



# Food Safety Challenge in Africa and Possible Solutions





Collectively, Africa is reputed as one of the most food insecure areas in the world, threatening millions of vulnerable people. Whilst Member States have focused mostly on food production and sufficiency to ensure availability of food to their populations, food safety, food quality and nutrition have, overall, been given lesser priority until recent years. According to the World Health Organization (WHO), 91 million people in Africa fall ill each year due to food-borne diseases and 137,000 die of the same cause, representing one-third of the global death toll for foodborne diseases.

Food safety risks not only pose significant threats to the health of the population, but also the competitiveness of African agriculture. This undermines actual and potential gains to be made in improving public health, food security and nutrition, as well as thwarting efforts at boosting trade in agricultural commodities. Such gains are the foundations of inclusive growth and sustainable development in the continent.

Food safety is firmly embedded in the pillars of the widely accepted FAO food security definition that expressly links nutrition and food safety as integral components: Food security

exists when all people, at all times, have physical access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Unfortunately these linkages have been disaggregated with disproportionate focus on supply. Emphasis is on levels of food production, stock availability and net trade. However, food safety is the bedrock link of food security and nutrition. Without safe food, consumers do not have food and thus cannot have healthy and productive lives.

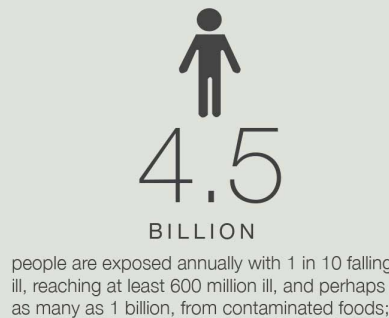
Over the past decade, there has been increasing recognition that the quantity of food alone guarantees neither food security nor adequate nutrition as shown by hunger, malnutrition, and stunting facts. A major impediment to achieve food security is the high prevalence of staple crops contaminated with different compounds, including mycotoxins produced by fungi, such as aflatoxin. Contaminated foods impede food security efforts and maintain unacceptable status quo in terms of food insecurity, poverty and a range of health-related problems, making sustainable development more challenging.

## EFFECTS OF FIVE FOOD SAFETY CHALLENGES

(physical, chemical and biological hazards; food preparation and handling; and mycotoxins)

Unsafe foods, such as those containing aflatoxin, impede economic and human development and burden health care systems.

Aflatoxin is as significant and pervasive a silent killer as micronutrient deficiencies, especially among women and children:



Human health impacts of cancers, anemia, stunting and cognitive degradation are significant and devastating with 420,000 annual deaths, largely in Africa and among children under 5



1 in 6 in the USA are affected by food related problems with 50 million illnesses, 3,000 deaths and at an economic toll of 80 billion dollars



Global extrapolation of the USA CDC numbers suggests approximately one billion people annually suffer from foodborne illness.

Source: WHO, FAO, PACA and the USA CDC





## THE FOLLOWING FACTS CHALLENGE HOW WELL PRODUCTION ORIENTED FOOD SYSTEMS ARE ADDRESSING GLOBAL HUNGER AND MALNUTRITION:



795  
MILLION  
people are hungry and 1.2 billion people are classified in poverty



2  
BILLION  
people, mostly children and women, are deficient in one or more micronutrients



159  
MILLION  
infants and children are stunted, with 51 million wasted and 99 million underweight



1.4  
BILLION

people of all income levels are obese, with the number of children under 5 having rapidly reached 41 million



300,000

Annually more than 300,000 pre-mature deaths of women and 3 million children under 5 are reported from nutrient and food related deficiency causes that sap the soul and the future of local communities of scores of nations.

On the other hand, food safety has become a main precondition for access to global food markets and, increasingly, for high-value domestic markets in developing countries. Therefore, raising food safety and quality standards at par with the rest of the world is foundational to make African agriculture a competitive and vibrant sector that promotes trade and agribusiness.

Addressing food safety is also crucial to achieve the integration agenda, including through the African Continental Free Trade Area (AfCFTA), in agricultural goods and services. Indeed, even with the best intentions and political will, non-tariff barriers, particularly technical barriers related to food safety/sanitary and phytosanitary measures, if not addressed proactively, will be obstacles to the implementation of AfCFTA and to increased intra-African trade.

Furthermore, without adequately addressing food safety issues, Africa will not be able to effectively attain the objectives set in the Declaration on the Comprehensive Africa Agriculture Development Programme (CAADP) and Commitment to Accelerate Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods, adopted by the 23rd Ordinary Session of the Assembly of the Union held in Malabo, Equatorial Guinea, from 26 to 27 June 2014. Of particular relevance here are Commitment #3 on Ending Hunger in Africa by 2025;

Commitment #4 on Poverty Reduction; Commitment #5 on Tripling Intra-African Trade in Agricultural Commodities and Services; and Commitment #6 on Enhancing Resilience of Livelihoods and Production Systems to Climate Variability and Related Risks.

Addressing food safety is complex as it cuts across three important sectors (health, trade, and agriculture) where food risks can incur at any point along food value chains. Furthermore, food safety operates in a demanding policy space that involves both public and private sector incentives and controls. Although the food safety situation in Africa is both complex and challenging, it is not hopeless. Solution pathways exist to raise the food safety bar and better manage the harmful impacts from unsafe foods. However, no single-entity can expect to achieve the global outcomes needed to move the needle towards ensuring more safe food at all times for all people with effective and sustainable progress. Noting this, the African Union Commission has, therefore, focused its efforts on aflatoxin control as one of the most pervasive food safety challenges in Africa by establishing the Partnership for Aflatoxin Control in Africa (PACA). PACA work in coordinating and providing leadership in aflatoxin control on the continent is having a spill-over effect in catalyzing systemic change addressing the broader food safety agenda.





There are several technologies recommended to reduce crop aflatoxin content and subsequent human and livestock aflatoxin exposure. These include cultural practices, biological control, monitoring and crop destruction, grain drying, sorting, storage, post-harvest processing, and dietary interventions. In order to have the greatest impact, farmers and value chain actors need to employ all available technologies. Using technologies by separate may result in crops not complying with aflatoxin standards. Management strategies need to be ethically appropriate (e.g. sorting with proper disposal systems in place), socially practical (e.g. dietary interventions with strong policy changes), and, most importantly, available for use by farmers. The International Institute of Tropical Agriculture (IITA) and partners developed a biological control product, Aflasafe, which significantly reduces aflatoxin contamination in maize and groundnut, from field to plate. Aflasafe contains four beneficial fungal strains native to target nations. Those fungi outcompete aflatoxin-producers when applied at the right crop growth stage. Use of Aflasafe products tackle aflatoxin contamination before the problem starts. Many other technologies aim to remediate and/or stop the contamination process but without tackling the

source of the problem: aflatoxin-producing fungi. IITA and partners promote and disseminate Aflasafe as a cornerstone of aflatoxin management strategies. Those strategies are tailored to the conditions and contexts of the intervention areas. IITA is partnering with public and private sector actors to scale up the use of Aflasafe along with use of appropriate aflatoxin management strategies in 11 African countries through technology transfer and commercialization efforts. Product development is at various stages in six other countries.

Cognizant that food safety is indeed the bedrock for enduring food security and nutrition, the importance of food quality and standards cannot be over-emphasized. It is not enough to simply focus on food quantity without assuring food quality: as outlined, unwholesome food has a very high health and economic toll. And although assuring Africa's food safety remains complex and challenging, it is not impossible. It can be done when all the public- and private-sector players along the food production and value chain each play their part as essential stepping stones keeping Africa's food safe in the forward march towards Africa's green revolution.

