SAFE AND SUSTAINABLE FOOD SYSTEMS – HOW CAN WE GET THERE?

Summary
European food is recognised as being safe and of high quality, but it should now also aim for the highest standards of nutrition and sustainability. Food systems at global and EU level need urgent and significant transformation if they are to meet sustainability targets. With the Farm to Fork Strategy, which is at the core of the European Green Deal, there is accelerating momentum in efforts to make our EU food system more resilient and sustainable. Although the European Green Deal puts sustainability at the heart of EU policy-making, and reflects the need for systemic change in food systems, we are still in the process of turning such ambitions into policies and actions. Moreover, steering food systems towards a sustainability transformation remains an immense challenge. Yet, food systems offer many entry points for change. Building on points emerging from the thematic (break-out) sessions over the previous days of the Conference, this plenary session will explore how food safety assessments need to be advanced to keep our food safe, while contributing to making it more nutritious and sustainable. To this end, we will address how a One Health approach could help to deliver more integrated, cross-sectoral and collaborative health assessments, and how such assessments could better inform policies that shape food system transformations.

Vision
The safety of the food chain from farm to fork is at the core of EFSA’s mission. With its food safety assessments, EFSA – together with EU Member States – contributes to the protection of human, animal, plant and environmental health and animal welfare. The ambition to advance food safety assessments to ensure they remain fit for purpose in the face of a changing environment is at the heart of EFSA’s Strategy 2027. EFSA’s Strategy 2027 emphasises that new approaches to food safety are required to meet societal ambitions and policy targets for more nutritious and sustainable food, without compromising on food safety. To this end, we will address how a One Health approach could help to deliver more integrated, cross-sectoral and collaborative health assessments that go beyond the traditional boundaries that separate scientific disciplines and organisations, and involve new stakeholders. Moreover, we will explore how such assessments could better inform policies that shape food system transformations. This will enable recommendations to be
formulated that promote the implementation of more participatory, interdisciplinary and transdisciplinary approaches, and thus facilitate a transition towards more integrated, cross-sectoral and collaborative health assessments.

Background – Challenges and opportunities
Current global food systems are at a pivotal turning point. They are increasingly challenged by a fast-growing world population, rising hunger and malnutrition, a rapidly changing climate, unprecedented biodiversity loss, and significant social inequities. At the same time, there is accelerating momentum in efforts to transform food systems so that they better integrate planetary health, economic viability and social welfare. At a global level, for example, the United Nations has adopted a transformative agenda for 2030 based on 17 Sustainable Development Goals (SDGs), which are designed to stimulate action in areas of critical importance for humanity and the planet. Food represents a common thread linking all 17 SDGs, given the interconnected economic, social and environmental dimensions of food systems. At an EU level, the European Commission has put forward its Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system. The Farm to Fork Strategy is one of the key components of the European Green Deal, alongside the Biodiversity Strategy for 2030, the Chemicals Strategy for Sustainability and the Soil Strategy for 2030. The main aim of the Farm to Fork Strategy is to enhance the sustainability of the European food system, so that we can produce safe and nutritious food in the most equitable way, without putting further undue pressure on the environment. While the European Green Deal puts sustainability at the heart of EU policy-making, and reflects the need for systemic change in food systems, we are still in the process of turning such ambitions into policies and actions. Moreover, steering food systems towards a sustainability transformation remains a monumental challenge. Food systems are complex, as they consist of all the components (such as the people, institutions, environments and infrastructure) and activities involved in bringing food from farm to fork. Yet, food systems offer many entry points for change. An avenue that will be explored further in the session is how more integrated, cross-sectoral and collaborative approaches to health assessments could better inform policies designed to shape food system transformations. Collaborative, co-creation and partnership approaches to knowledge development will be crucial in this context.

Scope and objectives
Food systems, globally and in the EU, need urgent and significant transformation to meet sustainability targets. While steering food systems towards a sustainability
transformation remains an immense challenge, food systems offer many entry points for change.
The main objectives of the plenary session are to:

- Report on relevant points emerging from the thematic sessions over the previous days of the Conference;
- Explore how food safety assessments need to be advanced to keep our food safe, while making it more nutritious and sustainable;
- Discuss how taking a One Health approach can help to deliver more integrated, cross-sectoral and collaborative health assessments that go beyond traditional boundaries that separate scientific disciplines and organisations, and involve new stakeholders;
- Explore how more integrated, cross-sectoral and collaborative health assessments could better inform policies that shape food system transformations;
- Formulate recommendations to promote the implementation of more participatory, interdisciplinary and transdisciplinary approaches and thus facilitate a transition towards more integrated, cross-sectoral and collaborative health assessments.

People behind the session
Session Coordinator: Yann Devos, European Food Safety Authority (EFSA)
Chairpersons: Pamela Byrne, Food Safety Authority of Ireland (FSAI); Lee Ann Jackson, Organisation for Economic Co-operation and Development (OECD)
Moderators: Rose O’ Donovan, AGRA FACTS
Rapporteurs: Yann Devos, European Food Safety Authority (EFSA); Clémence Foltz, European Food Safety Authority (EFSA); Cinzia Percivaldi, European Food Safety Authority (EFSA); Tobin Robinson, European Food Safety Authority (EFSA)
Closing plenary – Session affiliate profiles

SAFE AND SUSTAINABLE FOOD SYSTEMS – HOW CAN WE GET THERE?

Pamela Byrne, Food Safety Authority of Ireland (FSAI)
Chairperson

Dr Byrne holds a PhD in Environmental Toxicology from University College, Cork (UCC); an MSc in Aquatic Resource Management from Kings College, University of London; a BSc in Zoology from UCC and a Higher Diploma in Environmental Law from the University of Aberystwyth in Wales. Prior to taking up the position of CEO at the FSAI in March 2015, Dr Byrne held the role of Director of Regulatory Policy and Intelligence with Abbott Nutrition. Having previously held senior positions in the Ministry of Agriculture, Food and the Marine, she has extensive experience of the food regulatory environment, as well as expertise in risk assessment and food safety management at both national and international levels. During her time at the Ministry of Agriculture, Food and the Marine, Dr Byrne gained a deep knowledge of the food sector as an environmental toxicologist and risk assessor, and was instrumental in developing Ireland’s research and innovation policy programmes in relation to food and the bio-economy. Dr Byrne also worked in the Cabinet of the European Commissioner for Research, Science and Innovation - Commissioner Maire Geoghegan-Quinn. Dr. Byrne was the Chair of the Management Board of the Joint Programming Initiative A Healthy Diet for a Healthy Life for 5 years. She is also the Chair of the Strategic Advisory Board of the Institute of Food and Health at University College Dublin, Ireland. She currently chairs the Board of the Association of Chief Executives of State

Lynn Frewer, Newcastle University
Speaker and panellist

Lynn Frewer is Professor of Food and Society in the School of Natural and Environmental Sciences, Newcastle University, in the United Kingdom. Previously she was Professor of Food Safety and Consumer Behaviour at Wageningen University, in the Netherlands. Lynn’s research interests include developing transdisciplinary research into agri-food systems, in particular the interactions between social science research and the biological, environmental, and engineering domains; working with
digital methods to crowd source food risk information; Understanding how to facilitate and accelerate farmer, stakeholder and end-user adoption of emerging agrifood technologies and innovations (in resource rich and LMIC countries); developing and testing risk (benefit) communication strategies related to food security: applying qualitative and quantitative methodologies to understand attitudes and behaviours related to food safety and other food security issues; operationalizing scientific foresight regarding research agenda setting, policy and governance in the area of emerging food technologies, and food and agricultural risks; and understanding consumer responses to food integrity and food fraud. Lynn has published more than 300 peer reviewed publications in these research areas and continues to contribute to national and international research agenda setting and evaluations relevant to society, food and agriculture.

**Title of talk:** ONE Society track: wrap up

**Francesco Branca, World Health Organization (WHO)**

Speaker and panellist

Francesco Branca is the Director of the Department of Nutrition and Food safety in the World Health Organization, Geneva (since February 2020). From 2008 to 2019, he was the Director of the Department of Nutrition for Health and Development. During this period, WHO has developed a WHO Nutrition strategy, established a new nutrition guideline development process and has developed a Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition with six global targets. He has been leading the preparation of the 2nd International Conference on Nutrition and the Secretariat of the Decade of Action on Nutrition. Before that, in 2005-2008, Dr Branca was the Regional Advisor for Nutrition at the WHO Regional Office for Europe. Between 1988 and 2005, he has been a Senior Scientist at the Italian Food and Nutrition research Institute where he was leading studies on the effects of food and nutrients on human health at the different stages of the life cycle and on the impact of public health nutrition programmes. He has been President of the Federation of the European Nutrition Societies in 2003-2007. In 1985-1986, Dr Branca has been a medical staff of a Primary Health Care project in the South of Somalia ran by the Italian NGO, CISP Dr Branca graduated in Medicine and Surgery and specialized in Diabetology and Metabolic Diseases at the Universita’ Cattolica del Sacro Cuore, Roma and obtained a Msc and then a PhD in Nutrition at Aberdeen University.

**Title of talk:** ONE Life track: wrap up
Franck Berthe, World Bank
Speaker and panellist

Dr. Franck Berthe is a One Health practitioner at the World Bank, working on public health issues across the agriculture, environment, water and public health sectors. Franck provides advice and technical assistance to a broad portfolio of investments reducing risks at the human, animal and ecosystem interfaces in various countries and regions. Before joining the Bank, he was the Head of the Animal Health and Welfare Unit at the European Food Safety Authority (EFSA; 2007-2016), Canada Research Chair and Associate Professor at the Atlantic Veterinary College (AVC-UPEI; 2004-2007) and lead scientist at the French research institute for oceans (Ifremer; 1995-2007). He has served as an expert for the World Organisation for Animal Health (OIE) from 1996 to 2020 on various specialized Commissions and ad hoc groups. He was a lead author of the Bank’s One Health Operational Framework (2018) and contributed to a number of other Bank’s global analytical pieces on health security (from panic and neglect to investing in health security), food safety (the safe food imperative), and antimicrobial resistance (pulling together to beat superbugs). He is a member of the Lancet One Health Commission. A native of France, Franck has a Doctorate in Veterinary Medicine (DVM), a PhD in molecular biology, and a Pasteur Institute diploma in bacteriology.

Title of talk: ONE Planet track: wrap up

Christine Nellemann, Technical University of Denmark, National Food Institute (DTU)
Speaker and panellist

Christine Nellemann holds an MSc in Human Biology, a PhD in medicine and an Executive MBA in management of Technology and Innovation. She has a research background in endocrine disruption and headed the Toxicology and Risk Assessment division for four years before becoming Director of the National Food Institute, Technical University of Denmark in 2014. She is part of several boards including the National 3R-Center, The Danish Think Tank Fighting Food Waste and Food Loss and The National Center for Working Environment. Christine Nellemann has participated in several advisory boards for the Danish Food Administration, the Danish EPA and the Danish National Board of Health and advised both the European Food Safety Authority, OECD and the Swedish Research Council. The National Food Institute researches and communicates sustainable and value-
adding solutions in the areas of food and health for the benefit of society. The institute’s tasks are carried out in a unique interdisciplinary cooperation between the disciplines of nutrition, chemistry, toxicology, microbiology, epidemiology and technology. It houses four European reference laboratories and is the national reference laboratory for chemical and microbiological food safety in Denmark. The institute is WHO collaborating center for AMR and genomics, FAO collaborating center for AMR and employs the Danish OECD coordinator for health endpoints.

Title of talk: Many Ways track: wrap up

Rose O’ Donovan, AGRA FACTS
Moderator

Rose O’Donovan has been Editor-in-chief of the Brussels-based AGRA FACTS since March 2010, having previously served as Deputy Editor on the leading agricultural publication for nearly three years. AGRA FACTS covers a range of topics including the ongoing reform of the Common Agricultural Policy (CAP), international trade, environmental policy, animal health & welfare and human health. Prior to working as a journalist, she dealt with international relations on the EU satellite navigation programme at the Galileo Joint Undertaking (GJU) for two years. Following the completion of a Master of Science at University College Cork (Ireland) & several years living & working across France, Rose moved to Brussels in 2004 to work as an intern in the Cabinet of former European Parliament President, Pat Cox. It was during the internship, at a time when the European Union was undergoing a process of enlargement, that she decided to stay in Brussels on a more permanent basis. Hailing from a farming background near Ballydehob in West Cork, Rose has a keen interest in the evolution of Irish & European agricultural & trade policy and regularly appears as a moderator in the Brussels conference circuit. Since taking up the post at AGRA FACTS, she is also a contributor on agri-related matters on BBC1 & RTE radio programmes.

Steven Musser, US Food and Drug Administration (US FDA)
Panellist

Dr. Musser is the Deputy Center Director for Scientific Operations at the U.S. Food and Drug Administration’s (FDA) Center for Food Safety and Applied Nutrition (CFSAN). In addition to managing the Center’s scientific operations, he oversees the Center’s activities in cosmetics safety, color certification, pre-market review of food additives, food contact notifications and foods derived from bioengineered plants.
He has directed the Center’s research in precedent setting areas of food and cosmetic safety research, which include food allergen detection, methods for detecting chemical contaminants, dietary supplement analysis, and the use of whole genome sequencing during foodborne illness outbreak investigations. He has authored or co-authored more than 100 articles in the peer reviewed scientific literature and regularly speaks on CFSAN’s research at national and international scientific meetings. Dr. Musser received his B.S. degree in Biology from Millersville University and his Ph.D. in Medicinal Chemistry from the University of Maryland-Baltimore. He then completed a post-doctoral research fellowship at the National Institutes of Health, National Cancer Institute. He started his career at FDA in 1991 as a research chemist and became the Branch Chief of the Instrumentation and Biophysics Branch six years later. Prior to his current appointment, Dr. Musser was the Director of the Office of Regulatory Science at CFSAN.

Lee Ann Jackson, Organisation for Economic Co-operation and Development (OECD)
Moderator

Dr. Lee Ann Jackson is the Head of the Agro-Food Trade and Markets Division in the Trade and Agriculture Directorate (TAD) at the OECD. Dr Jackson manages a team that works to develop and communicate evidence-based advice for governments with the aim of helping them improve the domestic and international performance of their policies for agro-food trade and markets. Dr Jackson has over 20 years of experience in agriculture, multilateral trade, and management. She joined the OECD in 2020 after 16 years at the WTO where her most recent position was as Counselor of Food and Agricultural Policy Research in the Economic Research and Statistics Division. At the WTO, she also served as the Secretary to the WTO’s Committee on Agriculture in the Agriculture and Commodities Division where her responsibilities included the implementation and monitoring of WTO rules on agriculture and multilateral agriculture negotiations. Prior to the WTO, Dr. Jackson held various research roles including as a Research Fellow in the School of Economics at the University of Adelaide in South Australia and a researcher in the Environment Division of the International Food Policy Research Institute in Washington DC. Dr. Jackson completed her Ph.D. in applied economics at the University of Minnesota; has joint Master’s degrees in public and private management and environmental studies from Yale University.

Sandra Gallina, European Commission
Speaker
Ms. Sandra Gallina, Director-General for Health and Food Safety (DG SANTE) Sandra Gallina joined the European Commission in 1988. She is today Director General for HEALTH & FOOD SAFETY. Before joining DG SANTE, between 2018 and 2020 she was Deputy Director General for TRADE. Between 2014 and 2018 she was Director for DG TRADE Directorate D "Sustainable Development; Economic Partnership Agreements - African, Caribbean and Pacific; Agri-food and Fisheries". Sandra Gallina was also the EU chief negotiator for the EU-MERCOSUR Free Trade Agreement. Between 2001 and 2009 she was the EU Lead Negotiator for Non-Agricultural Market Access in the WTO Doha Round and in that capacity, she defined and presented EU policy for the Doha Development Agenda on non-agricultural market access negotiations. Before joining DG TRADE, she worked in the Directorate General for Taxation and Customs Union (DG TAXUD) at the end of the 1990s.

Title of talk: Achieving sustainable and resilient food systems: a science for policy perspective

Ismahane Elouafi, Food and Agriculture Organization of the United Nations (FAO) Speaker and panellist

Ms Ismahane Elouafi is Chief Scientist of the Food and Agriculture Organization (FAO) of the United Nations, and part of FAO’s core leadership structure. With nearly two decades of experience in agricultural research and development in Asia, Africa and the Middle East, Ms Elouafi is a strong advocate for diversifying into neglected and underutilized crops. She is also internationally known for her work on promoting use of non-fresh water in agriculture and empowerment of women in science. Ms Elouafi has been a member of various strategy expert panels and advisory groups. Her contributions to science and policy have been recognized with a number of prestigious awards and accolades, in particular the Excellence in Science Award from the Global Thinkers Forum. Dr Elouafi holds a B.Sc. in Agricultural Sciences (1993) and an M.Sc. in Genetics and Plant Breeding (1995) from the Hassan II Institute of Agronomy and Veterinary Medicine, Morocco, and a Ph.D. in Genetics (2001) from the University of Cordoba, Spain.

Title of talk: Transitioning to more sustainable and resilient food systems: FAO’s policy vision

Abstract of talk
The Food and Agriculture Organization (FAO) is a specialised agency of the United Nations that leads international efforts to defeat hunger. Our goal is to achieve food security for all and make sure that people have regular access to enough high-quality food to lead active, healthy lives. With 195 members - 194 countries and the European Union, FAO works in over 130 countries worldwide. Despite the enormous progress made in the last 75 years since FAO was created, we are not on track to achieve zero hunger by 2030. Today, nearly one-tenth of the world population – about 811 million people – are hungry, and healthy diets are out of reach for about 3 billion people. Climate change, biodiversity loss and the COVID-19 pandemic all undermine global food security and nutrition, the sustainability of our agrifood systems and the health of our ecosystems – jeopardising the achievement of the Sustainable Development Goals. To achieve the SDGs by 2030 and beyond, we need to adopt a holistic, coordinated approach to work collectively to transform our agrifood systems. Harnessing science, technology and innovation is key in leveraging emerging opportunities to achieve a world free from poverty, hunger and malnutrition. Last year, both the UN Food Systems Summit and the Glasgow Climate Pact affirmed the need to invest in science and innovation for the SDGs and effective climate action. Business as usual is no longer an option. The FAO Strategic Framework for 2022-2031 supports the 2030 Agenda through the transformation to MORE efficient, inclusive, resilient and sustainable agrifood systems for Better Production, Better Nutrition, a Better Environment and a Better Life, leaving no one behind. FAO’s first-ever Science and Innovation Strategy is a key tool for the implementation of the Strategic Framework. It will strengthen the use of science and innovation in FAO’s technical/programmatic interventions and normative guidance. Science must remain the foundation on which we build. However, science, technology and innovation are not sufficient to transform our agrifood systems. To be able to reach impact at scale, we must develop new and transformative partnerships, including with the private sector and civil society organisations. We must elaborate new and enabling policies that foster the production of nutritious foods and make them safe, affordable and accessible. We must increase access to convenient infrastructure and financial resources for small-scale producers. FAO stands ready to assist its members by providing scientific advice in areas of agriculture, food safety, nutrition, One Health, antimicrobial resistance and beyond. FAO and the EU have strong bonds and are deploying synergistic efforts through many collaborations, most notably through the EU-FAO Strategic Dialogues, which started in 2021.

Hans Bruyninckx, European Environment Agency (EEA)
Speaker
Hans Bruyninckx is the Executive Director of the European Environment Agency since 1 June 2013. In 1996 Dr Bruyninckx completed a PhD in international environmental politics at Colorado State University. From 2010 until his appointment at the EEA, he was head of the HIVA Research Institute in Leuven, Belgium, a policy-oriented research institute associated with the Katholieke Universiteit Leuven, where he was also head of the Political Science department from 2007 to 2010. Over the last 20 years, he has conducted research in more than a dozen countries, in areas including environmental politics, climate change, and sustainable development. He has taught on global environmental politics and global environmental governance in relation to the European Union (EU), publishing extensively on EU environmental policies and its role as an actor in global environmental governance. Throughout his career Dr Bruyninckx has worked with governmental agencies, civil society and businesses, often in an advisory role. Dr Bruyninckx speaks fluent English, French and German in addition to his native Flemish. He is a keen sailor as well as an outdoor and sports enthusiast.

Title of talk: Knowledge for action – sustainability transitions and the food system of tomorrow

Abstract of talk
We are living in times of uncertainty on multiple fronts. The environment faces concurrent pressures from climate change, biodiversity loss, resource use and pollution. These pressures are all interconnected and require simultaneous action. In order to live sustainably in the future, humankind must learn to live within planetary boundaries. This will entail significant restructuring of key societal systems such as energy generation, transport and mobility, the built environment, and food systems. In this intervention, Dr Bruyninckx will examine the interconnected nature of sustainability challenges, and the kind of responses required. With a particular focus on safe and sustainable food systems, he will consider the European Green Deal as a framework for policy, and the EU’s Farm to Fork Strategy as a cornerstone of action on food systems, covering aspects such as nature-based solutions, reduced inputs, integrated and circular nutrient management, and greater use of sustainable agroforestry or agro-ecological production methods.

He will also discuss the specific knowledge and competency needs for governing sustainability transitions and food systems, including a better scientific understanding of human and environmental risks. He will cover needed reforms of policy and knowledge systems, including systems thinking, participatory policy
making, transdisciplinary research, more adaptive governance and continuous organisational learning.

**Nathalie Chaze, European Commission**
Panellist

Nathalie Chaze is currently Director for ‘Food sustainability, international relations’ in the Directorate General for Health and Food Safety of the European Commission. From 2014 to 2019, she was Deputy Head of the Cabinet of the Commissioner for Health and Food Safety, Vytenis Andriukaitis. She first joined the Directorate General for Health, Food Safety and Consumers to work in the health systems unit where she became Head of Unit. She worked previously in the Directorate General for TRADE of the European Commission and was in that context posted to the European delegation to the WTO in Geneva. She is a lawyer by training.

**Gerda Verburg, Scaling Up Nutrition (SUN) Movement**
Panellist

Since August 2016, Gerda Verburg (The Netherlands) has served as UN Assistant Secretary-General and Coordinator of the Scaling Up Nutrition (SUN) Movement, working with the 65 country governments that lead the SUN Movement, united with UN agencies, civil society, business and donors, in a common mission to defeat malnutrition in all its forms. She was appointed by the UN Secretary-General based on her extensive experience in politics and international cooperation. Prior to her appointment, she served as Chair of the Agenda Council for Food and Nutrition of the World Economic Forum (WEF), 2014; was elected as Chair of the UN Committee on World Food Security (CFS), 2013, and served as Permanent Representative of the Netherlands to the United Nations Rome-based agencies (FAO, IFAD and WFP) from 2011. Ms. Verburg was elected as Chair of the UN Commission on Sustainable Development (CSD 17) in 2008. In 2007, she was appointed Minister of Agriculture, Nature and Food Quality in the Netherlands. In her period as Minister, she gave priority and special attention to innovative and sustainable agriculture and food security, both at national, EU and international level. The UN Secretary-General, António Guterres, renewed her position as Coordinator of the Scaling Up Nutrition (SUN) Movement for a third term, effective from 1 August 2020.

**Joachim Von Braun, Bonn University**
Panellist
von Braun is distinguished Professor for Economic and Technological Change at Center for Development Research (ZEF) Bonn University in Germany. He is co-coordinator of the Transdisciplinary Research Area Technology and Innovation for Sustainable Futures of Bonn University in the context of the excellence initiative of the University. His research addresses international and development economics topics, including markets and trade; poverty; health and nutrition; agriculture, and science and technology. von Braun is President of the Pontifical Academy of Sciences of the Vatican, he is member of the German National Academy of Sciences Leopoldina, Academy of Science and Art of North-Rhine Westphalia, German Academy of Science and Engineering (acatech), member of the African Academy of Sciences, and Fellow of the American Association for the Advancement of Sciences; he is Vice-President of the NGO Welthungerhilfe (WHH), member of the International Advisory Committee on Bioeconomy. He served as Chair of the Scientific Group for the Food Systems Summit 2021 of the UN Secretary General.