

Critical and Emerging issues in Food Safety and Quality-Malta

Critical issues are those that are the most pressing ones, and as such need to be addressed and considered as priorities. They can be known issues that are actually present/already occurring or even recurring. They can also be completely new or emerging. With the word “issues” is meant either hazards/challenges or opportunities or even trends that might have an impact on food safety and quality.

Emerging issues are those that are new, unexpected, or can cause change in the status quo. Many factors inside and outside the food production system(s) could directly and/or indirectly lead to emerging issues in food safety and quality.

Examples of “drivers of change” that could lead to emerging issues

- **Globalization of trade:** Food safety must be considered within a global context that is dynamic and evolving as part of the globalization process: increased international trade, more integrated markets, more rapid adoption of new technologies, increased market concentration, and information transfer, can all have important implications (both positive and negative) in food safety.
- **New distribution channels**
Increase in online retailers will eventually get to the food retail market; are there any food safety risks that might arise from such a change of the retail market, where the local store might be replaced with automated warehouses and logistics in distributing it to the end consumer?
- **Economic factors:** budgetary pressures on national governments to improve efficiencies and reduce spending on national food safety systems; the ability/ willingness of food enterprises to implement adequate food safety measures; trends in food adulteration and food fraud; fluctuation of food prices. All these, and many other economic factors can impact on food safety at different levels.
- **Climate change:** Climate change, perhaps the most compelling environmental issue of our time, can affect patterns of occurrence of food safety hazards. Indeed international commitment to address environmental issues has a significant impact on agricultural development strategies and on food safety
- **New technologies:** The increasing role of new and emerging technologies in food production, post-harvest treatment, processing, packaging and sanitary treatment is also significant in the context of food safety and more globalised food trade.
- **Scientific progress:** Technical and scientific innovation has multiple impacts on food safety and its management. More sensitive detection methods are providing new tools for investigating and indeed discovering new food safety hazards. Recent advances in food safety related sciences give us a better understanding of food-borne disease, and the role played by some food contaminants in the etiology of some pathologies and disorders.
- **Urbanization:** With the global population growing there is a sustained trend of migration from rural to urban areas. Cities (and surrounding areas) are increasingly becoming places where food is produced (i.e. urban and peri-urban agriculture). This plays an important role in how people procure food, what people eat, the nature of food traded and the interactions among food systems, people and the environment.
- **Regulatory landscape**
The regulatory landscape is changing with an increased importance on bilateral or multilateral treaties, emergence of private standards etc that can affect the food supply chain.
- **Public attention to food safety:** Increasing public awareness of food safety hazards, concern over hazards to health attributable to food hazards and reduced confidence in the ability of current food supply systems to manage food safety risks are additional factors to be considered

in the food safety evolving context. At the same time food insecurity – an extreme manifestation of a large and growing wealth disparity within countries and among countries – remains a pressing global concern with important implications for decision-making on food safety at all levels.

Please note that the above are just some examples of drivers and the list is not complete. In responding to question #1 please consider these and any other broad drivers that you think could lead to emerging issues in food safety and quality.

1 - Identification of critical and emerging issues

‘Malta context – our priorities’.

Please identify what you believe to be the 3-5 most **critical issues** related to Food Safety and Quality, from **present to the next 2 - 5 years**.

- 1) Residues
- 2) Contaminants
- 3) Traceability
- 4) Urbanisation

Please identify what you believe to be the 3-5 most important **emerging issues** related to Food Safety and Quality **in the next 2 to 5 years**.

- 1) Climate Change
- 2) Food Fraud
- 3) Microbiological Contamination of food of non-animal origin
- 4) Introduction of exotic diseases

2 - For each issue you have identified above please provide a short explanation¹ (1 or 2 paragraphs)

Critical Issues

1. Residues

There are many sources of chemical contamination that can affect the safety of food. For instance the residues of veterinary pharmaceuticals such as antibiotics may enter the food chain. This is a concern which needs to be addressed.

2. Contaminants

¹ In providing a **short explanation** of 1 -2 paragraphs please briefly explain: 1) why you selected that issue (i.e. on what basis - information/data, knowledge or assumption - you made that choice) and 2) the expected and/or actual impacts of the issue (whether the impact would be sector-specific, affect only some sub-populations or countries/regions, whether it would be related to public health or trade etc)

Contaminants may be present in food as a result of the various stages of its production, processing, or transport as well as from environmental contamination, posing a risk to both animal and human health.

Food safety is a public health priority for Malta as unsafe food may cause food borne illnesses to the population. Outbreaks of food borne diseases are a concern for Malta especially if the identified sources are chemical contaminants. Of concern are the use pesticides such as glyphosate and other co-formulants, perchlorates in the manufacture of fireworks but also since MT has a strong aquaculture industry of concern are the contaminants in sea water such as heavy metals and organo-chlorines.

3. Traceability

Traceability has become increasingly important particularly due the complexity of today's food supply chains and new distribution channels.

Malta also finds that the traceability of certain commodities such as fresh meats and fish can prove very difficult to investigate hindering the timeliness to act when a food safety problem occurs, which is at the deterrent to public health.

4. Urbanisation

Malta's population is becoming increasingly urbanized. This impact of urbanization on the nutritional status of the Maltese needs to be addressed with service provisions and city planning for healthy lifestyles. In a country that primarily depends on importation of its food commodities, food safety in urbanised areas with a population that is growing and leading a hectic lifestyles and increasingly consuming industrially manufactured convenience foods, is a major concern to Malta.

Emerging Issues

1. Climate Change

Malta believes that addressing the potential implications of climate change on food safety would require some important steps such as a thorough understanding of the microbiological hazards and the factors affecting their occurrence and persistence.

2. Food Fraud

Fresh meats have not been widely associated with food fraud. However, after the recent horsemeat scandal, this has become a concern particularly in the production of pre-packed and processed food. With rising food prices, food fraud is an easy way of making profit, accounting for major food safety concerns.

There are a large number of food commodities that can be targeted for food fraud and these include olive oils, milk and dairy products fruit juices including jams and preserves, spices and sweeteners, amongst others.

Organic food can also be a susceptible area for food fraud i.e. the selling and labelling of non-organic food as organic food. Often consumers perceive organically produced food to be

safer than conventionally produced food, containing more nutrients, including vitamins and minerals. In general, Maltese consumers believe that organic farming involves little to no use of pesticides and hence, may be encouraged to buy organic food for its perceived health benefits.

3. Microbiological contamination in food of non-animal origin

Foods of non-animal origin including fruits and vegetables are consumed in a variety of forms, being a major component of almost all meals and important for consumers' daily diet. These food types are often associated with healthy eating and perceived as posing no health concerns. However, the potential of these foods to be associated with food borne outbreaks is to be recognised.

In fact, a wide range of hazards are associated with these foods and such types are also associated with pathogens eg. *E Coli* when eating raw leafy greens and other vegetables such as tomatoes, melons and legumes.

4. Introduction of exotic diseases

Malta is concerned about the possibility of new diseases coming from the consumption of food and products of non-animal origin that may emerge locally due to the requirements of its diverse population especially from the sub-Saharan continent. The challenges of controlling such emerging exotic diseases are a challenge for their control and their implications on public health and food security. An example of concern to MT would be the small hive beetle in the apiculture industry.