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FOOD SAFETY AND QUALITY MANAGEMENT SYSTEMS APPLIED IN SERBIAN AND HUNGARIAN FOOD CHAIN

Abstract: *Quality management and food safety systems which are applied in the Serbian and Hungarian food chain are determined primarily by the law regulation background, secondly by costumers' need. Our work included the introduction of the applied food safety systems, as well as the comparison of the law regulations between the two countries in the field of food safety.*

Keywords: *food safety, regulations, standards, Serbia, Hungary*

1. INTRODUCTION

Today foodborn diseases have become a significant and growing problem worldwide. "However, the consumption of food safety has always been essential in human history. Today this topic has even higher importance, so in some countries has also become a political issue." [1].

Hungary's accession to the EU has been in the year 2004, by that time its own legislations have been harmonized with the EU regulations. Serbia currently is in the status of legislation harmonization with its intention to accession.

2. THE PROPOSED APPROACH

2.1 Food law

The food law general regulation by the EU's "Foodlaw" [2]. Regulation (EC) 178/2002 of the European Parliament and of the Council, issued in January 28th 2002. It is determined the principles of food law, which are the following: (1) The aim is the health and interest protection of consumers as well as to ensure fair trading,

(2) Food-chain view. The food safety have to be under control and traceable during the whole production process "from field to table", (3) the food companies have the primary responsibility for food safety. Their obligation is the proper establishment and functioning of the inner food safety system (HACCP), as well as the withdrawal of incorrect or health hazardous products from the market. They are obliged to report to the authorities if such a product detected. (4) Unsafe product must not be marketed. The product is unsafe if it might be harmful for health, or it is inappropriate for consumption due to other reasons, (5) Traceability. Every company has to record the incoming and outgoing products, and to ensure that these products could be identified by its accompanying documents. Therefore the incorrect products could be withdrawn or retrieved from food chain in a faster and more effective way, (6) Measures based on riskiness. The severity of regulations, measures and controls are based on the riskiness of company and the produced products made by it. [3].

Prior to this regulation the Council Directive 93/43 EEC on the Hygiene of

foodstuffs in which the European Union has specified the application of HACCP food safety system in the form of order to the member countries, which have to be included in their law and have to be applied till the end of 1995. [4].

One basic aim of the food law is the high level protection of human life and health, as the Regulation (EC) 178/2002 of the European Parliament and of the Council [5]. has stated, all clauses mandatory. On the hygiene of foodstuff, June 14th 1993, Council Directive 93/43 EEC on the Hygiene of foodstuffs [6]. established the general rules of hygiene of foodstuff and procedures, which could be served for control of compliance of this rules. There is a need for special hygienic rules in the case of certain foodstuff. These rules are determined according to the special hygienic rules of animal originated foodstuff on the regulation 853/2004/EK – April 29th 2004 European Parliament and Council order.” [7].

The 93/43 EEC Council Directive Hygiene of foodstuffs had foreseen the application of HACCP food safety system. According to that the food industry companies should be identified such steps, which are crucial in the aspect of food safety, and should ensure the appropriate selection, execution, maintenance, as well as revising in the frame of HACCP system of safety procedures.

The Council Directive 93/43 EEC on the Hygiene of foodstuffs replaced by Regulation (EC) No 852/2004 of the European Parliament and of the Council on the hygiene of foodstuffs, also foresees the HACCP application. The HACCP is a risk analysis and management system based on the Good Manufacturing Practice, Good Distributing Practice and the Good Hygienic Practice, what could be applied as standalone or as a part of the full quality management (for example: according to the ISO 9000 standard). The principles and user guide have published in the FAO/WHO Codex Alimentarius

Committee principles (CAC/RCP1-1969, its 4th version could be found in the Hungarian Foodbook issued in 2003 (principle number 2-1/1969))”. [8].

Although Hungary accessed to the EU in May 1st 2004, since then the application of HACCP food safety system has already required. In Serbia the introduction of the HACCP food safety system has been obligatory for animal protein processing plants since 2009, according to the Law on Veterinary- Zakon o Veterinarstvu [9]., the deadline was June 2011 for the remaining actors in the food chain (except the primary production), according to the Law on Food Safety-Zakon o bezbednosti hrane [10].

Both of the above mentioned laws foresee the application of Good Manufacturing and Hygienic Practice and risk analysis and critical control point, but do not add explanation. Although in the Serbian legislations the translation of Recommended International Code Of Practice, General Principles Of Food Hygiene: CAC/RCP 1-1969, Rev. 4-2003 [11] does not appear, but the seven principles of HACCP appear in the Order on Requirements of food hygienic (Official Gazette RS, num 73/2010) Pravilnik o uslovima o higijeni hrane („Sl. glasnik RS”, br. 73/2010) [12].

The HACCP (hazard analysis, critical control point) equipment for evaluation of hazards and establishment of such a (self) regulation system, which prefer to focus on prevention, do not build on the control of the end-product.

3. CUSTOMERS NEEDS

The customers are intended the purchased food industrial products for domestic or foreign country markets. In the case if the food product intended for European countries, “prior to accession Serbia fall into the so called “Third” country category, namely it is controlled -

during the export process - that whether the export product fit to the union regulations: Besides there must be respected the special additional regulations of the importer country too.

Nevertheless besides the law regulations certain customers required from suppliers the introduction and certification of some standards.

3.1 EN ISO 9001:2008

Although the EN ISO 9001:2008 general quality management system, along with the HACCP, provide a proper basic not only for food safety, but for the supervision and adequacy of operational processes too.

3.2 EN ISO 22 000

The ISO 22 000:2005 standard was elaborated for the purpose of certification of HACCP. The standard is applicable for all the processes in food chain.

This standard was elaborated by the ISO - International Organization for Standardization. The MSZ EN ISO 22 000:2005 international standard determines such a food safety management system requirements, which combines the following generally accepted, key elements what ensures food safety, along to the food chain, to the final consumer: mutual communication, system management, prerequisite programs, HACCP principles. Following the successful certifying the certification would be issued by the certification body. The certificate is valid for three years, along with successful annual supervision.

3.3 FSSC ISO 22 000:2005

FSSC 22 000:2005 is issued by the non-profit organization, Foundation for Food Safety Certification, recognized by the GFSI – Global Food Safety Initiative. Scheme of certificate of this standard is in

the line with ISO 22 000:2005 and BSI-PAS 220:2008 (or with ISO/TS 22002-1) standards.

The FSSC 22000 is the newest, comprehensive food safety system made for food manufacturers. It based on the ISO 22000 food safety system, supplemented by the requirements of PAS 220. The PAS 220 is such a prerequisite program, which contains safety requirements exclusively for food manufacturers. Actually it supports the better application of the ISO 22000. The FSSC 22000 unlike ISO 22000 applicable and certifiable only in food producing plants.

3.4 IFS – International Featured Standard

The members of the German Retail Federation (HDE) and the French co-organization (FCD) have drawn up under the name of International Food Standard (IFS) the quality management and food safety standard concerning to the retailers own brand name of traded products.

The aim of the standard is the evaluation of suppliers' food safety and quality management systems by uniform criteria. This standard is regulated by IFS Management GmbH, which standard concerns to every food industry processes following the raw material production. More IFS standard was established by its application field:

IFS Food ver. 6: Food-processing

IFS HPC: Manufacturing of household-chemical and body care products

IFS LOGISTIC ver. 2: Logistics, as a service (there is no trade activity)

IFS Broker: Food, HPC trade, product-without contact (there is no physical contact to the product, only procurement and sale; office activity without logistic)

Cash & Carry/wholesale (product distribution; it might contain

manufacturing activity in a small amount, special requirements)

IFS PacSecure: Standard concerning to food packaging material

The revised, new sixth version of the IFS Food came into force in July 1st 2012. This 6th version contains a lot of new requirements, which concerns among others to contact, management of records, HACCP, hygienic control of employees, product datasheets, insect and pest control, traceability of product. Ensure high priority to the issue of food security, which would be intended to the deliberate contamination of foodstuff. Validation period of the certification is one year.

3.5 BRC

The standard of the British Retail Consortium (BRC standard) has been developed due to establish uniform requirements for supplier food industry companies of the British traders. The standard among others extend to the quality, to the hygiene and also to the product safety, as well as the quality management is an integral part of it. Design and application:

(1) BRC Global Standard for Food Safety Issue 6., (2) BRC Global Standard for Packaging and Packaging Material Issue 4., (3) BRC Global Standard for Consumer Products Issue.

3.6 SQF – Safe Quality Food

Introduce on July 1st 2012, the SQF

Code, Ed. 7 serve as the replacement for the SQF 1000 and 2000 codes – offering one food supplier standard for use by all sectors of food industry, from primary production to transport and distribution. It's published Safe Quality Food Institute. SQF Code is an HACCP Based Supplier Assurance Code for the Food Industry.

3.7 Global G.A.P.

The GLOBAL G.A.P. appeared in 1997 as EUREGAP. The British traders along with the European foodstuff stores have been elaborated this standard, which regulates the operation from the primary production to the after collecting operations in line with the Good Agricultural practices (GAP).

It could be used among others in production of fresh vegetables and fruits as well as at livestock.

4. CONCLUSION

As it was necessary for Hungary, so it would be necessary also for Serbia according to the accession to the European Union the harmonization of the legislations concerning to the foodstuff. It would be expedient to translate and introduce the Recommended International Code Of Practice, General Principles Of Food Hygiene: CAC/RCP 1-1969, Rev. 4-2003 into the Serbian Law. The customers would be required the introduction and certification of many standards.

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