# Chapter 13 Unified Approach to Integrated Food Quality and Safety Management

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#### **ABSTRACT**

The market development and globalization requires for every organization to seek assurance in its supply chain in order to ensure that the products manufactured meet the requirements. Production quality is considered as a socio-economic category and is perceived as an aggregation of properties and features that are to satisfy the ever-growing customer needs and requirements in terms of consumption. Health insurance of all food consumers target groups is the basis of the global food safety policies. The goal of the present study is to analyze the requirements of ISO 9001:2015 and ISO 22000:2018 standards for food quality and safety management systems and thus identify the opportunities for a unified approach towards an integrated management to be implemented through risk-based thinking at all management levels. It is necessary for the assurance of food safety; it being the most important element of quality, to be perceived as an essential part of all management activities.

#### INTRODUCTION

Sustainable development is objectively necessary for the future of any society. Its goals are directed toward satisfying the current needs without jeopardizing the possibilities for satisfying the needs of future generations. This task is a responsibility for each and every society and all of its economic actors should be directly engaged for achieving this goals.

The Sustainable Development Goals of EU until 2030 are directed toward reduction of food waste per person worldwide on the retail trade and consumers level, as well as minimalization of food losses in the production and distribution processes, including losses of primary production, transportation and storage (Griggs, 2013).

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Food management systems are becoming more complex. Primely consumers expect that food is not only safe, but also produced without significant environmental impact and simultaneously on affordable prices (Wognum, N., & Bremmers, H., 2009).

Global food quality and safety solutions would be essential to meet the requirements and fully satisfy the customer needs within the entire food chain.

The adopted sustainability measures apply to the food supply chain in the European Union as well as at every stage of the food chain, from production, through processing, transportation, storage, retailing, placing on the market to consumption. In the definitions of the food chain and the supply chain, the unifying is that they cover the product's path from raw materials to its consumption (ISO, 2018). The sustainability measures are imposed by the fact that in highly industrialized countries most food is wasted in the sale and consumption phase, and in the developing countries food is lost even in the production and processing phase. The customer increasingly dominates customer-seller relationships, and, therefore, manufacturers are striving to reduce cases of expressed end-user dissatisfaction. In many cases, the consumers perception for the quality of the food overlaps with the perception of its safety. With supply chains becoming increasingly globalized and complex, the need for standardized, internationally accepted food safety audits has grown. The debate around these topics focuses on several aspects of the product: from organoleptic characteristics to health and hygiene safety, from health and nutrition properties to the place of production and related ethical and social aspects (Frewer, 2008).

This focus is closely related to the achievement of better financial results by the manufacturers. From this perspective, the food quality and safety are simply paramount to a company engaged in the manufacture and supply of food products, in both national and global markets. Food safety audits provide transparency and traceability in the supply chain, enhance quality and efficiency, while also reduce cost and risk.

The production quality is seen as a socio-economic category and is perceived as a set of properties and characteristics that must meet the ever-increasing demands in terms of consumer needs and consumption. The economic importance is determined by the ratio quality-pace of economic development and efficient utilization of raw and processed materials, and thereby more consumer value is being created (Vukasović, T., 2015).

The social importance of the problem with product quality increase is expressed by the ability to meet as many and as more growing customer needs as possible. The quality of the products produced is the result of the manufacturer's activity, however, the specific assessment is to be given by the market and so by the consumer.

Consumption processes are constantly evolving and becoming more complex, as food products are being evaluated for both their material values and their perceived value. For each consumer, the intention to buy and subsequently to consume the food is determined not only by the characteristics of the product itself but also by the impact of various factors such as consumer's social, environmental and health culture. In defining their identity and attitude towards the society, consumers are paying more attention to other aspects of the food production and food origin. Food is becoming a mean of communication and socialization (Wognum, 2009).

It could be said that quality is also perceived as an added value based on customer benefit (ISO, 2015 a).

There is a growing critical attitude and strictness from the side of the consumers with regards to the consumption of safe food of good quality. In recent years, their concerns have been related to the widely discussed problems among the food industry. The emergence of new human and animal diseases and the occurrence of epidemic cases of illness resulting in the death of a significant number of people/animals outline the framework of a crisis situation (EFSA, 2012). This problem draws attention to the adoption

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