



Food and Agriculture
Organization of the
United Nations



THE FUTURE OF FOOD SAFETY

There is no food security
without food safety

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IT IS
PARAMOUNT
THAT WE FIND
SUSTAINABLE
WAYS TO
CULTIVATE,
PRODUCE AND
CONSUME SAFE
AND HEALTHY
FOODS WHILE
PRESERVING
OUR PLANET'S
NATURAL
RESOURCES.

Cover photo: Azerbaijan – Vandam village, fresh fruit is displayed at a roadside produce stand. ©FAO/Tofik Babayev



GUATEMALA

Fruit and vegetables stall at the
green market.
©Pep Bonet/NOOR for FAO

INTRODUCTION

**EVERY YEAR
AROUND
THE WORLD,
OVER 420 000
PEOPLE DIE
AND SOME
600 MILLION
PEOPLE FALL ILL
AFTER EATING
CONTAMINATED
FOOD**

Today's global
challenges are
transforming the way
we produce, market,
consume and think
about food.

Ready access to safe and nutritious food is a basic human right. Yet every year around the world, over 420 000 people die and some 600 million people – almost one in ten – fall ill after eating contaminated food. In fact, foodborne hazards are known to cause over 200 acute and chronic diseases from digestive tract infections to cancer.

The ramifications of the cost of unsafe food, however, go far beyond human suffering. Contaminated food hampers socioeconomic development, overloads healthcare systems and compromises economic growth and trade. Opportunities of an increasingly-globalized food market are lost to countries unable to meet international food safety standards. Food safety threats cause an enormous burden on

ITALY

Associations farmers, producing in Lazio region surrounding Rome, gather in weekly markets to sell food products from the short distribution chain.
©FAO/Riccardo De Luca

economies from disruptions or restrictions in global and regional agri-food trade, loss of food and associated income and wasted natural resources.

Today's global challenges are transforming the way we produce, market, consume and think about food. The most pressing of these revolve around a growing population and increased food demands, further compounded by the adverse impacts of





environmental degradation, climate change, water scarcity, loss of biodiversity, conflict and socio-economic inequities. Hunger is on the rise and preventable foodborne diseases continue to affect millions of people annually. Food safety issues hinder global food security and our collective goal of achieving the Sustainable Development Goals by 2030, and exacerbate the poverty cycle affecting the most vulnerable populations.

Our cities are changing, transforming our food systems. With rapid urbanization, cities need to keep food safety and sustainable food systems planning high on their agenda. Today, half the world's population live in cities or towns on only three percent of the Earth's surface. By 2050, over 65 percent of all people will be urban dwellers. This means that issues related to food safety, food production and distribution will take on even greater

importance in strategic discussions on sustainable development and growth.

No matter how much our world continues to evolve and challenge us, the greatest risk would be our failure to protect and safeguard our food systems. It is paramount that we find sustainable ways to cultivate, produce and consume safe and healthy foods while preserving our planet's natural resources. ■

KEY MESSAGES

Food safety is integral to the Sustainable Development Goals.

When food is not safe, human development simply cannot take place. In its plan of action for people, planet and prosperity, the 2030 Agenda calls for everyone, in particular the poor and the vulnerable, to have access to safe, nutritious and sufficient food all year round. It pledges to ensure healthy lives and promote well-being, which are essential to sustainable development.

Unsafe food takes a huge toll on human health and the economy.

Every year more than 600 million people fall ill and 420 000 die from eating food contaminated with bacteria, viruses, parasites, toxins or chemicals. Unsafe food accounted for 33 million disability-adjusted life years in 2010. As for the economic price tag, unsafe food costs low- and middle-income economies alone about US\$ 95 billion in lost productivity annually and can curtail trade.

NIGER

A fruit vendor at the Maradi market.
©FAO/Giulio Napolitano

Agriculture is under pressure, and food production is changing, with consequences for food safety.

In a world of accelerating change, the need for food to be safe remains a constant. As the world is facing an unprecedented convergence of pressures from socio-economic, environmental and political fronts, a shift towards sustainable agricultural practices across all sectors and the whole supply chain is required to ensure a viable, sufficient and nutritious supply of safe food. Such a change must minimize environmental impacts, mitigate climate change, and promote economic growth and social equity.

From production to consumption – food safety is a shared responsibility.

Food safety is everyone's responsibility. Today, food is

produced and processed in greater volumes and distributed over greater distances than ever before. Widespread collaboration and contributions of all actors across the food supply chain, underpinned by robust governance, agreed international standards and harmonized regulations, are essential to food safety.

Good nutrition requires safe food.

Unsafe food prevents the suitable uptake of nutrients and renders it unsuitable for human consumption and can lead to long-term growth and





THERE IS NO FOOD SECURITY WITHOUT FOOD SAFETY, WHICH IS THE BASE FOR HEALTHY DIETS AND LIVES

José Graziano da Silva
FAO Director-General

developmental delays in children. Poor nutrition makes people more susceptible to diseases. It is a vicious cycle that must be broken. Sustainable Development Goal 2, which is about ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture, can only be achieved when food is safe for people to eat.

Food standards help to safeguard public health at large. Harmonized international food standards ensure that food is safe, healthy and of good quality, and can be safely traded between countries or passed on along a food value chain, enabling all players

to comply with requirements elsewhere. International standards shield countries and companies from discretionary national trade barriers.

We need to keep pace with the rapidly changing food systems. Production and processing methods and technologies continue to transform trade, changing the way food moves from farm to fork. It is essential to ensure that the many economic, social and environmental factors driving these changes contribute to our ability to achieve Zero Hunger for a global population that is projected to reach almost 10 billion by 2050. ■

THERE IS NO FOOD SECURITY WITHOUT FOOD SAFETY

If it is not safe, it is not food. Food security is achieved when all people, at all times, have physical and economic access to food that meets their dietary needs for an active and healthy life. Food safety plays a critical role across the four pillars of food security – availability, access, utilization and stability.

The increased globalization of the world's food supply means populations worldwide are more exposed to food hazards. This is of particular concern for countries that rely heavily on food imports.

Many developing countries import a significant share of the food supply for their population. Some – such as the Pacific islands – rely almost entirely on food imports to ensure food security.

Coordinated inspection and monitoring programmes lie at the heart of enforcing food safety regulatory systems

to prevent or minimize exposure to food hazards. Importing countries have progressively set up inspection measures to protect the health of their populations and ensure fair practices in food trade. However, over time, higher volumes of imported foods, together with the diversification of origin and growing complexity of the technologies used for traditional monitoring approaches, based on intermittent or irregular inspections at borders, is no longer considered adequate.

A growing challenge for imported food is that competent

COOK ISLANDS

Farmer started planting bananas for his family to ensure he can provide for their food needs.

©FAO/Sue Price

authorities in charge of official controls have no direct oversight over the production process of their trading partners. With the development of trading relationships, increased dialogue between competent authorities of importing and exporting countries, use of certification mechanisms and improved oversight of the importers community are some of the available options to strengthen the effectiveness of imported food controls.





Regardless of where food is produced, consumers have the right to expect that the food they buy is safe and of the expected quality. FAO works with governmental authorities, local industry and other relevant stakeholders to ensure that this expectation is met.

SAFE FOOD ENHANCES LIVELIHOODS AND BOOSTS TRADE OPPORTUNITIES

Chemical residues and microbiological contamination continue to pose public

Small Island Developing States (SIDS) share unique and particular vulnerabilities, resulting in a complex set of food security and nutrition challenges. Given their limited arable land, geographic isolation and exposure to extreme weather events, many SIDS rely heavily on remote markets for their food supplies, making them especially sensitive to external shocks such as food price and supply volatility. As well, consuming a diet of processed imported foods that are high in sugar, salt and fats, many SIDS suffer from the “triple burden” of malnutrition, where undernutrition, micronutrient deficiencies, and obesity co-exist in the population.

A major challenge facing SIDS is to enhance their ability to deliver safe, high-quality and nutritious food at reasonable prices to consumers while stimulating sustainable domestic food production and providing viable livelihoods to those involved in production and transformative activities. Strategies to educate and raise awareness among the different actors along value chains about the importance of food safety (such as safe storage and handling techniques) are essential.

health risks and lead to trade disruptions with substantial economic and social costs. Opportunities of the global food market are lost to countries that are unable to meet international food safety standards.

In addition, at the local level, farmers and producers who meet consumers’ growing demands for more sustainably-produced foods have the opportunity to improve their livelihood and foster economic development in rural communities. ►

THERE IS NO FOOD SECURITY WITHOUT FOOD SAFETY

► PROTECTING HEALTH, FACILITATING TRADE

There are significant interlinkages between food safety and trade

Expansion in agricultural trade has increased the availability and affordability of food, but at the same time it has increased the chances that unsafe or unhealthy food produced in one country can affect consumer patterns in another. The use of international food standards worldwide contributes to achieving global public health objectives, as it can ensure that the food that gets traded is safe. In addition, it helps reduce trade costs by allowing food to move more smoothly between markets. In this regard, it is crucial that governments strategically invest and actively engage in the work of international bodies such as the Codex Alimentarius and

COSTA RICA

Farmers working in a pineapple plantation, applying good agricultural practices throughout the production process and packaging of pineapple.

©FAO/Ezequiel Becerra



**THERE IS NO
FOOD SECURITY
WITHOUT
FOOD SAFETY**

the World Trade Organization (WTO) Committees on Sanitary and Phytosanitary Measures (SPS Committee) and on Technical Barriers to Trade (TBT Committee), particularly in an era when scientific knowledge, technology, products and trade are rapidly evolving and becoming increasingly dynamic and diverse, making the

existence of strong institutions an imperative.

Why food safety and trade?

The relationship between agri-food trade and food safety is attracting increasing attention on both the trade and the development agendas. Trade contributes to food availability and diet diversification throughout the



world; however, it can also increase the chances that the food produced in one place will affect the health and diet of people living elsewhere. Unilaterally-developed national food safety norms and specifications often make it difficult for food to be traded across borders. As such, global food safety and nutrition measures applicable across borders, institutions

and disciplines, including the establishment of evidence-based international standards on food safety and nutrition, have become more important than ever before.

As highlighted in *Trade and Food Standards*,¹ a joint FAO/ WTO publication, in order to trade internationally and have access to markets for high-value

products, producers must be able to meet national food regulations. Complying with these requirements in export markets – in a fragmented system of conflicting national food safety standards – can be challenging, especially for smaller producers in developing countries and emerging economies.

¹ www.fao.org/3/a-i7407e.pdf

THERE IS NO FOOD SECURITY WITHOUT FOOD SAFETY

CODEX HAS WORKED ON FOOD SAFETY AND TRADE FOR OVER 50 YEARS. IT HELD ITS FIRST MEETING IN 1963 AND SINCE THEN CODEX HAS DEVELOPED HUNDREDS OF INTERNATIONALLY RECOGNIZED STANDARDS, GUIDELINES AND CODES OF PRACTICE

► **Codex Alimentarius**

Food protection standards have existed since ancient times. The Assyrians determined weights and measurements for cereals, the Egyptians used scrolls as labels for certain foods, the Greeks inspected beer and wine to ensure it was in good condition, and the Romans had a State system to prevent fraud and root out poor-quality products. Today, protecting the health of consumers ranges from inspecting food additives and pesticide residues to preventing chemical and microbiological contamination or assessing the safety of modern, at times controversial, practices such as genetically modifying foods or using growth-promoting antimicrobials in animal production. While times have changed, the goal to protect consumers remains the same.

The Codex Alimentarius Commission held its first meeting in 1963 with the objective of developing food standards to protect public health and ensure fair practices in food trade. Since then, it has developed hundreds of internationally recognized standards, guidelines and codes of practice, and plays a crucial role in ensuring that traded food is safe and of high quality. This role is also recognized by the WTO Agreements on the Application of Sanitary and

SWAZILAND

Red cabbage growing in an orchard field which is sold at a wholesale market that was established to facilitate access to market opportunities for smallholder producers and link them with buyers.
©FAO/Believe Nyakudjara

Phytosanitary Measures (SPS Agreement) and on Technical Barriers to Trade (TBT Agreement).

The Joint FAO/WHO Food Standards Programme includes the Codex Alimentarius Commission, which is an inter-governmental food standard-setting body. Its standards, published as the Codex Alimentarius, serve as a “food code” that covers



the entire production chain. These science-based, internationally adopted standards provide a framework for governments to establish criteria for food to ensure safety and harmonize food trade. Codex is, therefore, the invisible link between those working in the food chain and the consumer. The Codex Alimentarius is vital for governments, industries and other actors in helping to ensure that

food is safe to eat regardless of the borders that it has crossed.

INVESTING IN SUSTAINABLE FOOD SYSTEMS PAYS OFF

Sustainable food systems are the future of food and agriculture. FAO supports governmental authorities, local industry and all those in supply chains to ensure that the food available on domestic and international

markets is safe and of the expected quality. Each year, unsafe food causes production losses of around USD 95 billion in low- and middle-income economies. Safe food production improves sustainability by reducing food waste and by enabling market access and productivity, which drives economic development and poverty alleviation, especially in rural areas. ■

FOOD SAFETY IS SCIENCE-CENTRED

Science-based decision-making boosts public health and protects trade. Risk assessment provides policy-makers with the information and evidence they need for effective and transparent decision-making, contributing to better food safety outcomes and improvements in public health. FAO and WHO expert scientific bodies provide the most robust and up-to-date scientific advice available.

STRATEGY AND SCIENCE: FAO'S FOOD SAFETY APPROACH

FAO works closely with its Members and international food safety experts to provide guidance for developing and emerging countries so that “the best available evidence” is used to inform food safety decisions. This guidance is tailored to specific country needs, especially those that may be data-poor or have less mature control systems and are keen to promote highly participative approaches to foster ownership of the process and results. The availability of agreed decision-making tools facilitates an inclusive and transparent process for food safety decisions, based on a broad set of factors rather than a single consideration.

Making sound strategic decisions is the primary responsibility of food safety risk managers, who must weigh multiple criteria and sometimes complex risk interactions. Decisions often require balancing food safety priorities with resources, following multiple policy recommendations and selecting the most appropriate intervention to minimize risks. To be effective in building strong food safety programmes, food safety risk managers need to influence high-level decisions

ZIMBABWE
Strengthening controls of food safety threats, plant and animal pests and diseases for agricultural productivity and trade in Southern Africa.
©FAO/Jekesai Njikizana

based on best available data and evidence to prioritize food safety in their countries. Also in determining appropriate action, decision-makers often need to consider the consequences relating to more than one risk factor, for example, the multiple impacts on public health, trade, food access and security.

Science is central to the work of FAO on food safety and



quality along the supply chain. In close collaboration with WHO, FAO provides neutral and independent scientific advice as the essential basis for the international food safety standards, guidelines and codes of practice established by the Codex Alimentarius Commission, and for supporting the development of modern food control systems by national authorities such as

whole genome sequencing for epidemiological surveillance for foodborne pathogens. In developing high quality globally relevant scientific advice, consideration is given to the entire food production chain as appropriate as well as all relevant and accessible data. Regular updates are made to the methods and approaches used to ensure consistency with the most recent developments. ►

**SAFE FOOD IS
UNDERPINNED
BY SCIENCE**

FOOD SAFETY IS SCIENCE-CENTRED

► **The Joint FAO/WHO Expert Committee on Food Additives (JECFA)** has been meeting since 1956 to provide scientific advice on food additives, contaminants and residues of veterinary drugs in food as well as principles and guidance for safety assessment of chemicals in food.

The Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA) began in 2000 as an international scientific expert group that evaluates different aspects of microbiological hazards in the food supply.

The Joint Meeting on Pesticide Residues (JMPR) is an expert ad hoc body administered jointly by FAO and WHO to harmonize the requirements and risk assessment for pesticide residues. The JMPR has met annually since 1963 to conduct scientific evaluations of pesticide residues in food, providing advice on the acceptable levels of pesticide residues in food traded internationally.

The Joint FAO/WHO Expert Meetings on Nutrition (JEMNU) were established in 2010 to strengthen the role of FAO and WHO in providing scientific advice on nutrition to Member States and bodies such as the Codex Alimentarius Commission and in particular the Codex Committee for Nutrition and Foods for Special Dietary Uses (CCNFSDU) with a view to set appropriate health-protective and trade-inclusive global nutrition standards. ■

SCIENCE IS
CENTRAL TO THE
WORK OF FAO
ON FOOD SAFETY
AND QUALITY
ALONG THE
SUPPLY CHAIN





SENEGAL

Inspecting melons
using a magnifier in a
cold room storage.

©FAO/Marco Longari

CORE PRINCIPLES FOR SCIENTIFIC ADVICE

- **Soundness:**
scientific excellence,
evidence-based, rigorous
and repeatable
- **Responsibility:**
accountability, safeguarding
the integrity of the process
- **Objectivity:**
includes neutrality of the
experts and of the advice
provided
- **Fairness:**
of the process, and respect
for all participants and their
scientific views
- **Transparency:**
of both the process and the
scientific advice
- **Inclusiveness:**
balance of skills and
expertise, minority scientific
opinion, geographical and
socioeconomic balance
without compromising
excellence

FOOD SAFETY REQUIRES SHARED SOLUTIONS

Human health is closely interlinked with the health of animals and the environment around us

FOOD SAFETY IS PART OF "ONE HEALTH"

Diseases know no borders. The expansion of global trade is leading to new health challenges such as the wider spread of microorganisms to people through food – from fruits and vegetables contaminated with soil and from animal-sourced foods. In response, FAO promotes a “One Health” approach as an integrated, multisectoral way to prevent and mitigate health threats across the animal-human-plant-environment interface. To do so, the Tripartite Partnership of FAO, the World Health Organization (WHO) and the World Organisation for Animal Health (OIE) work closely to encourage practices that decrease the likelihood of live animals carrying pathogens transmissible to people and prevent the transfer of contaminants from the environment to foods. The “One Health” approach brings together knowledge, insights and technical capacities in human and animal health and food and agriculture that generate strong synergies, for more robust, effective and cost-efficient solutions to the complex health problems facing the world today.

FOOD SAFETY AND PRODUCE, LIVESTOCK AND FISH

FAO combines expertise in sustainable food production across the agricultural sectors and

food safety disciplines to identify sources of food safety risk and to develop measures to prevent or minimize these risks at the most appropriate stages of the chain. Working with concerned stakeholders at national and local levels from both public and private sectors, FAO helps to strengthen the management of food safety in specific sectors and formulates strategies that promote the application of Good Hygienic Practices and ensure compliance with national and international food safety requirements.

Food safety and produce

FAO food safety and plant production specialists work with national institutions to develop guidelines and codes of practice that integrate food safety considerations into sustainable agricultural practices. Long-term impact is ensured through capacity building activities with local, national and regional partners.

Selected examples:

➔ Mycotoxin can affect staple foods such as maize and sorghum and high value commodities such as coffee and cocoa with important consequent food security implications for poor and vulnerable populations. These toxins are implicated in



MYANMAR

Supporting
conflict-affected
communities in
northern Rakhine.
©FAO/Hkun Lat

a wide range of health effects that include liver and kidney damage, among others. FAO and WHO produced a user-friendly and freely-available online tool to guide national authorities and operators to sample 26 mycotoxin-commodity combinations.

➤ Farmer Field Schools (FFS) have proved to be an effective vehicle for enabling farmers to understand and adhere to good practices. FFS are developed to fully integrate food hygiene with production issues such as integrated pest management techniques.

➤ FAO works with national institutions to build their

capacities to design and implement programmes to improve food safety in the primary production of fruit and vegetables. This includes programmes focusing on good practices on farm as well as on monitoring pesticide and other contaminants.

Food safety and livestock

Improving the safety of foods of animal origin involves guidance on good practices in animal feeding, animal husbandry, slaughter and handling and processing of animal products. FAO experts on animal production, animal health and food safety work closely with partners to ensure

a science-based and integrated approach to managing food safety risks related to foods of animal origin, including antimicrobial resistance (AMR).

Food producers play a vital role in stopping the spread of antimicrobial resistance. Antimicrobial drugs are essential to protect both human and animal health. However, antimicrobials, if misused for treatment or prevention of diseases in the livestock, aquaculture or crop production sectors, can contribute to AMR – one of the world's most pressing public health threats. AMR reduces the effectiveness of medicines, making infections

FOOD SAFETY REQUIRES SHARED SOLUTIONS

► and diseases difficult or impossible to treat in animals, plants and humans alike. Each year, an estimated 700 000 people die due to antimicrobial-resistant infections, with the largest toll in low- and middle-income countries. Good hygiene practices in agriculture, food production, processing and distribution are required to maintain food safety and minimize the transmission of AMR and other pathogens through the food chain to people. If antibiotics are not used appropriately, antimicrobial residues in food can also pose health hazards to consumers. Promoting a “One Health” approach to combating AMR, FAO, in partnership with WHO and OIE, encourages food production practices that: reduce the use of antimicrobials; enhance food hygiene and sanitation during processing to limit cross-contamination; and monitor progress in producing food that is free from antimicrobial-resistant pathogens.

Food safety and fish and fishery products

Improving the quality and safety of fish products requires interventions at various stages of the value chain. FAO, working with national authorities and other relevant stakeholders, assists

in developing the capacities for fish inspection and for promoting the application of good practices by all operators in fisheries and aquaculture: fishers, fish farmers, fish handlers and processors. FAO uses participatory approaches to assess training needs and to design and implement programmes for long-term capacity building. For example, Scombrototoxin Fish Poisoning (SFP) often called “histamine poisoning” occurs when certain species of marine fish – including tuna, mackerel, sardines and anchovy – are stored improperly, as a naturally-occurring amino acid of the fish is converted to histamine by bacterial contaminants. In some parts of the world, SFP is a major cause of foodborne illness.²

WRITING THE RULES: NATIONAL LEGAL FRAMEWORKS

Modern food legislation is a key pillar for an effective food control system. In all countries, food is governed by a complex set of laws and regulations which set out the government’s requirements to be met by food chain operators to ensure the food is safe and of adequate quality.

² FAO has published suitable guidance to aid countries in the management of such risks: www.fao.org/fileadmin/user_upload/agns/news_events/HistamineHighlightFINAL.pdf



FAO has a unique reservoir of knowledge and information to assist countries in drafting or amending legislation relevant to food safety and quality. This invaluable resource and collective wisdom has been accumulated over 40 years of engagement with different legal traditions around the world. FAO can assist in promoting the design of workable and appropriate national regulatory frameworks in all areas under FAO’s mandate, as well as provide assistance through legal and institutional assessments; support to participatory legal reform processes; preparation of draft laws; and capacity development activities for lawyers and regulators. Such capacity development helps countries to improve their abilities to autonomously formulate appropriate legislation.



EGYPT

Promoting and developing national potential on effective sustainable non-conventional water use practices for integrated agriculture-aquaculture production systems.

©FAO/Khaled Desouki

Assistance is tailored to each country's situation, with attention to the national legal framework and tradition, as well as to the implementation of applicable international agreements and international reference standards. To date, FAO has assisted a broad range of countries and regional organizations across five continents in revising their legislation.

FAO also has the world's largest legislative database (FAOLEX) on food and agriculture, including natural resources management (fisheries, land, water and forestry), and provides legal information by publishing legislative studies and legal papers online, including good regulatory practices (GRPs) for drafting or revising national legal frameworks. These publications cover different SPS-related topics, not only food safety, but also

animal and plant health and biosafety. FAOLEX, established in 1995 is updated with an average of 8 000 new entries per year. It currently contains legal and policy documents drawn from more than 200 countries, territories and regional economic integration organizations and originating in over 40 languages.

Governance enables safe and nutritious food for all.

National governance is critical for ensuring that we can all eat safe and nutritious food. FAO is supporting governments in transitioning food control systems into governance mechanisms that foster sustainable agriculture, the production of safe and nutritious foods and access to fair global trade. An enabling governance at national level also contributes to achieving the Sustainable Development Goals. ■

**MODERN FOOD
LEGISLATION IS A
KEY PILLAR FOR
AN EFFECTIVE
FOOD CONTROL
SYSTEM**

FOOD SAFETY IN EMERGENCIES

**FOOD SAFETY
EMERGENCY
PREPAREDNESS
SAVES LIVES**

International emergency response systems ensure coordinated action when combating outbreaks of global foodborne illness. FAO, jointly with WHO, leads global information and prevention networks involving national food safety authorities and experts to prevent, prepare for and respond to food safety emergencies.

FAO assists countries in building food safety emergencies prevention and management systems to strengthen country resilience to food chain crises.

In order to promote and facilitate the rapid exchange of information during food safety related events, FAO and WHO coordinate the International Food Safety Authorities Network

MOLDOVA
Biochemical
examination for
diagnosis of bacterial
diseases
(salmonellosis,
colibacillosis).
©FAO/Dorin Goian

(INFOSAN). Operating in its 15th year, INFOSAN has facilitated communication across borders, and between network members, during hundreds of food safety emergencies. In such instances, INFOSAN, a practical and reliable tool for information exchange, can mitigate and reduce impacts of a food crisis by allowing risk managers to prevent foodborne illness





and save lives by launching targeted product recalls and consumer warnings.

Recent events highlighted the important role this network plays to support national response activities. In 2017 an outbreak of salmonellosis was linked to infant formula produced in France and exported to more than 80 countries;

and in 2018 an outbreak of listeriosis was linked to ready-to-eat meat products produced in South Africa and exported to 15 countries. During both these events, national INFOSAN Emergency Contact Points provided key information, such as destination, countries of contaminated products, to the INFOSAN Secretariat, which, in turn,

notified INFOSAN Emergency Contact Points in importing countries of the details of the affected products to stop distribution. INFOSAN relies on proactive participation of members around the world to implement appropriate risk management measures.

Today, INFOSAN connects nearly 600 members from

FOOD SAFETY IN EMERGENCIES

- 188 Member States together and its membership continues to grow each year. Commitment to active participation in INFOSAN is one important way in which national government agencies can demonstrate their dedication to improving food safety as a global good.

IMPORTANCE OF PREVENTION OF FOODBORNE OUTBREAKS

The shift in food safety from “reaction and response” to “prediction and prevention” requires holistic and structured approaches to collecting and analysing intelligence for early identification of emerging issues.

FAO works with different partners and Member Countries to develop such intelligence and foresight to inform broad food chain decisions and provide guidance on key emerging issues.

MALI

Street vendors selling watermelons in Bla.
©FAO/Swiatoslaw Wojtkowiak



It is difficult to estimate the burden of foodborne diseases: only a small fraction is recognized by concerned authorities. The ultimate goal of food safety and public health officials is to prevent such

outbreaks. Surveillance systems allow authorities to better understand major food safety risks and to refocus prevention efforts. It also allows early detection of adverse food safety events for prompt and effective response.



RAISING AWARENESS TO ARM CONSUMERS

Outbreaks of foodborne illnesses and food recalls can have wide-reaching consequences and impact on consumer confidence in the safety of the global food supply. It is crucial to enhance food safety risk communication with consumers among all stakeholders in the agri-food chain, beginning with risk



managers and decision-makers. This two-way exchange of information and opinions between all involved is key to restoring trust and protecting people's quality of life.

For example, Mali sought to improve its decision-making approach to food-safety by adopting a risk analysis framework. With access to relevant food analysis and consumption data, the food-safety authorities requested FAO's advice on how to best use the data to guide strategic choices and day-to-day food control activities. In 2014, Mali and FAO launched a

two-year capacity development programme targeting a broad range of stakeholders. Competent authorities, from national food-safety authority laboratories, private-sector actors, primary producers and consumer' representatives, to research institutions, academia, and civil society representatives, were trained how to use their national data to prioritize risks and optimize the management of those risks. As a result, Mali is now able to build monitoring and control programmes for domestic and imported foods based on a practical understanding of risk analysis. ■

**FAO WORKS
WITH DIFFERENT
PARTNERS AND
MEMBER
COUNTRIES TO
DEVELOP FOOD
SAFETY
INTELLIGENCE
AND FORESIGHT
FOR BETTER
PREPAREDNESS**

PUBLICATIONS

FOOD SAFETY

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KYRGYZSTAN

People sell fruits and vegetables at the market in the village of Ivanovka.

©FAO/Vyacheslav Oseledko



THE FUTURE OF FOOD SAFETY

There is no food security
without food safety



This brochure presents FAO's work on food safety and the recognition that ready access to safe and nutritious food is a basic human right. Food security is achieved when all people, at all times, have physical and economic access to food that meets their dietary needs for an active and healthy life. Food safety plays a critical role across the four dimensions of food security – availability, access, utilization and stability.

It is paramount that we find sustainable ways to cultivate, produce and consume safe and healthy foods while preserving our

planet's resources. FAO recognizes that the ramifications of the cost of unsafe food go far beyond human suffering. FAO works with governmental authorities, with local industry and other relevant stakeholders to ensure that regardless of where the food is produced, consumers have the right to expect that the food they buy is safe and of the expected quality. This brochure includes examples of FAO's work, and stresses the importance of science-based decision-making and working together to build the world we want – a Zero Hunger world.