased impact on the environment. Adaptation techniques in livestock production are required.

Because the great majority of fish stocks remain fully fished or overfished, future increases in fish and shellfish supplies must come from aquaculture. While intensification of production seems the most realistic approach to safe and sustainable aquaculture, it requires the mainstreaming of environmental, health, nutritional, food safety and economic factors.

Alternative food and feed products are receiving growing attention to fill the gap between the increase in the demand for traditional protein sources and the environmental impact of overgrazing. This will require adequate oversight and control, including risk assessment of the potential associated risks.



THEMATIC SESSION 3

SCIENCE, INNOVATION AND DIGITAL TRANSFORMATION AT THE SERVICE OF FOOD SAFETY⁴

Session 3 was moderated by Robert van Gorcom, Director of RIKILT, Wageningen Research Institute. the Netherlands. Five panellists shared their views on the background that the food available today, food production pathways, mechanisms and tools for governing food safety are not the same as those of one year ago and even less so than those of five years ago, and, based on the current trajectory, they are different from what will be available even tomorrow. The question is how to use these tools, scientific advances, technical innovations and application of digital technology to their greatest advantage, and how to regulate them.

Juno Thomas, Centre for Enteric Diseases. National Institute for Communicable Diseases, South Africa, gave a presentation on whole genome sequencing (WGS) - paving the way forward globally to better understand food systems. She presented this as a revolution in public health microbiology, one with immense power in field applications and research - some readily realized, and yet more untapped. Whole genome sequencing represents a potent tool for: phylogenetic, epidemiologic

surveillance: transmission studies: food testing and monitoring; outbreak and trace-back investigations; source tracking and attribution; and rootcause analysis. As a single workflow, it has the potential to replace many phenotypic and genotypic methodologies currently used in a typical microbiology laboratory. Isolate preparation is identical for all bacterial pathogens, and the "wet laboratory" components (DNA extraction, library preparation and sequencing reactions) are quick and easy to perform. With the cost of WGS declining, it is fast becoming a cost-effective technology for food-borne pathogen speciation and subtyping. Complementary epidemiologic and WGS datasets provide the ultimate tool for delineating outbreak events, whether localized or transcontinental.

The use of WGS during the listeriosis outbreak in South Africa in 2017-18 was invaluable in guiding the successful outbreak investigation and eventual source identification. This was a landmark event for both the country and the African continent, proving that even resource-limited countries can ably implement this technology and

⁴ http://www.fao.org/3/CA2790EN/ca2790en.pdf



gain tremendous benefit. The single greatest challenge for less-developed countries to use the WGS for public health purposes is the availability of basic epidemiology, surveillance and food monitoring and testing infrastructure.

Critical to the success of using WGS data for surveillance, outbreak detection and investigation is being able to compare against data from One Health sectors, within the country and between countries - the so-called "open data" model. Such data access and sharing is very sensitive and needs to address a range of issues at the country and global levels. These issue include: intellectual property rights; legal, jurisdictional, and regulatory frameworks; and the participation of the food industry. This requires considered, inclusive consultation with all stakeholders and political support.

The current state of food safety and burden of FBD in low- and middleincome countries also reflects on the absence or weakness of a One Health approach. While funding for new programmes is a constant challenge, countries should actively drive smallscale initiatives to overcome practical, regulatory and interagency obstacles in order to facilitate sharing of knowledge, data, epidemiological and laboratory skills and capacity. Political commitment and support is paramount for enabling effective multijurisdictional collaboration across public health, veterinary and food sectors.

The food industry needs to be an active participant and take responsibility for its role in a collective effort to improve food safety and FBD surveillance both at the local level and worldwide.

Aideen McKevitt, University College Dublin, Ireland, in his presentation on novel food production, stressed that with the world's increasingly urbanized population growing annually by 80 million, and with growing concern for the sustainable use of natural resources, food production systems will need to continue to evolve to meet the needs of all people and use new technologies to help meet the changing needs. Adoption by mainstream production and growth in market share is expected to increase for many new foods, such as crops obtained through gene editing and other new plant breeding techniques. The challenges associated with developing regulations concerning the use of new technologies in food production is complicated by the difficulty of keeping up to date with the rapid pace at which science develops. Further regulatory implications at the global level are yet to unfold. However, disagreements among countries about regulatory models, and resulting trade disagreements, might be expected to remain part of the international landscape unless dialogue at the international level directed towards developing a model of regulatory convergence is enhanced, based on science and risk analysis.

He emphasized the importance of the inclusive dialogue between regulatory authorities in shaping a convergent global regulatory framework that would be beneficial to harmonizing standards globally. This may also require greater attention towards strengthening the capacity of developing countries to master emerging new technologies. In addition, regulatory authorities should raise awareness, and upfront engagement with consumers with trusted information can reduce scepticism about new products.

Kennedy Bomfeh, University of Ghana, gave a presentation on policy considerations for the development and adoption of technologies for local food value chains, highlighting the need for comprehensive and multidisciplinary approaches in the development, oversight and legislation of novel production systems. Importantly, when developing policy concerning the adoption of foods and food processing. the evaluation should be comprehensive in weighing the potential risk and benefits not for food contamination alone, but also related issues such as the environment, sustainability, livelihoods and trade - a One Health approach. Five principles for consideration for food policymakers with respect to new products are: (i) risk profiling of the product; (ii) benchmarking of the innovations; (iii) creation of market incentives; (iv) plans for consumer engagement and education; and (v) prioritization of challenges for a national research agenda.

Steven Musser, Deputy Director, Center of Scientific Operations, Food and Drug Administration, the United States of America, introduced novel analytical methods and models for enhanced food safety. He noted that food can be adulterated by a wide variety of chemical and microbiological contaminants, which may occur at any point in the distribution chain. Therefore, regulators, public health officials and the food industry must continually invest in new food-testing technologies that lead to innovative approaches to rapidly and accurately identify and characterize the hazard. The innovative methods go beyond food laboratories and include field test kits, smartphones and other handheld detection technologies. The application of many novel analytical methods, including WGS, is expanding and becoming more accessible, both from a field-technological standpoint, but also economically. New tools have the potential to be more accurate and more rapid, improving surveillance and monitoring systems, and permitting increased levels of food traceability. These assays include portable devices that could be employed across the food chain, ranging from food producers and processors to the final consumer. There is a critical need for further investment in data management and sharing platforms at all levels (national, regional and international), and for education to enable interpretation of data that are reliable, standardized and understandable for end-users. If applied appropriately by food-testing



laboratories, these innovations, coupled with sound epidemiological systems, will enable better understanding of risks and the development of prevention, mitigation and response strategies for hazards across the food chain.

Mark Booth, Food Standards Australia and New Zealand, Australia, in his presentation on the digital transformation of the food systems, underlined the fact that the complexity. fragmentation and global nature of the food supply chain is a key driver for the use of digital technology in order to provide enhanced food traceability and safer food to consumers. The creation of a "big data" culture in the food industry could facilitate advances in global food safety, food quality and sustainability. For example, WGS and geographic information systems (GIS) could be used in tandem to better detect outbreaks and their causes. The digital transformation of food supplies and food safety control systems is a confluence of automated data collection, data collation and data analytics that will permit new levels of transparency to drive food safety interventions and provide unparalleled information to prioritize and direct action that is faster and more complete. Implemented correctly and in a timely manner, digitalization may facilitate international trade with faster, more cost-efficient and less bureaucratic electronic certification of internationally traded food products, coupled with increased food safety and reduced vulnerability to fraud.

In particular, this would be valuable for developing countries with limited resources and less-mature food safety systems. Consideration should be given to electronic certification. with a view to reducing lengthy and cost-intensive clearances for official certification needed by food authorities, by streamlining processes and linking into food composition databases. Digital traceability of food by, for example, applying blockchain approaches may offer faster and more efficient food safety risk management options globally. These developments, together with the increased volume of food traded by e-commerce, may give developing countries and smaller businesses a better environment for participating in the global marketplace. However, there are still a number of challenges to manage, such as having the appropriate infrastructure available. intellectual property ownership, governance of the systems, and data currently residing in "silos" within food businesses and governments. In this new world, there is a critical need for protection of confidential information. Regardless of the food safety system adopted, it should be fit for purpose in the individual countries, harness this wealth of information to enhance food safety, and ensure access by all.



In today's rapidly evolving digital world, there are a number of steps and considerations that impact the safety of both traditional food products, new foods and novel processing technologies.

The concepts presented emphasized that responsible approaches and global policies need to promote equitable engagement in the process of setting research priorities and application of technologies and innovations.

All parties, across multiple disciplines and regardless of current economic strength, must be involved in the dialogue addressing the risks and benefits of new scientific discoveries, digital processes related to their adoption, and governance with respect to food safety.

Making use of new scientific findings, technical innovations and digital technologies can enhance the availability of nutritious food and grow economies locally, while at the same time helping to attain safer, more efficient and more resilient food systems globally.

Supporting developing countries to gain access to scientific advances that enhance food production and safety can facilitate sustainable and more equitable development.





THEMATIC SESSION 4

EMPOWERING CONSUMERS TO MAKE HEATHY FOOD CHOICES AND SUPPORT SUSTAINABLE FOOD SYSTEMS⁵

"Good science is not enough. Evidence, data, methodologies and protocols should be accessible and effectively communicated." (B. Gallani)

Session 4 was moderated by Svetlana Akselrod, WHO Assistant Director-General, Non-Communicable Diseases and Mental Health. Five panellists shared their views on different aspects relevant for strengthening consumers' trust in food safety within changing food systems, considering their views and concerns, enhancing their awareness and understanding of food safety, and providing reliable information to guide healthy and safe food choices and creating conditions that enable constructive dialogue.

Francesco Branca, Director of Nutrition, WHO, in his presentation on dietary transitions and the triple burden of malnutrition necessitate action, noted that the perspective of diet and nutrition is a necessary complement to the food system discussion. Today, the world is burdened by multiple forms of malnutrition, inducing obesity/overweight, stunting, and micronutrient

deficiencies. Inadequate diet is a common risk factor for all forms of malnutrition. Food insecurity is not only about a lack of adequate food, but also a lack of the correct quality of food. Food insecurity is an important cause of malnutrition. The latest analyses show that unhealthy diet is among the top risk factors contributing to the global burden of deaths and disability, a cause of premature deaths from cardiovascular disease and cancer as well as early deaths from infectious diseases such as diarrhoea and respiratory infections. Overall, while food production has increased, food systems have also become dynamic to provide wide variety. However, not everyone has access to fruits and vegetables and the other nutritious foods that come with improved food systems. Healthy diet starts very early, with exclusive breastfeeding.

From a nutrition and safety perspective, a healthy daily diet should have less

⁵ http://www.fao.org/3/CA2791EN/ca2791en.pdf

energy, more fibre, limited salt, at least 400 g of fruits and vegetates, and less sugar. Total fat intake should be kept to less than 30 percent of total energy intake, with a shift in fat consumption away from saturated fats to unsaturated fats, and towards the elimination of industrial transfatty acids. Carbohydrates in the diet should come from whole grain foods. A diet rich in plant-based foods, such as pulses and legumes, and reduced animal-sourced foods confers both improved health and environmental benefits. Safe food is an integral part of a healthy and sustainable diet. Consumption of contaminated food and water leads to diarrhoeal disease and loss of nutrients. Improper use of chemicals such as pesticides and veterinary drugs in food production has resulted in public health concerns such as the emergence and spread of AMR. The importance of taking part in the work of the Codex Alimentarius Commission on nutrition and food safety, and the implementation of internationally adopted standards at the national level, were emphasized.

Barbara Gallani, Head of Communication, Engagement and Cooperation, European Food Safety Authority (EFSA), Italy, in her presentation on understanding food safety risks and uncertainties and meeting citizens' expectations as food systems become more complex, noted that the dynamic changes in food systems give rise to many knowledge gaps and uncertainties in

regulatory science that risk assessors need to explain. Value judgements are important and also have a role in effective communication. Consumers are exposed to different sources of food safety information, some of which are more reliable and some less so. Making the best possible use of all available traditional, modern and emerging communication tools and approaches to counteract misinformation is key. At the same time, consumers take great interest in food safety matters, and there is a legitimate expectation that different views should be listened to. Public authorities have the responsibility to provide verifiable and trustworthy information, considering data sources and methodologies. and excluding conflict of interest from those involved in food safety risk assessments. In a world of increasing complexity, it is important to create and support transparent and accessible risk assessment mechanisms as well as clear and engaging communications. Openness to the public and transparency are fundamental values that can translate into open repositories of data on risk assessment related to food-borne zoonotic diseases, antibiotic resistance and the presence of chemicals in food. Active and constructive engagement with multiple stakeholders is essential.

Lynn Frewer, Newcastle University, the United Kingdom of Great Britain and Northern Ireland, in her presentation on effective communication and engagement with the public about



food safety and quality issues in the digital age, stressed that food safety risk communication is an important element of the risk analysis framework, and that social media has a role in this process. Information gathered from social media and the social sciences can help understand consumer behaviour and preferences. It is also important to understand the role of social media influencers, which specific media platform to use for various audiences, and which platforms work at various levels - this in order not to exclude some consumers. Legal and ethical issues are relevant to data processing and analysis when collecting data from the public or modifying such data. Institutions need to be aware of misinformation being provided by the media. There are various users who are highly skilled in using social media, and it is necessary to be aware of these various skills and how these can be used to influence social and consumer trends.

Stephen Mbithi, Kenya, in his presentation on harnessing market drivers of food safety, stressed the fact that food safety is a partnership – regulators, industry and consumers all have a role in ensuring safe food for all. Regulatory frameworks on food safety are necessary to define what is acceptable, and to establish measures that monitor and promote compliance and that penalize non-compliance, thus protecting the public from unsafe or fraudulent practice. However, food is delivered to consumers mainly through the market, not directly by governments.

Minimizing food safety risk requires that industry consistently implement good practice, and this is more likely to occur if consumers and the "market" drive good practice. Brand protection is a powerful incentive for stringent food safety management practices by well-established industries. In countries where small-scale producers and informal markets dominate, careful reflection is needed in order to harness market drivers of food safety. Consumer education plays a major role in creating conditions for their driving improvements in the food safety practices of suppliers. Through awareness and education, consumers are better placed to recognize and reward suppliers' good hygiene practices. The consumers' role in driving food safety depends on the reliability of received information. Therefore, it is necessary for governments and civil society groups to actively promote greater responsibility and accountability in information provision. Aiming to constantly improve domestic food safety, the small-scale operators should be given the opportunity to strengthen their systems of food safety management by gradual application of new regulatory requirements, while considering unique circumstances and carefully evaluating the associated risks.

Rebecca Berner, Consumers International (Desarrollo Institucional El Poder del Consumidor), Mexico, gave a presentation on sharing responsibility for consumer empowerment. She stressed the importance of a human rights approach to empowering consumers, and highlighted four action areas: (i) empowering consumers with the right, accurate information and clear communication messages; (ii) empowering consumers through regulations that promote healthy choices, including taxes, subsidies, etc; (iii) safeguarding consumers against conflicts of interest; and (iv) empowering and transforming food systems through global governance on problematic issues.

The discussion with the audience emphasized that consumer awareness and a supporting institutional framework that empowers consumers can create a positive dynamic within the market that promotes consistent attention to food safety. The sociocultural contexts and socioeconomic impact of empowerment and education should be estimated

and used when devising food safety communication strategies. There is a need to harmonize methodologies. Trade requirements as driven by consumers of exported foods, the development of tourism sector and consumers' exigencies in domestic markets are important drivers for food safety improvements. These should be considered in conjunction with governments' role of spearheading and enacting policies and legislative frameworks in consultation with stakeholders, ensuring that the supporting systems, such as national monitoring programmes for residues and microbial contaminants, inspection, certification and diagnostic capacity, are in place. Equally important are the private sector's efforts, with its responsibility of ensuring that the foods placed on the market are safe for consumption.



KEY MESSAGES FROM PRESENTATIONS AND DISCUSSION WITH THE AUDIENCE

Food safety is a shared responsibility where all people, as consumers, play an important role.

Given the complexity of food safety, consumers need access to timely, clear and reliable information about the nutritional and disease risks associated with their food choices.

Traditional and new communication tools need to be embraced to enhance food safety through better transparency, effective dialogue and cooperation.

In today's changing world, for consumers to be empowered to make healthy food choices and help make food systems viable for the long term, their interaction with governments needs to be based on mutual trust and understanding.

Consumer engagement can lead to stronger and more sustainable food systems and better regulations.

Healthy diets can be promoted through: education and communication (including food labelling, food-based dietary guidelines); regulating incentives and food prices; aligning agricultural and marketing policies; accounting for vulnerable groups; and making healthy choices available and accessible, including through social protection programmes.

It is important to invest time and creativity in building trust among consumers and influencing their perception of risk.

World Food Safety Day opens avenues for food safety awareness raising and advocacy for all stakeholders along the food chain from farmers to consumers.

Involve consumers in policy processes, and include parliamentarians in advocacy as having the mandate to represent citizens and power to support consumer-sensitive policies.

PANEL DISCUSSION

CIVIL SOCIETY AND THE PRIVATE SECTOR



The discussion focused on identifying the strong roles that non-state actors could play to enhance food safety for everyone, including industry and broader private-sector, research, academia, consumer and professional organizations.

Leon Gorris highlighted the importance of developing human capital through training and capacity building of scientists, engineers and researchers, enhancing their competencies and professionalism through the International Union of Food Science and Technology network. The network has 3 000 members in 45 countries worldwide, who are focused on science and technology development. It works mainly with knowledge partners, and its tools for learning including knowledge products and online training videos. The network is looking to expand and foster closer links, particularly with academia and other partners to develop projects and use technologies to reach out to more people.

Cris Muyunda underlined as critical the need to have a guiding framework for food safety, such as that the Comprehensive Africa Agriculture

Development Programme is developing for food and agriculture in Africa. The seven commitments of the Malabo Declaration on Accelerated Agricultural **Growth and Transformation for Shared** Prosperity and Improved Livelihoods emphasize the key role of partnerships and inclusiveness in decision-making for achieving the goal of eliminating hunger and reducing poverty. This means that the private sector, women's organizations and youth bodies have to be at the same table as they are active throughout the value chain. It is important to train and empower these stakeholders, informing them about food safety and standards, and developing their capabilities to implement them.

Samuel Godefroy, Laval University, drew attention to the interdisciplinary and fragmented nature of food safety, and the role academia can have in bringing all elements together. Science and technology can bring answers to food safety issues that underpin food control systems and operationalize risk analysis involving other disciplines such as mathematics, biology, economics and social sciences for risk management solutions. This area



Attendees arrive for the morning session.

needs much more attention and investment. Developing training and masters of science programmes in regulatory sciences is essential for the development of a broad set of skills. Harnessing the investment made by the Codex Alimentarius Commission in its tools and materials, and propagating them through modern methods and through partnerships and international opportunities, would be one way to proceed. Subregional institutions could be developed to provide training, and to supply trained and competent people for food control authorities. Food safety education needs to upgraded, with strong integration of science with socio-economic disciplines, and

long-term capacity building delivered through partnerships with academia.

Laura Fernandez, European Food Information Council (EUFIC), stressed that communication is important for empowering consumers. Working on trust issues with consumers is a way to ensure that they are better informed and aware of food safety issues. Informed consumers are a prerequisite for making healthy food choices, especially when 30-40 percent of food-borne illnesses occur due to poor practices and handling by the consumer in the household. It is important to understand the values and concerns of the consumer, and to establish a better

communication environment to make messaging easier. Information from social media is omnipresent, but not necessarily always accurate, and that undermines trust in the food chain and its institutions, including the private sector and civil society organizations. This improved environment can be realized through two-way dialogue and mutual understanding by the parties involved. Consumers and the private sector can work together to ensure that their common interests are served. For example, EUFIC facilitates dialogue between associations of allergy-prone consumers and the private sector to influence the manufacturers' practices.

Owen Fraser, AOAC International, stressed that reliable and good-quality data generation using fit-for-purpose methods are vital for achieving food safety. Founded in 1884 and with 3 000 members in 90 countries, AOAC International works with academia, industry and contract research organizations to develop voluntary standards through scientific consensus for testing methods and other solutions. The objective is to ensure high levels of precision and accuracy in testing as well as ensuring proficiency and dependability across the globe. To ensure accurate testing and provide a bridge between regulation and compliance, there is a need to develop new methods and analytical technologies for new analytes to respond to technological changes in the way food is grown and processed. The challenge AOAC International faces

is that modern analytical methods are not cheap, and the infrastructure and human resource capacity of many countries are limited.

Barbara Kowalcyk emphasized the fact that public-private partnerships need to be emphasized for lasting solutions. Synergies between the private sector and government can be achieved through collaborative partnerships. The Center for Foodborne Illness Research and Prevention (CFI), a not-for-profit organization based in the United States of America, represents the public and advocates for food safety based on food-borneillness data. It serves on government advisory boards and panels. It also engages with media and the private sector. The CFI has succeeded in passing consumer-friendly measures through collaborative partnerships with government and the private sector, such as the labelling of mechanically pulverized meat. Consumers often have the least amount of control and need to make sure that good practices are employed throughout the food chain. The 2006 food-borne illness outbreak in the United States of America associated with spinach led to the enactment of the Food Safety Modernization Act in 2010, and the CFI was very involved in this process. The organization is now working to ensure similar modernization for meat and poultry products. A dialogue group has been formed with the private sector, and changes in the food safety system around meat and poultry have



been proposed through a white paper. Involving consumers in each and every discussion on food safety is crucial.

Greg Garrett, Global Alliance for Improved Nutrition (GAIN), emphasized the importance of building incentives, penalties, tools and mechanisms to drive the consumption of safe and nutritious foods. The private sector is part of the solution and part of the food safety problem; therefore, it needs to be on board. He brought specific examples of market solutions for food safety. GAIN works to create a food safety and nutrition fund and to develop metrics to measure the impact of food safety investment.

David Crean, Mars Inc., argued that public-private partnerships could indeed facilitate food safety and inspire consumer confidence. As a large company, Mars Inc. understands that even the smallest of food safety issues or incidents can lead to a drop in consumer trust and market sales. This acts as a positive driver and ensures that the fundamentals of food safety, including testing capabilities, are kept strong. Through its supply chain, the company collects data on food handling, storage and processing in millions of points. It uses these data to strengthen the knowledge base, and to share with partners and exchange perspectives.

PANEL DISCUSSION

POLICYMAKERS AND HEADS OF NATIONAL AGENCIES



Pawan Agarwal, Chief Executive Officer, Food Safety and Standards Authority of India, India Jorge Dal Bianco, National Directorate for Food Safety and Quality (DNICA), Argentina Sètondji Epiphane Hossou, Director General, Benin Food Safety Agency (ABSSA), Benin Zainab Jallow, Director General, Food Safety and Quality Authority, Gambia

Bernhard Kühnle, Director-General for Food Safety and Animal Health, Federal Ministry of Food and Agriculture, Germany

Mohammad Mahfuzul Hoque, Chairman, Bangladesh Food Safety Authority, Ministry of Food, Bangladesh Hussein Mansour, Chairman of the National Food Safety Authority, Ministry of Agriculture and Land Reclamation, Egypt

Pietro Noè, Director, Directorate General for Food Hygiene, Safety and Nutrition, Ministry of Health, Italy Vyacheslav Y. Smolenskiy, Deputy Head of Rospotrebnadzor, Russian Federation

MODERATOR:

Mary Lou Valdez, Associate Commissioner for International Programs, Office of International Programs, Food and Drug Administration, the United States of America

This session underscored the heavy responsibilities of the heads of competent food safety authorities and the challenges they face, some of which are common and many different and diverse in various country contexts. With the food safety landscape constantly changing, regulatory leaders have to remain ahead of the curve. They have to ensure that their experienced staff stay in their jobs and, at the same

time, ensure that they are constantly upgrading their skills and knowledge. They have to continuously deal with a wide range of stakeholders at multiple levels. Moreover, food safety agencies remain underresourced as their systems and roles are not always well understood by policymakers.

The panel members shared their experience on the challenges of how



to stimulate government to invest sustainably in national food control systems, and exchanged views on the key current and emerging challenges.

Zainab Jallow explained that the Gambia Food Safety and Quality Authority (GFSQA) was backed by a strong legal framework and had all key constituent bodies in place for regulatory affairs, for food control, and a scientific committee (although not fully operational). Agreements with the plant and animal health authorities for a One Health approach were also in place. However, investments in capacity building and science-based data generation, including accredited laboratories, are lacking. This means that food samples have to be sent abroad for analysis for residues of pesticides and veterinary drugs. Consumer awareness is also low, and a school programme to educate children and influence their parents is under way. Clear legislation that would deregulate all other previous acts and delegation of responsibilities to competent institutions through memorandums of understanding are essential. However, while an independent scientific committee is in place, no risk assessments have been done in the country. Instead, those done in other countries are being adopted. Moreover, the GFSQA has a stakeholder consultative forum where members from different food producer associations and consumers can express their concerns, which could then be used to collect confirmatory

information and improve risk-based inspection.

Bernhard Kühnle highlighted the fact that food safety is not well acknowledged as a public good, and that therefore it lacks investment support. In fact, food safety is in the spotlight only during incidents or outbreaks. The importance of food safety needs to be highlighted to policymakers through cost-benefit analyses and the many tangible and intangible benefits it brings to a country. The growing speed and size of food trade as a consequence of globalization are forcing the European Union and Germany to constantly improve on digitalization and data management. The increase in demand for food supplements is also a challenge. He stressed that the independence of the risk assessment body is important, regardless of which agency is the food safety lead in a country. This will allow for impartial implementation.

Hussein Mansour explained that resistance to a single food safety authority being established and making it fully operational was the biggest challenge in Egypt. He suggested that smart demonstrable investments could change the mindset of the three major stakeholders – government, industry and consumers – and ensure better uptake for funding requests. Transparency and confidence between partners are essential for the transfer of necessary knowledge. Reaching out to

unreachable segments and vulnerable populations, and investments in underlying issues, such as safe water and waste disposal, are of great importance.

Pawan Agarwal stressed that countries need to develop their own workable investment models for effectiveness and broad outreach. For example, the Food Safety and Standards Authority of India (FSSAI) focuses on people and partnerships. The strength of the agency has quadrupled in the last few years but is still very limited. Recognizing that India's huge population means that consumer empowerment and participation is key, the FSSAI has invested in designing easy-to-understand manuals for food safety at home, in school and in the workplace. It has also invested in a food establishment to create a demand and environment for safe food. Investment is mobilized in a large food safety training and certification programme that to date has trained almost 100 000 trainers. Much of it has been delivered through partnerships with the private sector and academic institutions. In India, mass education programmes for small and medium-sized enterprises (SMEs) and "micro, small and medium enterprises" (MSMEs) on good hygiene practice have been rolled out, delivered in simple and easy-to-understand formats. In addition, clusters of food business operators that follow these practices have been created.

Pietro Noè explained that, while Italy follows European Union legislation, it invests in research to generate data and evidence on hazards and risks to inform agricultural producers associations and help them implement food safety across value chains. Ten research centres and the National Institute of Health in Rome are involved in this activity. In turn, surveillance personnel, present in all 21 regions of the country at the regional and local levels, ensure implementation of food safety. Their services are sustained by fees paid by producers. There is a need to constantly update the food business registries and evaluate their risks. including laboratory testing of products as an essential element of sustaining food safety.

Jorge Dal Bianco explained that, recognizing the finite nature of financial resources for food safety, Argentina has focused on ensuring efficiency of food control operations to reduce costs. Duplication in activities is removed or avoided, public-public relationships are strengthened, and experience sharing between different institutions is encouraged to ensure that all parts of the food supply chain are covered. He emphasized the use of information technology to collect monitoring data, which is updated every 30 days. All information is posted online by the national agency, and decisionmaking is on the basis of scientific evidence. Stakeholders - especially consumers - are kept informed.





Opening session of the First FAO/WHO/AU International Food Safety Conference.

Sètondji Epiphane Hossou referred to the establishment of structural controls across food chains as a key current challenge. In Benin, reforms have been undertaken following export rejections by the European Union. Policies for food safety have been formulated in the crop and fisheries sectors. Risk assessment programmes for sanitary and phytosanitary hazards need to be continuously undertaken. Ensuring technical competence and rigour are essential, as is microbiological risk assessment with sister agencies in the region. Benin has institutionalized the process of food safety reform, which assures its sustainability. This includes the establishment of agencies for food safety, committees for risk assessments and scientific advice, and accredited laboratories. Awareness raising and

information campaigns are organized each time a new regulation is enacted, with particular emphasis on reaching poor and disadvantaged groups.

Vyacheslav Smolenskiy stressed that novel food technologies and the pace at which they are emerging pose serious challenges. Even before the risks have been adequately assessed, many technologies become accessible, affordable and widely utilized. The Russian Federation has been largely successful in determining the causes of food safety incidents, with only 2 percent of cases annually remaining as being of undetermined cause. However, surveillance needs constant bolstering as food fraud, mislabelling and adulteration continue to pose risks to the consumer. These shifts in the

hazard and risk landscape also require constant explanations to the Ministry of Finance, which is not an easy task. The sustainability of the food safety system in the Russian Federation is part of the public health system, enabling food safety regulators and consumers to benefit from vertically integrated institutions covering epidemiological surveillance and food safety monitoring. The competent agency reports directly to the Government and produces knowledge products and reports with monitoring data every year. Education and awareness raising among food businesses, and voluntary labelling regulations with the agreement of the private sector, could improve the efficiency of inspection services.

Mohammad Mahfuzul Hoque laid out the context of food safety challenges in Bangladesh, which is a very densely populated country, heavily prone to climate change impacts, and with over 2.5 million food businesses that need to be regulated. The Bangladesh Food Safety Authority brings under its ambit the fragmented activities of 18 Ministries and more than 100 regulations under different acts. Skilled personnel and enhanced laboratory capacity are needed to support implementation and combat food fraud and adulteration. To this end, agreements for delivery of services have been signed with key departments, including those of agriculture extension, fisheries, livestock and consumer affairs.

PANEL DISCUSSION

PARTNER ORGANIZATIONS







Jimmy Smith, Director General, ILRI

Jean-Philippe Dop, Deputy Director General, Institutional Affairs and Regional Activities, OIE

Philippe Scholtes, Managing Director, Directorate of Programme Development and Technical Cooperation, United Nations Industrial Development Organization (UNIDO)

Simeon Ehui, Director for Agriculture, World Bank

Matthew Hudson, Acting Director, Food Chain, Directorate-General for Health and Food Safety, European Commission

MODERATOR:

The panel discussion was moderated by Girum Chala, CGTN journalist, Ethiopia.

The panellists shared their views on how to bring on board partners in support of food safety, and challenges that each agency perceives in this regard.

Sylvia Alonzo explained the need to continue to make the case for food safety through generating data and providing evidence on the magnitude, impact and consequences of food safety issues and solutions to address them. She underscored the fact that solutions should be tailored to specific needs of target groups, and that consumer interest in food safety should be leveraged.

Jean-Phillippe Dop highlighted his organization's priorities: capacity building of veterinary services to implement standards that are rooted in best international practice; and encouraging the adoption of international standards through supporting the participation of countries in standard setting, emphasizing that dialogue is pivotal. He also underscored the importance of cooperation with other international organizations.

Aurelia Patricia Calabro highlighted two challenges of their mission: a lack of a systemic approach; and a lack of coordination of actors in food safety.

She outlined the three pillars of their work: capacity building for both actors in the food safety system and operators in the value chains; creating and investing in the regulatory framework and infrastructure; and promoting coordination and partnerships, including with the private sector, through awareness and advocacy.

Simeon Ehui emphasized the role of the World Bank as both a development and financial institution, with the shared objective of supporting activities that bring together and connect partners and create opportunities to address and scale up interventions. He informed the audience about the creation of the Global Food Safety Partnership, and the collaboration with different partners to prepare knowledge products.

Mathew Hudson underscored the need to tailor solutions based on beneficiaries' context, and the importance of educating consumers. He reminded the audience that Codex standards are available as a reference point, and stated that public authorities need to provide leadership and the framework for their application. He identified two incentives for the

private sector to support food safety: an educated consumer base; and the establishment of proper control structures to minimize abuse. He also drew attention to the issue of AMR and its increasing importance.

With reference to priority actions for moving forward, Simeon Ehui underscored the need for working more closely with partners, supporting multisectoral programmes, and taking preventative rather than reactive measures such as those applied when food safety emergencies occur. He brought the attention of the audience to a food security leadership dialogue that the World Bank plans to organize to identify solutions, including those related to food safety. Sylvia Alonzo noted that partnerships should be inclusive, and should involve those at the grass-roots level. She also underscored the importance of intercountry and intercontinental dialogue, learning and exchanges. Jean-Philippe Dop emphasized that investments should not be limited to material assets, but should also cover intangibles, such as people, knowledge and processes.

CLOSING SESSION



The Outcome Document of the First FAO/WHO/AU International Food Safety Conference – Chairperson's Summary – is presented in Annex 3.

The closing remarks of FAO, WHO and AU are presented in Annex 4.



GENEVA 23-24 APRIL 2019

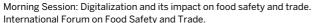


International Forum on Food Safety and Trade



The International Forum on Food Safety and Trade was held in Geneva on 23-24 April 2019. While harboring overall objectives of the two conferences, (i) to identify key actions and strategies to address current and future challenges to food safety globally; and (ii) to strengthen the commitment at the highest political level to scale up food safety in the 2030 Agenda for Sustainable Development, this Forum more deeply explored the trade-related aspects of food safety. The forum brought together an estimated 600 - 700 participants from multiple sectors, including agriculture, health, trade and finance. Attendees included Ministers, heads of food safety authorities, country delegates, consumers, academia, and representatives of the private sector, civil society and partner agencies.

The Forum was preceded by two pre-event sessions advocating for better investment in food safety systems and highlighting the relevance of food safety and trade for healthy diets. The high-level opening session featured the four Directors General of WTO, FAO, WHO and OIE, the AU Commissioner for Rural Economy and Agriculture as well as statements by four of the attending Ministers. The Forum hosted three very interactive expert panel discussions, underlining the importance of capacity building, digitalization, transparency, partnerships and international harmonization for the future of food safety and trade. The Forum programme is presented in Annex 5.





PRE-EVENT SESSION 1

ESTIMATION OF THE NATIONAL BURDEN OF FOOD-BORNE DISEASES – AN INVESTMENT FOR BETTER FOOD SAFETY SYSTEMS

23 APRIL, 10.00-11.30



MODERATOR:

Kazuaki Miyagishima, Director, Food Safety and Zoonoses, WHO

PANELLISTS:

Barbara Buck Kowalcyk, Assistant Professor, Department of Food Science and Technology, Ohio State University, the United States of America

Rob Lake, Manager, Risk Assessment and Social Systems, Institute of Environmental Science and Research Limited, New Zealand

Delia Grace, Programme Leader, Animal and Human Health, International Livestock Research Institute, Kenya

Lindita Molla, Head, Food Safety and Nutrition, Health and Environmental Department, Institute of Public Health, Albania

CLOSING REMARKS:

Naoko Yamamoto, Assistant Director-General, Healthier Populations, WHO

The session aimed to increase awareness and to further emphasize the importance for intervention at the government, policy and regulatory levels to address the need for safe food and allocate resources to the improvement of food safety systems.

Kowalcyk highlighted the fact that food safety is a global public good by sharing her personal story. Recognizing the

complex nature of food safety problems and the food system, she underscored the importance of using a risk-based approach, and the impact the burden that FBDs have on people's lives.

Lake explained the steps that a country can take to estimate the burden of FBDs – from conducting a situation analysis and running the actual estimation process to knowledge



translation. He emphasized several benefits of conducting such a national estimate, highlighting that knowing the burden of FBDs enables governments to: prioritize food safety in national public health resource allocation and interventions; facilitate trade and compliance with international market access requirements; identify system needs and data gaps; and coordinate food safety efforts by multiple state and non-state actors.

Grace touched upon the economic burden of FBDs, which is projected to equate to a USD 110 billion loss in terms of productivity and costs of treating illness in lower- and middle-income countries, based on a 2019 World Bank report. This loss is concentrated in certain countries in Africa and Asia, but there is evidence that investments do actually work to reduce the burden of FBDs.

Molla shared her experience as a principal investigator in conducting a national burden study in Albania with the technical support of WHO in 2015. Despite challenges, the pilot study led to many findings that will allow Albania to develop greater national capacity in food safety.

Yamamoto mentioned that food safety contributed to the attainment of multiple SDGs, such as SDGs 1, 2, 3, 8, 12 and 17. However, food safety should not be driven by the economy, as it risks creating one food safety for the rich and another food safety for the poor and vulnerable. In closing, she encouraged all countries to use the disease burden to trigger more public and private investment in food safety systems.

PRE-EVENT SESSION 2

TRADE, FOOD SAFETY AND HEALTHY DIETS

23 APRIL, 11.30-13.00



MODERATOR:

Máximo Torero Cullen, Assistant Director-General, Economic and Social Development Department, FAO

OPENING REMARKS:

Naoko Yamamoto, Assistant Director-General, Healthier Populations, WHO

PANELLISTS:

Mario Mazzocchi, Professor, Department of Statistical Sciences "Paolo Fortunati", University of Bologna Erik Wijkström, Counsellor, Division on Trade and Environment, WTO, and Secretary of the WTO, Technical Barriers to Trade (TBT) Committee

Angela Parry Hanson Kunadu, Lecturer, Department of Nutrition and Food Science, University of Ghana

The key points of the presentations and the discussions were the following:

- Trade creates both challenges and opportunities with regard to food safety and healthy diets. Policy options targeted at promoting healthier diets are available globally; however, such policies are effective to varying degrees. More evidence is required in this regard, as well as on the impact of nutrition policies on trade and markets.
- Trade policies cannot be considered as the best option with respect to

- objectives on nutrition and healthy diets. However, compliance with the principles of WTO Agreement on Technical Barriers to Trade harmonizes the trade mechanism and minimizes potential disputes.
- Striking a balance between food security, food safety and nutrition objectives requires political will and adequate data. In this regard, regulations are key, but establishing them requires collaboration by various stakeholders, including the public sector, the private sector and academia.

OPENING SESSION



The International Forum on Food Safety and Trade, hosted by the WTO in Geneva with the participation of WTO Director-General Roberto Azevêdo, Former FAO Director-General José Graziano da Silva, and WHO Director-General Tedros Adhanom Ghebreyesus, looked at the intersections between food safety and international trade with a three-pronged focus on the challenges and opportunities brought about by digitalization, trade facilitation and harmonization.

The Forum was opened by the Directors-General of the WTO, FAO, WHO and OIE, followed by statements from the AU and a number of Ministers from participating countries.



Roberto Azevêdo (WTO Director-General) recalled that access to safe food was a central element of public health, which is crucial in achieving the SDGs. The WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) highlights the interlinkages between food, health and trade policies. By ensuring that food safety requirements are science-based and

fit for purpose, it protects public health while minimizing unnecessary trade costs and barriers. The SPS Agreement references the Codex Alimentarius Commission (Codex) for food safety standards, thus illustrating the complementarity of the work done by WTO, FAO and WHO. Roberto Azevêdo cited the Forum as an example of joint engagement for the management of future policy challenges.





José Graziano da Silva (former FAO Director-General) described international trade as an important tool for tackling hunger, as many countries depend heavily on food imports to guarantee the availability of food for their people. However, countries also ought to guarantee that internationally traded food is safe and healthy. Therefore, it is crucial that the international community advance the establishment of rules and regulations that appropriately encourage the consumption of diverse, safe and nutritious food products. José Graziano da Silva said the Forum would serve to deepen collaboration between the relevant international organizations, strengthen Codex, and promote healthy food systems globally.



Tedros Adhanom Ghebreyesus

(WHO Director-General) saw the Forum as an opportunity to take food safety to the next level and mainstream it in the global health agenda. He also called for increased support for the Codex Trust Fund, whose assistance was sought by more and more countries. The Fund had become a true capacitybuilding instrument for national food control systems and helped make Codex stronger. Tedros Adhanom Ghebreyesus believed the Forum would help the participating international organizations forge a new way forward in how they worked together to promote health, keep the world safe and serve the vulnerable.

Monique Eloit, Director General, World Organisation for Animal Health (OIE), former FAO Director-General Jose Graziano da Silva, Tedros Adhanom Ghebreyesus, WHO Director-General and Roberto Azevedo, WTO Director-General. International Forum on Food Safety and Trade.





Monique Eloit (OIE Director-General) stressed the complementarity of the work undertaken by all four organizations. The OIE is a contributor to the work of Codex and part of the tripartite alliance working towards a One Health approach with FAO and the WHO. Moreover, OIE animal health standards are referenced in the WTO SPS Agreement; they have particular relevance for food safety, as producing safe meat products requires healthy animals. Monique Eloit said the Forum

would provide an opportunity to better identify and address the multiple challenges standing in the way of furthering food safety.



Josefa Leonel Correia Sacko

(African Union Commissioner for Rural Economy and Agriculture) gave an overview of the First FAO/WHO/AU International Food Safety Conference. which was held in Addis Ababa in February 2019.

Following this, the Opening Session continued with a series of statements from, successively, H.E. Saleh Hussein Jebur (Minister of Agriculture, Iraq), H.E. Anna Popova (Head of the Federal Service for Surveillance on Consumer Rights, Protection and Human Well-Being, the Russian Federation), Hon. Peter Bayuku Konteh (Minister of Trade and Industry, Sierra Leone), and H.E. Nasser Mohsen Baoom (Minister of Public Health and Population, Yemen).

SUMMARY OF THEMATIC SESSIONS



THEMATIC SESSION 1 DIGITALIZATION AND ITS IMPACT ON FOOD SAFETY AND TRADE

MODERATOR:

Ousmane Badiane, Regional Director for Africa, International Food Policy Research Institute (IFPRI)

SPFAKERS:

Frank Yiannas, Deputy Commissioner for Food Policy and Response, United States Food and Drug Administration

Enzo Maria Le Fevre Cervini, Senior Expert on International Relations at the Agency for Digital Italy – Presidency of the Council of Ministers

Lynn Frewer, Professor of Food and Society, Newcastle University

Simon Cook, Professor, Curtin University and Murdoch University

Session 1, moderated by Ousmane
Badiane, explored the transformative
effects of growing digitalization
and the rise of new technologies on
food safety and trade. Participants
stressed that an era of smarter food
safety is dawning, with all kinds of
digital agricultural technologies now
being used to connect operators all
along the supply chains and improve
traceability. This had the potential
to result in the increasingly efficient

production and trade of higher-quality and higher-value food. Yet, the world is still far from being able to fully exploit the opportunities afforded by the digitalization of food value chains, as current applications still tend to have limited reach and address a given segment or location of the value chain only, especially in low-middle-income countries. This makes it crucial to elaborate integrated solutions, design an effective infrastructure governance,

and scale up regulatory frameworks to promote interoperability and ensure that the value generated will be distributed among all actors and along the entirety of value chains. Overall, it will have to be a collective endeavour, bringing together the public and private sectors in as many countries as possible.

Simon Cook focused on issues of organizing digital technologies into the value chains, value creation and sharing, reaching farmers with information on desired quality of food and how to produce it, and how data and technologies enable processes to change practices and food systems on the ground and through distribution networks. He also shared considerations on scaling up processes (disruptive, accumulation) and actors. He underlined the fact that digital technologies come with a cost. As millions of small-scale farmers are engaged in food supply and will apply new technologies, there is a need to identify how created value goes back and is distributed to farmers, how they know what quality is expected and learn to produce food of needed quality, and how they are rewarded for quality products of known provenience. A critical issue is the equitable sharing of information, avoiding undue preference for large organizations, which tend to accumulate intellectual properties. He mentioned it is important that institutions that help digital governing processes consider promoting policies that reward farmers.

Enzo Maria Le Fevre Cervini stressed that - in the context of food supply chains that involve a multitude of actors and authorities dealing with food production and processing, food safety, public health, and trade having trustworthy information and the capacity to share this information are essential, and this requires standardization. One of the major roles of governance in this process is to support linking the benefits of innovations with policies, practices and regulation, and to guide the standardization process. He stressed that digitalization is already here, and with time its scaling up will increase the associated risks. Therefore, there is a need to invest equally in linking innovations' benefits with policies and practices, and to invest in cybersecurity risk management.

Lynn Frewer noted that digitalization is about both benefits and risks. The benefits include: faster communication across various geographical locations; help with collection and exchange of various datasets, such as those related to extreme climatic events, agrotechnical data, etc.; and flexibility. One of the risks relates to the creation of a digital underclass who cannot receive information. Not everyone has access to the Internet or smartphones; thus, they are especially vulnerable in critical emergencies. Uncontrolled information in social media may cause economic damage to producers. It is essential that the information come from trusted sources.





Frank Yiannas noted that anonymity and lack of traceability in food chains are among the causes of food fraud. Currently, digital technologies are being applied to certain segments of food systems. To be successful, digital technologies should be applied to the entire food chain continuum from farm to table. Emerging digital technologies, such as blockchain, have the potential to bring traceability, transparency and decentralization to food chains. This would facilitate meeting quality standards, achieving real certification, democratizing data sharing and value sharing. There is a need for distributed forms of governance. The benefits of digitalization are: more efficient and smarter supply chains; facilitated linking of farmers to customs and consumers; and timely payments.

Questions from the audience concerned the role of the public sector, international

organizations, cooperation, target groups and tackling food fraud.

The panel discussion concluded that the digitalization has a transformative role. It will provide solutions to small-scale famers in areas related to payments, connections with suppliers, customs, and access to market information and food safety requirements. One major source of exclusion may be the failure of lower-middle-income countries to adopt and apply digitalization. Platforms for diverse activities, such as e-certification or e-commerce, can streamline and expedite cross-border flows of foods and agricultural products but will also require new governance and regulatory approaches in order to ensure safety. Codex has enormous potential to support, and contribute to organizing, the digitalization of food systems with relevant, internationally agreed standards.

THEMATIC SESSION 2 **FNSURING SYNFRGIFS BETWFFN** FOOD SAFETY AND TRADE FACILITATION

MODERATOR:

Evdokia Moise, Senior Trade Policy Analyst, Trade and Agriculture Directorate, Organisation for Economic Co-operation and Development (OECD)

SPFAKERS:

France Pégeot, Executive Vice President, Canadian Food Inspection Agency

Tan Lee Kim, Director-General, Food Administration, and Deputy Chief Executive Officer, Singapore Food Agency

Rajesh Aggarwal, Chief, Trade Facilitation and Policy for Business, International Trade Centre (ITC) Elizabeth Murugi Nderitu, Acting Director, Standards and SPS, TradeMark East Africa

Session 2, moderated by Evdokia Moise, highlighted how trade facilitation and food safety mutually support each other. Rather than hindering effective food controls at the border, trade facilitation seeks to incentivize trade in safe food by promoting more efficient controls and a greater focus of inspections on high-risk food products, while also suggesting ways to conduct checks before or after the border to avoid the creation of bottlenecks. Countries that have made progress in this respect have relied on transparent import requirements and toolkits (e.g. single windows, customs clearance algorithms prioritizing inspections based on risk levels) that pay close attention to international standards, those of Codex in particular. Cooperation and

trust between exporting and importing country authorities are equally crucial, also between all customs and sanitary and phytosanitary agencies involved at the border, to allow for efficiency gains and avoid duplicative inspections. Finally, the private sector needs to be brought fully on board to ensure its actors are both cognizant of the regulatory requirements to be met and aware of the benefits that could come from developing a relationship of trust with food safety authorities.

France Pégeot stated that Canada, as an export-oriented country, has five key priorities for the synergies between food safety and trade facilitation: (i) modern, outcomeoriented regulatory toolkit, such as the Safe Food for Canadians Regulation,



aligned to the Codex Alimentarius food safety standards; (ii) digital tools and services, such as singlewindow e-platforms for sharing all export and import data, as well as e-certificates that can reduce the burden at the border; (iii) integrated, science-based risk assessment and risk management; (iv) consistent and efficient inspection; and (v) fostering trust and transparency on a national level between the private sector. different agencies and ministries. It is essential to ensure that private-sector entities understand the regulatory requirements and consider food safety their responsibility, especially for smaller suppliers. In addition, staff working in food safety authorities and border controls need to be adequately trained to create a professional culture of quality and food safety.

Tan Lee Kim noted that Singapore is an import-oriented country, with 90 percent of the food on the market being imported from more 180 countries. Singapore is adopting science-based risk management approaches to ensure food safety while allowing trade to take place. To optimize the workload, risk-based inspections are carried out; highrisk food products will be checked with high frequency. Accreditation at source for food with high public health or sanitary and phytosanitary risk enables less frequent inspections at the border for high-risk products from sources with high compliance. As one measure to strike a balance

between health protection and enabling trade, Singapore has a regionalization agreement with more than ten countries with which import restrictions are only implemented for affected products from affected regions in the event of an outbreak. For Singapore, there is a challenge in the availability of international standards for new technologies, such as alternative protein sources containing genetically modified yeast, which makes the development of national standards necessary and delays market access.

Elizabeth Murugi Nderitu focused on the challenges that many developing countries face. Often, there is insufficient collaboration and coordination between relevant national agencies and Ministries to ensure food safety. Due to the lack of collaboration between customs and sanitary and phytosanitary agencies, there is a lack of understanding and a barrier for harmonized regulations. Countries implementing trade food safety standards independent of international standards pose an additional obstacle, especially for smallholders, to access international trade. While producers may lack the capacity to comply with food safety standards, they may also just be unaware of new standards and requirements, which can even be due to a lack of translation into local languages. Compliant producers face the challenge of not being able to demonstrate their compliance owing to the lack of accreditation services or appropriately equipped and accredited



laboratories for testing. Hence, there is a strong need to strengthen the capacity of countries to demonstrate the compliance of their producers and so enable their access to international food trade.

Rajesh Aggarwal noted that many developing countries have yet to overcome many of the challenges tackled by developed countries. The private sector should be able to meticulously follow food safety regulations and standards, and be compliant. Food safety regulatory agencies often see themselves

purely as enforcers of their country's legislation, but they should also play a role in capacity building and creating a culture of hygiene, quality and food safety. Public-private dialogue should be enhanced, especially when regulations are changed. In addition, coordination is very difficult among food safety authorities, inspection agencies and border control agencies. There is a need to enhance transparency and awareness of the standards for producers, as well as to promote the accreditation of laboratories to certify compliance.



THEMATIC SESSION 3

PROMOTING HARMONIZED FOOD SAFETY REGULATION IN A PERIOD OF CHANGE AND INNOVATION

MODERATOR:

Guilherme da Costa, Chairperson, Codex Alimentarius Commission

SPFAKERS:

Rebecca Jane Irwin, Head, Canadian Integrated Program for Antimicrobial Resistance Surveillance Division, Public Health Agency of Canada

Anne Bucher, Director-General, Directorate-General for Health and Food Safety, European Commission Anthony Huggett, Board Member, Global Food Safety Initiative (GFSI)

Reri Indriani, Acting Deputy Chairperson, Drug, Narcotic, Psychotropic, Precursor, and Addictive Substance Control, National Agency for Drug and Food Control of the Republic of Indonesia

Session 3 was moderated by Guilherme da Costa. The chair opened the session by stressing the need for science-based international harmonization of food safety standards and by underscoring the central role of the Codex Alimentarius in this. The panellists shed light on the contemporary challenges presented by aligning domestic food safety requirements among countries. Recent global challenges, such as the spread of AMR, demonstrate the need for timely and coordinated responses drawing on evidence collected by and shared among all. This means embracing change and innovation in the alignment of food safety regulations and using all tools available, although the fundamental characteristics of Codex as the world's pre-eminent standardsetting body in the food safety area should be maintained. Equally, it remains important to keep science as the basis of all work, and to ensure that standards will always be underpinned by transparent and robustly conducted risk assessments. Beyond this, the global community will need to keep a sustained focus on building regulatory capacity in developing countries, as an enabler for their full and necessary engagement in international harmonization. The global community's ability to identify and address the challenges of applying global standards to situations that vary greatly at the national level, and among firms, will also prove crucial. In the end, success can only be achieved by harnessing the efforts of all (governments, food businesses, academia, etc.), as global

intersectoral cooperation will make it possible for all stakeholders to design new solutions and learn from one another.

Anne Bucher stressed that food safety is essential for human health and an enabler of international trade. She underlined the importance of a sciencebased approach to food safety, focused on risk assessment and management. Scientifically developed food safety standards are key to establishing trust, protecting consumers and harmonizing food safety regulations across borders, as in Europe. The European Union finds it key to have separation between science-based and consensus approaches to be applied transparently at the national level. In addition, discussions on transparency and the independence of scientific advice are important. While much knowledge already exists in the field of food safety, it is essential to invest in research to address knowledge gaps. For example, the topics of AMR and environmental sustainability should be high on the global agenda. The private sector should also be brought on board as it provides a vast amount of data and experience. Anne Bucher also highlighted the importance of Codex and the SPS Agreement in enabling countries to strengthen their food safety systems and allowing international trade.

Rebecca Irwin spoke about the growing severity of AMR in food systems and the need for an

international, collaborative One Health approach from farm to fork to tackle the issue, engaging all stakeholders involved. She highlighted the need for raising awareness and education on the matter for policymakers, producers and consumers. Fundamental roles for each entity must be defined, with clear moves towards a common goal. The risks of AMR can be controlled through good risk management procedures under a stewardship agenda. Tripartite Plus is a good example of intersectoral. international collaboration to reduce the public health burden of AMR and for sharing lessons learned from the community. Irwin also noted that there is a clear difference between monitoring veterinary residues and organisms that have developed AMR, calling for improved, integrated surveillance of AMR.

Reri Indriani spoke about Indonesia's success in establishing a food safety system and the struggles faced along the way. Having the awareness and support of the government, private sector, academia and the civil society has been key to that success. Codex standards serve as a basis for regulation in Indonesia, and Codex Indonesia actively participates in relevant national committees. Academia plays an important role in aiding the development of frameworks for food safety regulation, with the national food safety network, a food laboratory testing network, and the Indonesian risk assessment



centre comprising important pillars for internationally harmonized regulation. Indriani highlighted how rapid development has led to multiple challenges in the global market, and that food safety has to take into account public health, economies. digital fluency, and local or cultural products and practices. Small and medium-sized enterprises (SMEs) often lack resources and face barriers to meeting food safety standards, including on the use of antibiotics. Indonesia is strengthening producer as well as laboratory capacity to enable implementation of food safety regulations. In addition, educating the consumer on food hygiene is necessary. Close collaboration with all stakeholders and international organizations, coupled with expertise from developed countries and industry, is needed to eliminate technical barriers for consumer protection and trade facilitation in developing countries.

Antony Huggett briefly introduced the role of the GFSI as an organization that brings different stakeholders of the private sector together to ensure safe food around the world. While retailers had previously been using private food safety standards without alignment to international standards, GFSI requirements are based on Codex principles and are recognized in 162 countries, including by some national regulatory bodies. One issue that has led to diverging private-sector standards is the time frame of international standard

development. Issues such as AMR, food contact materials and acrylamide are regulated in some countries and the European Union, but not globally. It is important that Codex address these issues, which have also become barriers to trade. While most large enterprises have the capacity to abide by national and international food safety standards, SMEs often lack the appropriate resources. The GFSI's Global Markets Programme has been put in place to help smaller companies in developing and low-middle-income countries meet food safety standards and remove trade barriers. This also benefits larger enterprises as SMEs often form part of their suppliers. In the programme, the GFSI provides capacity building and guidance, mainly for farming and processing operations, at different levels. The GFSI strives to reduce food safety risks and decrease costs by improving efficiency. It acts as an international stakeholder platform but does not engage in policy or accreditation, nor does it own standards in any way. The private sector has a large amount of food safety data and experience, which are often already shared with regulators. To foster better exchange between the public and private sectors, there is a need for an environment of trust and transparency. Such an exchange platform could be led by international organizations.



CLOSING SESSION



The conclusion of the Forum featured high-level interventions from the FAO, WHO and WTO.

Máximo Torero Cullen (FAO Assistant Director-General) highlighted the centrality of food safety and trade in today's world, and saw in the conclusions drawn from the Forum discussions the potential for a significant agenda of work going forward for the three organizations. His recommendations included: addressing asymmetries of information across modern food value chains to make them more inclusive for smallholders: understanding precisely why and where problems were arising in those chains (evidence of causality) and what was needed to resolve them; and promoting a government role in solving the digital divide in the food sector, as governments could introduce interoperability and competition. He emphasized more broadly the role the public sector at large has to play to optimize the benefits or minimize the negative consequences of market decisions.

Naoko Yamamoto (WHO Assistant Director-General) stressed the need for more data in order to strengthen the science-based approach to food safety. She recalled that FBDs were less noticeable than other major issues discussed by global health leaders, such as malaria or HIV, and therefore suffered from significant underreporting. She called on the three organizations to continue working together to expand their capacity in this respect, and more generally to strengthen their partnership. As much had been invested in the Forum, so every effort should be made to keep the momentum and dialogue going for improving food safety.

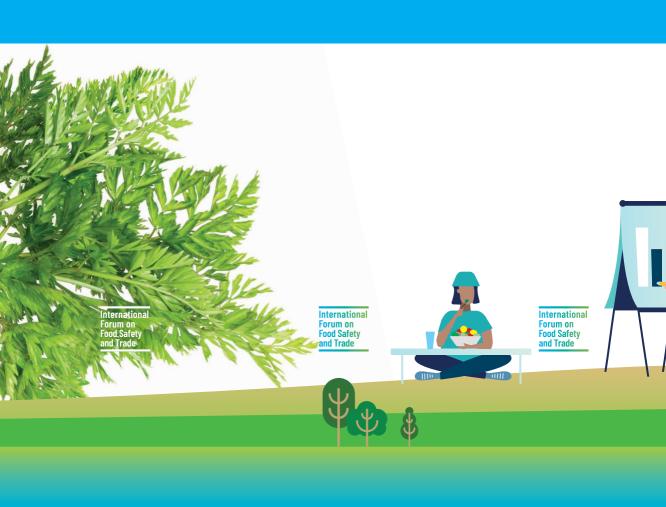
Alan Wolff (WTO Deputy Director-General) commended the Forum for its future-oriented discussions focus. This showed that improving food safety would require a multisectoral, interdisciplinary and collaborative approach cutting across agriculture, health, trade, economic development, tourism and other areas. Food safety is a shared responsibility, whose end

result will depend on building capacity and improving cooperation across different government agencies, as well as with the private sector, consumer organizations and others involved in the food chain. In that respect, building strong partnerships among international and regional organizations and stakeholders along the value chains will prove essential. Alan Wolff concluded by thanking all of the participants in the Forum for making a significant contribution to the process of international engagement, which he trusted would not end there.

Monique Eloit (OIE), Jose Graziano da Silva (FAO), Tedros Adhanom Ghebreyesus (WHO) and Roberto Azevedo (WTO).



ANNEXES



ANNEX 1.

PROGRAMME OF THE FIRST FAO/WHO/AU INTERNATIONAL **FOOD SAFETY CONFERENCE**

12 FFBRUARY

10.00-11.30

OPENING SESSION

Ibrahim Assane Mayaki.

Chief Executive Officer, New Partnership for Africa's Development (NEPAD) – Conference Chairperson

Josefa Leonel Correia Sacko,

African Union Commissioner for Rural Economy and Agriculture

José Graziano da Silva.

FAO Director-General

Tedros Adhanom Ghebrevesus.

WHO Director-General

Roberto Azevêdo,

WTO Director-General

Moussa Faki Mahamat.

African Union Commission Chairperson

Abiy Ahmed,

Prime Minister of Ethiopia

12.00-13.00

OPENING MINISTERIAL PANEL

OVERCOMING FOOD SAFETY CHALLENGES

Oumer Hussein, Minister of Agriculture, Ethiopia

Noel Holder, Minister of Agriculture, Guyana

Datuk Seri, Minister of Health, Malaysia

Ezechiel Joseph, Minister for Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives, Saint Lucia

Peter Bayuku Conteh, Minister of Trade and Industry, Sierra Leone

Sun Meijun, Vice Minister, State Administration of Market Regulation, China

Ashraf Esmael Mohamed Afifi,

First Deputy Minister - Chairman of the Board of the Egyptian Organization for Standardization and Quality, Egypt

Erkinbek Choduev, Deputy Minister of Agriculture, Food Industry and Melioration, Kyrgyz Republic

MODERATOR:

Girum Chala, Journalist, China Global Television Network (CGTN), Ethiopia

14.30-16.30

THEMATIC SESSION 1

THE BURDEN OF FOODBORNE DISEASES AND THE BENEFITS OF INVESTING IN SAFE FOOD

The public health burden of unsafe foods: a need for global commitment

Arie Hendrik Havelaar, Professor, University of Florida, USA



Economic case for investments in food safety

Steven Jaffee, Lead Agricultural Economist, World Bank Group

Leveraging private sector investment for safe value chains

Ed Mabaya, Manager, African Development Bank

People-focussed food safety investment in low- and middle-income countries

John McDermott, Director of CGIAR Research Program on Agriculture for Nutrition and Health (A4NH), International Food Policy Research Institute (IFPRI)

The need for integrated approaches to address food safety risk - the case of mycotoxins

Chibundu Ezekiel, Senior Postdoctoral Researcher, Babcock University, Nigeria

MODERATOR:

Nathan Belete, Agriculture Global Practice Manager, World Bank Group

16.30-18.30

THEMATIC SESSION 2

SAFE AND SUSTAINABLE FOOD SYSTEMS IN AN ERA OF ACCELERATED CLIMATE CHANGE

Climate change and implications for food safety

Cristina Tirado-von der Pahlen, Director of International Climate Initiative, Loyola Marymount University, USA

Safe, sustainable crop production: meeting the goals

Howard-Yana Shapiro, Chief Agricultural Officer, Mars Inc., USA

Safe and sustainable livestock production

Tim McAllister, Principal Research Scientist, Agriculture and Agri-Food Canada

Safe and sustainable aquaculture intensification

José Miguel Burgos, Researcher, University of Chile and former Director Sernapesca

Alternative food and feed products

Eva Maria Binder, Chief Research Officer, ERBER Group, Austria

MODERATOR:

Abebe Haile-Gabriel, Assistant Director-General and Regional Representative for Africa. FAO

18.30-19.30

PANEL DISCUSSION

CIVIL SOCIETY AND PRIVATE SECTOR

Leon Gorris, Head of Food Safety, International Union of Food Science and Technology (IUFoST)

Cris Muyunda, CSO Coordinator, Comprehensive Africa Agriculture Development Programme (CAADP)

Samuel Godefroy, Professor, Laval University, Canada

Laura Fernández Celemín, Director-General, European Food Information Council (EUFIC)

Owen Fraser, President, Association of Analytical Communities (AOAC International), Sub-Saharan Africa Section

Greg S. Garrett, Director, Food Policy and Financing, Global Alliance for Improved Nutrition (GAIN)

Barbara Kowalcyk, Co-founder and former CEO of the Center for Foodborne Illness Research & Prevention (CFI), USA

David Crean, Vice President, Corporate R&D, Mars Inc., USA

MODERATOR:

Girum Chala, CGTN Journalist, Ethiopia

19.30-21.30

CONFERENCE RECEPTION

Multipurpose Hall

13 FFBRUARY

9.00-11.00

THEMATIC SESSION 3

SCIENCE, INNOVATION AND DIGITAL TRANSFORMATION AT THE SERVICE OF FOOD SAFETY

Whole genome sequencing - paving the way forward globally to better understand food systems

Juno Thomas, Head of the Centre for Enteric Diseases, National Institute for Communicable Diseases, South Africa

Novel food production

Aideen McKevitt, Professor, University College Dublin, Ireland

Novel analytical methods and models for enhanced food safety

Steven Musser, Deputy Center Director of Scientific Operations, Food and Drug Administration, USA

Policy considerations for the development and adoption of technologies for local food value chains

Kennedy Bomfeh. Food Scientist. University of Ghana

Digital transformation of the food system

Mark Booth, Chief Executive Officer, Food Standards Australia and New Zealand

MODERATOR:

Robert van Gorcom. Director of the Food Safety Research Institute (RIKILT), Wageningen University & Research. The Netherlands

11.30-13.30

THEMATIC SESSION 4

FMPOWERING CONSUMERS TO MAKE HEALTHY FOOD CHOICES AND SUPPORT SUSTAINABLE FOOD SYSTEMS

Understanding food safety risks and uncertainties and meeting citizens' expectations as food systems become more complex

Barbara Gallani, Head of Communication, Engagement and Cooperation, European Food Safety Authority (EFSA)

Effective communication and engagement with the public about food safety and quality issues in the digital age

Lynn Frewer, Professor, Newcastle University,

Dietary transitions and the triple burden of malnutrition necessitate action

Francesco Branca. Director of the Department of Nutrition for Health and Development, WHO

Harnessing market drivers of food safety

Stephen Mbithi, Technical Advisor and former Chief Executive Officer of the Fresh Produce **Exporters Association of Kenya**

Sharing responsibility for consumer empowerment

Rebecca Berner, Institutional Development Director, Consumers International, Mexico

MODERATOR:

Svetlana Akselrod. Assistant Director-General. Non-Communicable Diseases and Mental Health, WHO



14.30-15.30

SIDE EVENT:

AFRICAN UNION SPECIAL EVENT ON TRADE OF SAFE FOOD IN FREE TRADE AREAS

15.30-16.00

SUMMARY OF THE THEMATIC SESSIONS

Ibrahim Assane Mayaki, Chief Executive Officer, New Partnership for Africa's Development (NEPAD) – Conference Chairperson

16.00-17.00

PANEL DISCUSSION

POLICY MAKERS AND HEADS OF NATIONAL AGENCIES

Pawan Agarwal, Chief Executive Officer, Food Safety and Standards Authority of India. India

Jorge Dal Bianco, National Directorate for Food Safety and Quality (DNICA), Argentina

Sètondji Epiphane Hossou, Director General, Benin Food Safety Agency (ABSSA), Benin

Zainab Jallow, Director General, Food Safety and Quality Authority, Gambia

Bernhard Kühnle, Director-General for Food Safety and Animal Health, Federal Ministry of Food and Agriculture, Germany

Mohammad Mahfuzul Hoque, Chairman, Bangladesh Food Safety Authority, Ministry of Food, Bangladesh

Hussein Mansour, Chairman of the National Food Safety Authority, Ministry of Agriculture and Land Reclamation, Egypt **Pietro Noè**, Director, Directorate General for Food, Hygiene and Safety and Nutrition, Ministry of Health, Italy

Vyacheslav Y. Smolenskiy, Deputy Head of Rospotrebnadzor, Russian Federation

MODERATOR:

Mary Lou Valdez, Associate Commissioner for International Programs, Office of International Programs, Food and Drug Administration, USA

17.00-18.00

PANEL DISCUSSION PARTNER ORGANIZATIONS

Jimmy Smith, Director-General, International Livestock Research Institute (ILRI)

Jean-Philippe Dop, Deputy Director-General, Institutional Affairs and Regional Activities, World Organisation for Animal Health (OIE)

Aurelia Patrizia Calabrò, Representative and Director of the Regional Hub in Ethiopia, UNIDO

Simeon Ehui, Director of Food and Agriculture Global Practice, World Bank Group

Matthew Hudson, Director, DG Health and Food Safety, European Commission

Stephanie Hochstetter, Director-Rome Based Agencies Coordination, World Food Programme

MODERATOR:

Girum Chala, CGTN Journalist, Ethiopia

18.00-19.00

CLOSING SESSION

Summary of key messages from the panels Addis Ababa Statement on the Future of Food Safety

Closing remarks

ANNEX 2.

OPENING SPEECHES AT THE FIRST FAO/WHO/AU INTERNATIONAL FOOD SAFETY CONFERENCE

Statement by

H.E. Amb. Josefa Sacko

Commissioner for rural economy and agriculture, African Union commission

Distinguished Ladies and gentlemen,

It gives me great pleasure to extend to you all a very warm welcome on behalf of African Union and to say how grateful we are to the Government and people of Ethiopia for accepting our request to host this event.

To our visitors, welcome to Africa- and to the Headquarters of the African Union.

I wish to acknowledge that we are all attending this conference in our different capacities. Amongst us are Presidents, Ministers, Heads of Food Safety Institutions, leading authorities on food safety, technical experts, international organizations, development organizations, food producers, the private sector, civil society and the media.

Notwithstanding, we are all united by a common denominator, which is food safety, we are all consumers! And our quest to assure the safety of our food systems has brought us together. I hope you are all well and are excited to be here as I am, to discuss matters of food safety.

I recognize our co-organizers, FAO and WHO, and the unflinching support of the European Union and other partners that have supported this Conference. Thank you for your continued support.

Over the years, tremendous investments and progress have been made by governments, development organizations and other partners to improve food safety globally. However, the challenges that our food systems face are still numerous.

Inadequate risk-based food laws in some countries, limitations in regulatory oversight and extension activities coupled with inadequate integration of food safety research outcomes into food control systems remain an impediment in assuring food safety to consumers.



Ladies and gentlemen,

Today we face yet another public health threat - Antimicrobial Resistance. In the past decades, inappropriate use of antimicrobials especially in humans and animals, has promoted the evolution of microorganisms that are resistant to commonly used antimicrobials.

We are now witnessing the spread and prevalence of antimicrobial resistant organisms including resistant foodborne pathogens which have direct impact on food safety. Consumption of food contaminated with resistant foodborne pathogens means that humans will acquire foodborne diseases that can no longer be cured. Years of public health gains could be easily derailed by antimicrobial resistances if urgent mitigation measures are not pursued in all countries of the world.

The changing rainfall patterns and extreme weather conditions are equally important environmental stressors that are likely to exacerbate the food safety challenges I have already enumerated. Food safety also has a direct impact on the global goal of ending hunger in all its forms by 2030 and achieving food security. Unsafe food contributes to food insecurity because it reduces the quantity of food available for consumption.

It is obvious that, no country or region can exist in functional isolation in the quest to address these food safety challenges. We need to make deliberate efforts to bring all countries to an acceptable capacity threshold where food safety can be managed to protect public health and with minimal distortions to food trade whether in local or international markets.

We need heightened commitment to enhance food safety management in all countries of the world. The need for strategic and smart partnerships for the safe and environmentallyfriendly production of food is urgent.

Addressing contemporary food safety issues will require changes in policy and practice across multiple sectors and disciplines.

Ladies and gentlemen,

The African Union remains committed to this call, and will continue to engage in strategic partnerships to support our Member States to establish and operate functional and effective institutional structures, to provide policy guidance and create a policy environment that assures the delivery of safe and nutritious food.

I am encouraged by the high-level political representation and the diverse experiences in this conference. I have no doubt that this conference will lead to the required commitments for increased and better coordinated collaboration and support to improve food safety globally.

I welcome you all again to Africa and the African Union Headquarters and I wish you fruitful deliberations.

Thank you





Statement by

José Graziano da Silva

Former FAO Director-General

Addis Ababa, 12 February 2019

First of all, I want to thank the Government of Ethiopia and the African Union Commission, particularly Chairperson Moussa Faki and Commissioner Josefa Sacko, for hosting and co-organizing this very important Conference, along with FAO, WHO and WTO.

Let me start by highlighting that food safety is a fundamental element of the 2030 Agenda for Sustainable Development. It is directly related to many of the Sustainable Development Goals.

In fact, without food safety, we cannot eradicate hunger and all forms of malnutrition, the SDG number 2.

Without food safety, there is no healthy lives for all, the SDG number 3.

Also without food safety, there is no sustainable production and consumption patterns, the SDG number 12.

And without food safety, there is no international food trade that can help a sustained economic growth, the SDG number 8.

This is why FAO, WHO and WTO are organizing two major Conferences to discuss the future of Food Safety, and to strengthen even more our joint and collaborative work.

Here in Addis, as already mentioned by Commissioner Sacko, we will focus our debates on the importance of food safety to fight all forms of malnutrition.

In 23 and 24 of April, in Geneva, the second food safety conference will address the importance of strengthening food safety standards to improve and enhance international trade.

Allow me to also thank the World Organization for Animal Health (OIE) and other institutions who have provided valuable support for the organization of these High Level events.

Ladies and gentlemen,

Food security does not only mean that enough food is produced, and that all people have access to this food.

Food security also means that all food must be safe for consumption.

Today, the world produces enough food to feed everyone, but we have clear indications that an important part of this food is not safe or healthy.

More than 1 billion people suffer from micronutrient deficiencies nowadays; not to mention the recent increase of people suffering from hunger.

About 150 million children are stunted.

At the same time, more than 670 million people are obese. Obesity is growing everywhere.

We are witnessing the globalization of obesity.

Furthermore, food-borne illnesses affect 600 million people, and cause more than 420 000 deaths every year, according to the WHO.

The costs of unsafe food go far beyond human suffering. It can hamper socioeconomic development and overload health care systems.

Malnutrition is today the largest cause of health loss in the world. Estimates indicate that malnutrition costs the global economy up to USD 3.5 trillion annually.

Obesity alone costs USD 2 trillion per year from direct healthcare costs and lost economic productivity. It is a similar amount to the costs of smoking or armed conflicts.

All these numbers show that we cannot only focus on the quantity of food produced.

We also have to invest in the quality of food for consumption.

There is no food security without food safety.

Ladies and gentlemen,

Consumption patterns are undergoing rapid changes due to many factors, like urbanization, new dietary trends and climate change impacts.

Studies indicate that climate change will make some types of food more risky and less healthy to consume.

In some staple crops, climate change may increase the risk of carcinogen substances, such as aflatoxin. This can be the case particularly in tropical areas, as temperatures rise and rainfall patterns change.

Climate change is also reducing the levels of important nutrients like zinc, iron, calcium and potassium in important staple crops like wheat, barley, potatoes and rice.



Some varieties of wheat, for example, now have more carbohydrates and less protein.

All these threats will only increase.

The World Meteorological Organization (WMO) has confirmed that the past 4 years were the warmest on record.

The scientific publication LANCET has just released a very interesting report.

It highlights that the world is facing today what they call a "Global Syndemic of Obesity, Undernutrition and Climate Change".

It is the synergy of three pandemics (Obesity, Undernutrition and Climate Change) that co-exist in time and place, and interact with each other to produce complex consequences.

So we have to face all these challenges together through a food systems approach.

We have to guarantee that our food systems provide safe, healthy and nutritious food for all.

This requires action on many fronts.

For example: using less chemicals and pesticides in agriculture; investing in the adaptation of agricultural sectors, as well as promoting more complete food labelling standards for consumers.

Food contaminated with antimicrobial-resistant organisms (AMR) is also a major threat to humans. We urgently need to halt the use of antibiotics in animals in a preventive way or to stimulate animal growth.

In all these cases, specific legislation and public policies are very important.

We also need to invest in surveillance, monitoring and information technologies to improve our food safety systems.

For that, cross-sectoral collaboration is fundamental, particularly under the concept of the "One Health" Approach.

Ladies and gentlemen,

Today, we have globalized food markets and food supply chains.

A local problem can rapidly escalate to an international emergency, exposing populations worldwide to food hazards.

Many developing countries, for instance, import a significant share of their food supply, with some of them relying almost entirely on food imports.

In this context, there is a need to strengthen and harmonize trade standards, build robust legal frameworks, and integrate evidence-based food safety into national and regional policies.

The Joint FAO/WHO Codex Alimentarius offers a great platform for that, as an intergovernmental food standards setting body.

Codex standards cover the entire food production chain, ensuring that food is safe to eat regardless of the borders that it has crossed.

This is vital to improving and enhancing international trade.

Science, innovation and digital technology also play a critical role.

E-certification schemes, for instance, can facilitate inspections with the added bonus of promoting market access to small family farmers.

Ladies and gentlemen,

This Conference is a great opportunity for the international community to strengthen political commitments and engage in key actions.

Safeguarding our food is a shared responsibility. We must all play our part.

We must work together to scale up food safety in national and international political agendas.

It is very important that countries can endorse here in this Conference a robust and ambitious Addis Statement on Food Safety

This would help to guide the international community on the way forward.

Let me remind you that on June 7th, we will celebrate the first World Food Safety Day. It will also provide a good opportunity to raise public awareness and inspire actions to promote food safety around the world.

To conclude, allow me to repeat: there is no food security without food safety.

And if it is not safe, it is not food.

Thank you for your attention



Statement by

Tedros Adhanom Ghebreyesus

WHO Director-General



Your Excellency Abiy Ahmed Ali, Prime Minister of Ethiopia,

Your Excellency Moussa Faki, Chairperson of the African Union Commission,

Your Excellency Josefa Leonel Correia Sacko, African Union Commissioner for Rural Economy and Agriculture,

Mister José Graziano de Silva, Director General of the Food and Agriculture Organization of the United Nations,

Mister Roberto Carvalho de Azevêdo, Director General of the World Trade Organization,

Excellencies, distinguished delegates, colleagues, ladies and gentlemen,

Like air and water, food is fundamental to life itself. We need it to survive and thrive.

But food is so much more. It's a source of enjoyment. It's an expression of culture and faith. It's an art form. And it brings families, friends and communities together.

Food is an essential part of what it means to be human.

Which is why unsafe food is so unacceptable.

It turns what should be a source of nourishment and enjoyment into a source of disease and death.

Unsafe food is responsible for hundreds of thousands of deaths every year.

And yet food safety has not received the political attention it deserves.

How many people who have diarrhoea will consult a doctor? Very few.

If they do, what are the chances the symptom will be linked to contaminated food? Very low.

If food poisoning is diagnosed, will the case be reported to health authorities? Rarely.

Because of massive under-reporting, the global burden of foodborne disease remained unknown until WHO published the first estimates in 2015.

Today, we know that foodborne diseases caused by chemicals, viruses, bacteria and parasites kill hundreds of thousands of people every year.

Those most affected are children under five in Africa and South Asia.

What can we do about this unacceptable situation?

Improving food safety in countries requires sustained investments in several areas, from stronger regulation, to better laboratories, more stringent surveillance and better training and education.

Historically, upgrades to food safety systems have been triggered by large-scale outbreaks of foodborne diseases.

Food safety systems in Europe and other parts of the world were modernized in the 1990s after the emergence of variant CJD, which is associated with eating contaminated beef.

Fortunately, food safety crises like that are rare.

But many outbreaks of foodborne disease are quickly forgotten by policy makers and the public.

Lessons are not learned, the same mistakes are repeated, and people continue to suffer.

Although its effects are felt by individuals, families and communities, food safety is not an issue that can be addressed only with local solutions.

Food markets and food supply chains are now massive global industries.

For example, food grown in country A may be exported to country B for processing. It is then incorporated into a final product in country C, along with other ingredients manufactured in countries D, E, and F. Then it is sold in country G.

If there is a safety problem, recalling food products can be extremely complex – and even more difficult when they are sold over the internet.

All of this means that food safety is everyone's issue.

We are only as strong as the weakest link.

To connect national food safety systems, WHO and FAO created the International Network of Food Safety Authorities, INFOSAN, more than 10 years ago.

INFOSAN supports countries to manage food safety risks by sharing information, experiences and solutions.

But the level of commitment to this network remains uneven.

I invite you to visit the INFOSAN exhibition booth outside this room and consider how much more your country can contribute to and benefit from this network.

In our globalized world, we must work together.

Excellencies, ladies and gentlemen,

Food safety is not only important for fighting hunger and promoting health.

It's critical for achieving the Sustainable Development Goals.



Food safety is intimately linked to many other SDGS, including economic growth, innovation, responsible consumption and production, and climate action.

As part of the United Nations Decade of Action on Nutrition, many countries have made commitments on nutrition, but very few have made commitments on food safety.

But there is no food security without food safety.

One area countries must address is combating antimicrobial resistance in the food chain.

The inappropriate use of antibiotics in food-producing animals is contributing to the emergence of drug resistance in human pathogens.

Another issue is the impact of climate change on food safety. We need to understand the adverse interactions between these two issues and start acting now to fight them.

Both of these issues highlight that food safety is not an issue for one agency, or one ministry.

I am delighted that this meeting is bringing together representatives from the public and private sectors, agriculture, fisheries, environment, trade, and the food industry.

Without this kind of collaboration, we cannot reduce the burden of foodborne diseases.

We can only make progress with a "One Health" approach that addresses food safety holistically.

Excellencies, ladies and gentlemen,

Thank you for your commitment to this issue.

Let me leave you with three requests.

First, learn from our mistakes. Use this meeting to share experiences, understand problems and identify solutions. Every outbreak of foodborne disease is an opportunity to ensure the same thing never happens again.

Second, build bridges. This meeting is an opportunity to create strong networks within and between countries, and within and between sectors.

Finally, innovate for investment. The world needs a mechanism for investing in food safety in a sustainable way, adapted to national and regional circumstances. This gathering is an opportunity to lay the foundations for that mechanism.

Learn. Build. Innovate.

I thank you.

Statement by

Roberto Azevêdo

WTO Director-General



Ladies and gentlemen,

Good morning. It is a pleasure to join you today.

Food safety is a central element of public health and will be crucial in achieving the 2030 Sustainable Development Goals.

So this Conference is a welcome way of highlighting this vital topic.

The WTO is happy to be a part of it. In fact, we will be hosting the second part of this event at our headquarters in Geneva on 23-24 April: the FAO-WHO-WTO Forum on Food Safety and Trade. It will be an opportunity to explore the deeper interlinkages with trade issues.

Trade matters because it helps lift people out of poverty. It helps economies to grow. It helps workers to find better jobs, businesses to find new markets, and consumers to access a wider range of products, with lower prices.

The World Trade Organization underpins global trade – complemented by important regional initiatives like the African Continental Free Trade Area.

But our job isn't just to boost trade. We must also ensure that trade works together with vital public policy and health imperatives such as food safety.

We need to maintain effective food control systems to ensure that imported food is safe.

Consumers need to be able to trust the food that they import just as they would trust the food that is supplied domestically. Importing food helps to lower prices, particularly for goods that are consumed by the poorest in society – and they need to be confident that their food in safe.

Equally, exporters must know what the food safety standards are and be able to comply with them.

The WTO, and its range of rules and disciplines, helps us to achieve all this. The WTO's sanitary and phytosanitary agreement is a prime example.

Since it entered into force 24 years ago, this Agreement has made a very important contribution. It ensures that food safety requirements are based on science and that they are fit for purpose, thereby protecting public health and at the same time minimizing unnecessary trade costs and barriers. This is in everyone's interests.



Taking full advantage of the trading system to achieve these ends requires capacity. This was recognized by the FAO, WHO and WTO, together with the OIE and the World Bank, when we came together to establish the Standards and Trade Development Facility (the STDF).

This facility provides a platform for development partners to come together to:

- discuss capacity building needs in this area,
- share experiences and good practice, leverage additional funding,
- and work on coordinated and coherent solutions.

The STDF also provides funding for the development and implementation of innovative projects, benefiting both the public and private sector. The goal is to build capacity in developing countries to implement international sanitary and phytosanitary standards, and to help them gain and maintain market access.

This is important work. And it is particularly important in the context of the new opportunities and challenges that are facing food safety and trade.

When we reconvene in Geneva in April, we will consider some of these issues in more depth, so I'll be very brief today.

And let me start with digitalization and use of new technologies. They are already having an impact on both food safety and trade.

These technologies make it easier to trace products throughout a supply chain, and traceability is key to ensuring food safety and addressing risks when they arise. Electronic certification can be more reliable and efficient than paper-based systems, therefore reducing costs and facilitating trade.

But the use of such technologies requires investment. So a key focus of the discussion must be on how to bridge the digital divide between countries at different levels of development.

In this context, the WTO's Trade Facilitation Agreement can play a positive role. It aims at streamlining border processes to help goods move more smoothly and more quickly. Reducing the time needed for goods to cross borders can make all the difference when your exports are perishable products, such as cut flowers or green beans from Kenya and animal products from Ethiopia. And reducing trade costs is important for everyone.

Of course, the safety of imported products also needs to be ensured, and the Agreement recognizes that cooperation among different border agencies plays a fundamental role.

Another key issue is access to information.

Surveys among traders show that information costs are very high. It can take a lot of time and resources to find out exactly what food safety and other requirements their products need to comply with, and what procedures and documentation requirements apply at the border.

Therefore improving transparency is vital. This is a key part of our work at the WTO. We are working to make it easier for traders and for producers along the value chain to find this essential information.

In this vein, together with ITC and the United Nations Department of Economic and Social Affairs, the WTO has developed a tool, called ePing. It is designed to help small businesses, traders and other stakeholders stay informed about food safety and other requirements. They receive email updates, whenever there is a new regulation in a market or on a product that they are interested in.

This innovation has already proved very successful – and so I think this is something that we should seek to build on in future.

Taking a broader perspective, we need to ensure that we use the latest technologies and innovations to support food safety, and agriculture in general.

Farmers need to have access to the best available information and technology, and consumers increasingly expect to have access to information about their food.

Regulatory frameworks should support this. So we should look at how farmers, consumers and those engaged in food value chains can benefit from the digital revolution – in the interests of us all.

I detect a real desire to deepen the debate on these issues. We must ensure that we are fully ready to meet the challenges and seize the opportunities that we see on the horizon.

So I wish you all a successful meeting and fruitful exchanges over the coming days.

And I look forward to welcoming all of you to the WTO in April to continue the conversation.

Thank you.



Welcome address by

H.E. Moussa Faki Mahamat

Chairperson of the African Union Commission

Excellency Paul Kagame, Outgoing Chairperson of the African Union

Excellency Abdel Fattah Saeed Hussein Khalil El-Sisi, incoming Chairperson of the African Union

Excellencies Heads of State and Government.

José Graziano da Silva, Director General of FAO

Tewodros Adhanom, Director General of the World Health Organization

Distinguished Heads of Delegation,

Invited Guests.

Before I begin my speech, I would like to first ask the audience a very interesting question. Who here has never been a victim of food poisoning or any other food related diseases in their lifetime? This will show you how important the topic of my speech is today.

Today, the African Union Commission and the United Nations, once again, come together to address a common challenge. The partnership between the AU and the UN has been long standing and can be seen as one of the most strategic. Reinforcing this, in January 2018, we have signed the AU–UN framework for the implementation of agenda 2063 and the 2030 agenda for sustainable development. This first AU/FAO/WHO International Food Safety Conference is an illustration of this unrelenting partnership. The African Union Commission greatly appreciates this alliance.

The Food Safety agenda is an important one to all stakeholders. Each year, millions of people get foodborne illnesses. Each year, hundreds of thousands (420 000) die due to foodborne illnesses. However, the African continent is disproportionally affected by food safety challenges daily. The number of food borne diseases and deaths are among the highest in the world. The World Health Organization tells us that currently, in Africa, food borne disease accounts for more than 91 million cases of illness each year. Meanwhile, stunting and underweight affect 39 percent of African under 5s. It is therefore not a coincidence that this meeting is held here in Africa, it is a necessity. Africans deserve safe food.

Over the past decades, our member states, realizing the importance of agriculture, food security and trade in the development of the continent, have moved forward in adopting continental strategies such as the Comprehensive Africa Agriculture Development Programme (CAADP) in 2003, followed by their renewed commitment to CAADP through the Malabo Declaration of 2014 and the African Continental Free Trade Area

(AfCFTA). While this sustained attention to food security and trade is imperative, the limited attention to food safety systems can be self-defeating. Food safety receives minimal investment and policy attention and only captures the attention of our Member States when there are foodborne outbreak. The result is weak food safety systems and populations left to fight on their own.

One of our central projects of Agenda 2063 is the African Continental Free Trade Area (AfCFTA), a continental market for goods and services, with free movement of people and investments while also accelerating Intra-Africa trade through better harmonization and coordination of trade liberalization.

It is no surprise to anyone that food safety has become an important precondition to export markets and, if not addressed proactively, can be an impediment to the AfCFTA, particularly in agricultural goods and services, and the competitiveness of the agriculture sector in Africa.

Over the years, the African Union has been committed to improving the lives of Africans through its various technical institutions such as AU-IBAR, PATTEC and PANVAC working on animal Health, and AU-IAPSC, working on plant health. Thus far, there is no mechanism to address and coordinate food safety on the continent. It is indeed high time, that food safety receives the attention it deserves. It is against this background that we, at the African Union, are working towards establishing a Continental Food Safety Agency. This Agency, coordinated by the AU, will support AU Member States and RECs in addressing the complex challenges in food safety and support the advancement of continental development strategies.

Today, I'm pleased to see that the highest political institutions have come together to discuss food safety challenges, not only in Africa but globally. It is also reassuring to see stakeholders from different countries, organizations and professions coming together, to discuss food safety matters for our continent and the globe. The collaboration of continents, towards a common objective of improving the lives of people, will facilitate greater understanding and a move towards a cooperative world.

The food safety burden on Africa and the global community can't be diminished. Countries must build their food safety systems through human and infrastructural capacity building, by creating vibrant food safety culture to bring about behaviour changes and ensuring better regulatory frameworks.

In conclusion, as we continue working towards the "Africa we want", I plead with governments to take ownership of our continental agenda and to work together in building strong alliances and institutions to protect and improve the lives of Africans.

I thank you for your attention and I wish you fruitful deliberations!

ANNEX 3.

CHAIRPERSON'S SUMMARY

The First FAO/WHO/AU International Conference on Food Safety met in Addis Ababa, Ethiopia, from 12 to 13 February 2019, with more than 500 participants representing over 110 governments, several international and regional intergovernmental organizations as well as civil society and the private sector.

Participants recalled the previous and ongoing efforts¹ made by governments and other stakeholders; highlighted the integral role of food safety in achieving the 2030 Agenda for Sustainable Development, in particular its Sustainable Development Goals (SDGs) 2, 3 and 8; and recognized that foodborne diseases make 600 million people ill and cause 420 000 premature deaths annually² and that this translates into productivity losses of

US\$95 billion a year in low- and middle-income countries alone³. Participants further noted the ongoing changes in climate and in global food production and supply systems^{4,5} and the need to empower the consumer through improved and evidence-based health and nutrition information and education.

Participants emphasized, *inter alia*, the importance of:

- Integrating food safety into national and regional policies as a means to achieve the 2030 Agenda for Sustainable Development, by setting a firm political commitment and coherent actions across multiple sectors in order to promote safe and diversified healthy diets;
- Enhancing the participation of all countries in the standard-setting work of the Codex Alimentarius Commission and facilitating the implementation of Codex standards;

¹ FAO Conference Resolutions 3/2017, 4/2017, 9/2017, 3/2013, 2/97; World Health Assembly Resolutions WHA53.15, WHA55.16, and WHA63.3; the Rome Declaration on Nutrition and the Framework for Action adopted by the Second International Conference on Nutrition organized by FAO and WHO in 2014 as well as and the General Assembly resolution 70/259 proclaiming the UN Decade of Action on Nutrition (2016-2025); the Rome Declaration adopted by the First World Food Summit in 1996; UN General Assembly resolution 70/1 adopting universal and transformative Sustainable Development Goals (SDGs)

WHO estimates of the global burden of foodborne diseases, WHO, 2015

The Safe Food Imperative: Accelerating Progress in Low- and Middle-Income Countries, World Bank, 2018

⁴ FAO.2016. The State of Food and Agriculture: Climate Change, Agriculture and Food Security. Rome, FAO

⁵ FAO, IFAD, UNICEF, WFP and WHO. 2018. The State of Food Security and Nutrition in the World 2018. Building climate resilience for food security and nutrition. Rome, FAO

- 3. Strengthening cross-sectoral collaboration and applying multisectoral "One Health" approaches to address sustainability challenges in food production systems and ensure the availability of and access to safe, sufficient and nutritious foods:
- 4. Combatting and containing antimicrobial resistance in the food chain through prudent use of antimicrobials in animal and plant production;
- Integrating food safety into national plans and commitments for climate change adaptation and mitigation;
- Increasing investment in national food control systems, enhancing risk-based approaches and including building capacity for managing food safety emergencies, in order to ensure the safety of food supplies in informal and formal markets, with specific attention to vulnerable populations;
- 7. Ensuring adherence to adequate food safety management in the food sector, with special attention to small-scale operators, and leveraging private sector investment in building safe and resilient food and feed supply chains;
- 8. Enhancing partnership among public sector, private sector and academia/ research, including South-South cooperation, which is essential for fostering innovation as a means of improving safety and resilience of food systems;

- Taking actions to ensure that all countries can benefit from the developments in food sciences and technologies that are providing new tools for the assessment and management of food safety risks;
- 10. Enabling consumers and civil society to engage and contribute to food safety discussions, foster ownership of decisions, collaborative actions and public confidence in food systems, and drive enhanced food safety practices, sustainable food systems and related policies;
- 11. Raising public awareness, promoting food safety education and training in communities and schools, fostering dialogue and inspiring actions to enhance food safety, using the World Food Safety Day as a global reminder of the need to maintain a high level of public awareness;
- 12. Improving the evidence base for food safety decisions through systematic efforts on the monitoring of foodborne hazards and the surveillance of foodborne diseases. on estimating the public health and economic burden of foodborne diseases, and on the improvement of food safety risk assessment methodologies;
- 13. Contributing to global integrated data and sharing expertise, knowledge and information on existing and emerging food safety issues so as to inform forwardlooking policies, regulations and programmes.

ANNEX 4.

CLOSING REMARKS

Closing Statement by

Maria Helena Semedo

FAO Deputy Director-General, Climate and Natural Resources

Wednesday, 13 February 2019

African Union, Addis Ababa

Excellencies, Ladies and Gentlemen.

Good evening. On behalf of the FAO Director-General, José Graziano da Silva, I have the pleasure of concluding the important discussions that have been held over the last two days here in Addis Ababa.

We have ascertained many facts that will help guide our work in pursuing a Zero Hunger world.

We have heard inspirational accounts of making food safer around the world.

With over 650 participants from some 130 countries, including many ministers, we are witnessing strong determination to scale up food safety in the 2030 Agenda for Sustainable Development.

We have identified key areas where our knowledge must be transformed into action:

- Investment in food safety pays dividends. Achieving success needs intersectoral participation;
- Climate impacts food safety. Vigilance is required in maintaining food safety in the face of change;
- Digitalization and other innovations can transform how we identify, assess and manage food safety risks. We must ensure equitable access of these tools by developing countries;
- Strong and viable food systems require transparency, collaboration and communication.
 Consumers must be engaged.

Ladies and gentlemen,

There is no food security without food safety.

In a world of accelerating changes, the need for food to be safe remains a constant imperative.

And, in an increasingly complex food system, there must be greater attention to transparency, information sharing and collaboration.

We have heard stakeholders from across the food chain here talk about the responsibility we share.

Everyone has a role to play in food safety.

With widespread collaboration and the contributions of all actors in the food supply chain we can seek to improve food safety.

The compelling and widespread endorsement that you have given to the Chair's summary shows that the moment is right for a powerful statement by Member Countries on what is required – nationally and internationally - to assure the future of food safety.

Fortunately, our progress does not end tonight. We will continue to build on the momentum that has been generated at this meeting.

FAO and WHO will launch a process of consultation with Members to agree on an Addis Statement, starting on the basis of the Chair's Summary that was so well applauded here this evening.

I hope that all of you will join us on 23 and 24 April in Geneva, where we will continue to raise food safety on the global agenda, including the trade aspects of food safety

This is a pivotal moment in which international attention, key actions and strategies can make a difference in the lives of many.

Your continued participation and dedication will pay off – improving human health and livelihoods, strengthening economies and protecting the planet.

You have FAO's unwavering support in these efforts.

Thank you.



Closing Statement by

Syletana Akselrod

Assistant Director-General of WHO



Excellencies, Ladies and Gentlemen.

On behalf of Tedros Adhanom Ghebreyesus, it is my pleasure to express my full satisfaction and sincere thanks to all participants as well as the secretariat of the conference. My thanks also go to interpreters, without whom it would not have been possible to exchange our ideas over het past two days.

This conference was a success, a triple success.

Do you remember what my DG said at the end of his opening address? He said, learn lessons, build bridges and innovate. I have witnessed that things are moving towards good directions.

First, we had a very good participation. Having over 600 participants from more than 120 countries was far beyond our expectation. The participation of a number of Ministers and Vice Ministers demonstrated the good will at a high government level to mainstream food safety in national agendas. I hope food safety is now integrated into country's public health priority and development agenda.

Second, we had a very interesting and fruitful discussion on the emerging challenges and opportunities around food safety at national, regional and global levels. The interlinked nature of food safety demonstrated that food safety is a sector we need multilateral collaboration by breaking the walls of ministries and professions and starting to build networks.

Third, we just heard the chairperson succinctly identifying the areas where we can focus out attention, take challenges and continue our efforts. I sincerely hope that Member States actively take forward the Chairperson's Summary and express their commitment in and support to food safety in visible policy for such as WHO governing bodies. That will help mainstreaming food safety in the global agenda.

Excellencies, ladies and gentlemen, I am looking forward to seeing you again in Geneva in April where we will deepen our discussion.

Closing Statement by

Kwesi Quartey

Deputy chairperson, African Union commission

Your Excellencies.

Honourable Ministers.

Colleague Commissioners,

Distinguished Guests,

Ladies and Gentlemen.

Good Evening!

I am delighted and privileged to be able to address your meeting today at its closing session.

We are here in complete recognition of the importance of food safety. We need to address the issue of sustainable development in Africa and across the world. That we have been able to gather here and to share lessons and seek solutions to address this important issue, means that half the battle is already won. Identification and recognition of the problem is halfway to its solution.

We have heard of how contaminated foods impede providing food security, poverty and causes a range of health-related problems. Food safety is often an obstacle for smallholder farmers to access lucrative markets that require strict adherence to set standards. Phytosanitary requirements can be used as non-tariff barriers. This is of particular interest to the African continent, where the majority of our people depend on agriculture for survival. It is critical that we continue the work together. This is the only way to raise food safety and quality standards in Africa and across the world.

This is the only way to make our agriculture competitive; the only way to develop a vibrant sector that promotes trade and agribusiness - where, believe it or not, Africa still possesses comparative strategic advantage.

We are encouraged by ever-growing political will to address food safety. This is crucial to enable Africa achieve global and continental commitments such as the Sustainable Development Goals (SDGs), AU Agenda 2063 specifically the African Continental Free Trade Area (AfCFTA), and the Malabo Declaration. However, even with the best of intentions and political will, non-tariff barriers, particularly technical barriers related to food safety/SPS, remain obstacles to all continental and global development commitments. Intra-African trade remains the master key. That is why the CFTA will be a quantum leap forward.



I am pleased to learn that key recommendations have emerged from this meeting, which recognize the complexity of addressing food safety among various sectors with overlapping mandates. It will be important for our food safety agencies to be coordinated for effective delivery. At a continental level, the AUC will establish a similar model that will enhance coordination through the African Union Food Safety Agency.

As we move into a phase of implementing lessons learnt at this conference, let us take advantage of the technologies available and collect data that is needed for sustainable reporting and tracking of food safety. The African Union will ensure that AU Member States are supported. We shall work closely with Regional Economic Communities, to track food safety through the African Food Safety Index, which is now part of the Malabo Biennial Report.

Finally, Your Excellencies, my dear brothers and sisters, we hope that in the next few years, we shall confidently be able to say that food safety is no longer a forgotten pillar of food security. Let us work to make it an integral component that is being given the due attention it deserves.

Thank you!



ANNEX 5.

PROGRAMME OF THE INTERNATIONAL FORUM ON FOOD SAFETY AND TRADE

23 APRII

10.00-13.00

PRE-EVENT SESSION

As a curtain raiser to the main event, FAO and WHO have organized the following presentations building on key issues discussed at the First FAO/WHO/AU International Food Safety Conference:

Welcome by the Host

Alan Wm. Wolff, WTO Deputy Director-General

10.00-11.30

ESTIMATION OF THE NATIONAL BURDEN OF FOODBORNE DISEASES - AN INVESTMENT FOR BETTER FOOD SAFETY SYSTEMS

Welcome and Introduction

Kazuaki Miyagishima. Director, Food Safety and Zoonoses Department, WHO (Moderator)

Keynote

Barbara Kowalcyk, Assistant Professor, Department of Food Science and Technology, Ohio State University, USA

Panel themes

The burden of foodborne disease and estimating its impact - Global and national perspective

Rob Lake, Manager, Risk Assessment and Social Systems, Institute of Environmental Science and Research Limited, New Zealand

Addressing the economic burden of foodborne disease

Delia Grace. Co-Leader. Animal and Human Health, International Livestock Research Institute.

Disease burden estimation in practice - A country perspective

Lindita Molla, Head, Food Safety & Nutrition, Health & Environmental Department, Institute of Public Health. Albania

Questions from the floor

Closing remarks

Naoko Yamamoto, ADG, Healthier Populations, WHO



11.30-13.00

FOOD SAFETY, HEALTHY DIETS AND TRADE

Welcome and Introduction

Máximo Torero Cullen, ADG, Economic and Social Development Department, FAO (Moderator)

Naoko Yamamoto, ADG, Healthier Populations, WHO

Panel themes

Effectiveness of policies targeted at promoting healthier diets

Mario Mazzocchi, Professor, Department of Statistical Sciences "Paolo Fortunati", University of Bologna

Critical issues on food safety and healthy diets at international trade fora

Erik Wijkström, Counsellor, Division on Trade and Environment, World Trade Organization, Secretary of the WTO Technical Barriers to Trade (TBT) Committee

Aligning national food safety policies to promote food security

Angela Parry Hanson Kunadu, Lecturer, Department of Nutrition and Food Science, University of Ghana

Questions from the floor

Closing remarks

Máximo Torero Cullen, ADG, Economic and Social Development Department, FAO

15.30-17.15

OPENING SESSION

FOOD SAFETY AND TRADE

This session will open the event and make the link between the Addis Ababa and the Geneva meetings

Roberto Azevêdo, WTO Director-General

José Graziano da Silva, FAO Director-General

Tedros Adhanom Ghebreyesus, WHO Director-General

Monique Eloit, Director General, World Organisation for Animal Health (OIE)

Overview of the Addis Ababa Conference

Josefa Leonel Correia Sacko, African Union Commissioner for Rural Economy and Agriculture

Statements by Ministers

17.30-18.30

RECEPTION

Participants are invited to a welcome drink in the WTO Atrium.

24 APRII

10.00-11.30

THEMATIC SESSION 1

DIGITALIZATION AND ITS IMPACT ON FOOD SAFFTY AND TRADE

Participants will learn about the potential and actual use of new technologies in the realm of food safety and trade; from e-commerce and electronic certification to big data and blockchain. Discussions will be framed in the context of today's complex and evolving food systems considering both opportunities and obstacles of digitalization. Speakers will also explore the contributions of big data and computational tools for building consensus on science-based food safety regulations. Attention will be focused on challenges, in particular from the point of view of developing countries on issues such as the technology divide.

MODERATOR:

Ousmane Badiane, The Regional Director for Africa, International Food Policy Research Institute

SPEAKERS:

Frank Yiannas, Deputy Commissioner for Food Policy and Response, United States Food and **Drug Administration**

Enzo Maria Le Fevre Cervini, Senior Expert on International Relations at the Agency for Digital Italy - Presidency of the Council of Ministers

Lynn Frewer, Professor of Food and Society, **Newcastle University**

Simon Cook, Professor, Curtin University and Murdoch University

11.30-13.00

THEMATIC SESSION 2

ENSURING SYNERGIES BETWEEN FOOD SAFFTY AND TRADE FACILITATION

This session will provide an overview of the different areas in which synergies between food safety and trade facilitation are possible. The way in which food safety measures are designed and enforced is key in this respect, including the use of science-based measures and international standards. Risk-based inspections and simplified procedures can help ensure that resources available for inspections and controls are focused where they have the biggest impact. Transparency assists producers and traders in finding information on relevant food safety measures and procedures. Cooperation among border agencies can ensure effective and efficient food safety controls, facilitating safe trade.

MODERATOR:

Evdokia Moise, Senior Trade Policy Analyst, Trade and Agriculture Directorate, Organisation for Economic Co-operation and Development (OECD)

SPEAKERS:

France Pégeot, Executive Vice President, Canadian Food Inspection Agency

Tan Lee Kim, Director-General, Food Administration & Deputy Chief Executive Officer, Singapore Food Agency

Rajesh Aggarwal, Chief, Trade Facilitation and Policy for Business, International Trade Centre

Elizabeth Murugi Nderitu, Acting Director -Standards and SPS. TradeMark East Africa



15.00-17.00

THEMATIC SESSION 3

PROMOTING HARMONIZED FOOD SAFETY REGULATION IN A PERIOD OF CHANGE AND INNOVATION

Reiterating the importance of internationally harmonized food safety regulation based on Codex standards and scientific risk assessment from different perspectives, this session will also look at the future challenges for the Codex Alimentarius. The session will provide an opportunity for participants to discuss challenges and experiences in aligning food safety regulations across sectors using a One Health approach, adapting to innovation and change as well as in harmonizing regulations across borders and dealing with regulatory divergence.

MODERATOR:

Guilherme da Costa, Chairperson, Codex Alimentarius Commission

SPEAKERS:

Rebecca Jane Irwin, Head, Canadian Integrated Program for Antimicrobial Resistance Surveillance Division, Public Health Agency of Canada

Anne Bucher, Director-General, Directorate-General for Health and Food Safety (DG SANTE), European Commission

Anthony Huggett, Board Member, The Global Food Safety Initiative (GFSI)

Tetty Helfery Sihombing, Deputy Chairperson for Processed Food Control, National Agency of Drug and Food Control of the Republic of Indonesia

17.00-18.00

CLOSING SESSION

Presentations by rapporteurs from each thematic session will wrap up the proceedings, followed by closing remarks and farewell messages.



THE FUTURE OF **FOOD SAFETY**

Addis Ababa, 12-13 February 2019

The First FAO/WHO/AU International Food Safety Conference

Geneva, 23-24 April 2019

International Forum on Food Safety and Trade

CONTACTS

FAO

Food Safety and Quality Unit Rome, Italy

food-quality@fao.org

WHO

Food Safety and Zoonoses Department Geneva, Switzerland foodsafety@who.int

WT0

Agriculture and **Commodities Division** Geneva, Switzerland foodsafety@wto.org

ΑU

Department of Rural Economy and Agriculture Addis Ababa, Ethiopia

foodsafety@africa-union.org











WITH THANKS TO OUR DONORS



Government of Canada



Federal Ministry of Health



CA8386EN/1/06.20



