Quality and food safety issues revealed in certified food companies in three Western Balkans countries

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ABSTRACT

Certification of quality and food safety management system is increasing, with various business drivers that demand third party audits. A survey was undertaken where audit reports and revealed findings (nonconformities and/or improvement opportunities) were analyzed from 123 quality and/or food safety audits performed in 60 food companies. The results showed that QMS audits revealed most of the findings in the management process (21.8%), followed by control (14.5%). Findings related to documentation and control of records increase as the system evolves. Food safety audits showed that the majority of findings are related to managing food safety issues (17.5%) and various aspects of food safety control (15.5%). Further analysis showed that the majority of findings (59.6%) are related to prerequisite programs including GHP requirements. These audits generated twice as much nonconformities than quality management system audits. The survey recognized that in the sampled companies, managing quality and food safety as well as control of quality and food safety represent a problem which should be addressed by most of the companies.

1. Introduction

Consumers are using food or food ingredients that may derive from distant countries or continents with a less transparent food supply. This led to food quality and safety concerns which may present an argument for limiting trade (Schillhorn van Veen, 2005). In order to build and maintain the consumers' trust in food safety and quality throughout the food chain, quality assurance and food hygiene became highly significant in the food sector (Aggelogiannopoulos, Drosinos, & Athanasopoulos, 2007). Business drivers that enforce implementation of quality and food safety schemes have been recognised. In some cases, the supply and demand drivers support the decision on adopting a quality or other assurance scheme (Tsekouras, Dimara, & Skuras, 2002). Looking at food safety and quality in a wider perspective, the decision to adopt an assurance scheme may be the outcome of a complex push and pull process of simultaneously acting forces applied by external parties such as the final consumers, the intermediate consumers (other firms down the supply chain) or by a firm's own management (Tzelepis, Tsekouras, Skuras, & Dimara, 2006). As a result of the risks in the food supply chain, various assurance schemes have been developed and are present worldwide.

In three countries of the Western Balkans (Serbia, Bosnia and Herzegovina and FYR of Macedonia) implementation of various quality and food safety assurance schemes is on one side required by legislation: on the other side, large multinational producers or retailers set their own requirements and recognized schemes. In the last few years, food industry legislation introduced a set of food safety laws and regulations requiring implementation of HACCP based food safety systems. Other food safety and quality standards are applied voluntarily, although governments in these countries promoted their implementation and certification (Aggelogiannopoulos et al., 2007; FYRM, 2006, 2007; Herzegovina, 2005; Serbia, 2008, 2009). Food producers received financial support from governmental and non-governmental funds available on the market (USAid, SIEPA and EU funds).

The producers who mainly exported food to the EU, were the first to start implementing HACCP principles and other quality and food safety schemes; however, they were confronted with a dilemma who should verify its effective implementation. HACCP programs and their implementation presents responsibility of the food industry while government inspection agencies are responsible for monitoring and assessing their proper implementation (Ababouch, 2000). In most countries, the national or local inspection services are responsible for the assessment of HACCP and they should be competent to perform these assessments (Azanza, 2006; Barnes & Mitchell, 2000; CAC, 2008; Gagnon, McEachern, & Bray, 2000; Lee & Hathaway, 2000). Due to inspections services lack of

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competence in these three countries, certification bodies started providing third party HACCP audits.

Besides HACCP, the most common certifications in the Western Balkans food industry cover food safety (ISO 22000) and quality management systems (ISO 9001). ISO 22000 is a HACCP-type standard based on ISO 9001, developed to assure food safety (Aggelogiannopoulos et al., 2007). There is a trend of integrated management systems and combined audits of two or more management systems (ISO, 2002). Standards in their scope specify whether they cover a quality or food safety scheme; nevertheless, in a broader perspective all schemes can be understood as quality schemes where each quality assurance system is focused on a particular dimension (i.e., food safety includes GMP, HACCP, BRC, FSMS; food quality is focused on ISO 9001, environmental management on ISO 14001) (Raspor, 2008).

In criticizing the role of third party audits, Deaton (2004) states that an important task for future research is to measure the benefits attributable to third-party certifiers. Food producers seeking certification consider a certificate as a proof of an implemented and effective system. However, in every country, geographic area or food chain link, HACCP and other systems are influenced by a complex set of factors (Taylor & Kane, 2005).

This paper presents the results of an empirical survey of certified food producers in Serbia, Bosnia and Herzegovina and FYR of Macedonia in order to investigate audit findings revealed from third party audits in quality and food safety schemes. The objective of the study is to analyse whether there is a link between production scopes of the companies, types of audits and distribution of findings.

2. Third party auditing

Quality audits have gained prominence as a tool for assessing the effectiveness of quality assurance efforts and, more recently, for the evaluation of compliance with quality standards such as ISO 9000 (Poksinska, Dahlgaard, & Eklund, 2006). Since the ISO 9000 series of standards were adopted more than twenty years ago, certification has become a common process as a conformity assessment process. The process is related to international standards (ISO management standards such as ISO 9001, ISO 14001, ISO 22000), as well as other standards (BS OHSAS 18001, Codex Alimentarius CAC/RCP rev.2003, BRC, IFS), which cover quality, environment, health and safety, food safety and other management systems. Certification bodies provide a variety of auditing services against a large number of standards and certification procedures have gained great importance in the international agribusiness sector (Albersmeier, Schulze, Jahn, & Spiller, 2009).

Certification is a worldwide recognized process. However, there are no sufficient reliable local and global databases covering the number of certificates. The number of enterprises that are adopting quality assurance systems to improve their competitiveness in the global market is continually increasing (Karipidis, Athanassiadis, Aggelopoulos, & Giompliakis, 2009). ISO organization as the world's largest developer of voluntary International Standards for business, government and society, realizes The ISO Survey covering number of certificates worldwide (ISO, 2008b). By the end of 2008, at least 982,832 ISO 9001 certificates had been issued in 176 countries and economies. The number of ISO 9001 certificates represents the total number in all industries since the standard is generic and applicable to all organizations, regardless of type, size and product provided (ISO, 2008a). According to this survey, food industry is not among top five industrial sectors and covers approximately 4% of ISO 9001 standard (4.2% in 2007 and 3.9% in 2008). As per the same survey, ISO 22000, being a typical food safety standard is present in 112 countries and economies and there are at least 8102 certificates.

Purpose of this process is trading within a country or across borders, which requires a mechanism to ensure that the conformity of a management system is on an acceptable level (Gyani, 2008). An independent assessment by an expert and a fully accredited organization provides true additional value to the industry it serves as well as supporting and complementing the role of the food-law enforcement agencies (Tanner, 2000).

Some researchers and authors state that implementation and certification is a paper-driven process of limited value, and it does not have an impact on firm performance, thus it may be considered as a marketing cue (Tzelepis et al., 2006). As confirmed by Gotzamani (2010), ISO 9000 research has shown that the major motive for certification comes from global external pressures, since companies cannot do business in Europe or other countries without first being certified. In this manner, certification was viewed as a threshold that should be crossed in order to expand globally and do business all over the world. According to Poksinka, few studies have investigated the certification body's role in achieving benefits (2006). However, there are indications highlighting the role of audits not only for the effectiveness of systems, but also for organizational learning and continual improvement. Audits may provide audited organizations with a unique opportunity to receive advice, new ideas and external assistance.

Certification bodies perform the certification process in accordance with ISO/IEC 17021 (ISO, 2006). An audit consists of two stages. In the first stage, auditors assess the compliance of the documentation and readiness of the company and its premises (this stage is referred to as readiness review, preassessment or initial audit). This audit covers evaluation of the location and premises, understanding the requirements of the standard audited, documentation and scope of the management system and evaluation of internal audits and management review (ISO, 2006; Mortimore, 2000). In the second stage, auditors evaluate whether actual activities conform to the documented procedures and whether they are actively implemented (Poksinska et al., 2006). It covers conformity to the requirements of the standard audited including performance monitoring, measuring, reporting and reviewing against key performance objectives and targets, legal compliance, operational control, management responsibility, internal auditing and management review (ISO, 2006).

Upon successful completion of the second stage, a three-year surveillance program is developed to monitor the management system on a regular basis and to consider changes within the management system and improvements. Surveillance audits should as a minimum include internal audits and management review, follow up activities from previous audits, handling of customer or other interested parties complaints, effectiveness of the management system, progress toward continual improvement, operational control, review of any changes and use of mark/logo of certification and accreditation body (ISO, 2006).

As a result of all audits, a report should be prepared including audit findings and conclusions (positive and negative) on fulfillment, statement on effectiveness of the management system with all requirements of the standard and nonconformities (ISO, 2006). Audit findings can indicate either conformity or nonconformity with audit criteria (requirements of the standard). When specified by the audit objectives, audit findings can identify an opportunity for improvement (ISO, 2002).

3. Materials and methods

There are plenty of criticisms about the certification bodies, their work and differences among them regarding certification criteria. Some certified organizations unofficially claim that there is a differentiation of auditing organizations from the demanding ones