POSSIBILITIES AND SIGNIFICANCE OF HAS IMPLEMENTATION (HALAL ASSURANCE SYSTEM) IN EXISTING QUALITY SYSTEM IN FOOD INDUSTRY

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Abstract: Islamic community in Serbia has opened and agency for certification of Halal Quality System in food industry and in this way helped food producers who want to develop their businesses in that direction. "Halal" is a term contrary to "haram" and it means legal. Every producer wishing to obtain halal certificate must previously introduce and implement quality control system which will provide not only production according to hala standards but also purchasing of halas raw materials and accompanying material. Halal quality system can be implemented into existing quality system. At the same time this system defines organizational structure, responsabilities, procedures, activities, possibilities and resources with same mutual purpose that products, processes or services satisfy defined goal – halal product.

Key words: halal, haram, HAS, HrACCP, food industry

Introduction

In conditions when possibility for marketing of goods from food industry is decreasing, producers are trying to use all opportunities even there were until recently it was unimaginable to market our products, for instance islamic countries, where due to Sheriat laws it was not possible or procedure for placement and utilization of such products was very strict. All products produced for the needs of Islamic countries must comply with their strict legal criteria, i.e. be halal. Term «halal», i.e. legal, is used for those products that are allowed for use according to Sheriat laws, and those are all products that are not "haram" (illegal). Today, in the World, the need for halal products is becoming increasingly explicit. From the stand point of Islamic religion this is positive practice. However, development of technology has made this practice more complicated, considering that numerous ingredients don't have clearly defined origin. There are numerous examples, for

instance: emulsions which can derivie from plants but also animals; or chicken or fish aromas which can contain pork fat. Producers are not obligated to declare these characteristics on label, therefore information presented on the label does not guarantee that this food stuff is halal.

In order to convince their consumers that food that they are producing is halal, producers can request introduction of halal certificate, which is usually issued for period of 12 to 24 months. Previously it is neccessary to introduce system which can guarantee that products placed on the market by certain producer are halal and that there is no possibility of mistake or ommission during production which would lead to production of not "halal" but "haram" product. This system is called **HAS** (**H**alal **A**ssurance **S**ystem).

Basically, HAS is based on concept of **TQM** (**T**otal **Q**uality **M**anagement) which includes four main attitudes (*Šomođi et al., 2006*):

1. dedication,
2. consumer demands,
3. improvement without increase of costs, and
4. production of goods successivelly, without corrections, without rejects/waste and inspection.

Accordingly, application of HAS can be formulated as tendency towards an ideal situation, according to so called concept of "3 zerosl", i.e.

1. Haram substances can not be present in the production (zero limit),
2. No haram products can be produced (zero products), and
3. No possibility for risk during implementation of system (zero risk).

HAS COMPONENTS

Every producer wishing to market halal products has to establish HAS. This system consists of 5 following components:

1. Standards of halal management and halal system;
2. Control of standards of halal system;
3. Haram analysis and control of critical points (HrACCP);
4. Halal directions and halal data base.

It is desirable, but not indispensable that HAS bee independent system, so it can be incorporated in already existing system, for instance ISO 9000.

Standards of halal management and halal system

Halal management manages all functions and activities in production of halal products. Halal system defines organizational structure, responsabilities, procedures, activities, possibilities and resources which mutually strive that products, processes or services satisfy the defined goal – halal product.

Halal product is defined as food produced according to Islamic law and should comply with following requirements:

1. Does not contain elements not allowed according to islamic law;
2. During production, transportation and storage never cam into contact with prohibited/not allowed substances;
3. Is not stored in facilities or premises or transported using transportation vehicles which are not allowed.

Substances that are not allowed are following substances, as well as all those deriving from them:

- Food of animal origin:
  1. pigs,
  2. dogs, snakes and monkeys;
  3. carnivores, i.e. animals with claws and tusks,
  4. birds of prey,
  5. Pest and poisonous animals,
  6. Animals who are forbidden to be killed by Islam (bees, ants, wood peckers)
  7. Animals in general considered in Islam as repulsive (flies, worms, etc.)
  8. Amphibians and other animals which live in the water and on ground (frogs, crocodiles)
  9. Mules and donkeys
  10. All poisonous and dangerous water animals
  11. All other animals that weren't killed according to Islamic law
  12. Blood
- Food of plant origin
  1. Poisonous and intoxicating plants, except those where toxic and intoxicating substances are eliminated during production process
- Beverages
  1. Alcoholic beverages
  2. All types of poisonous and intoxicating beverages
- Additives- all additives which originate from previously stated substances and food stuffs.

Islamic law also regulates the process of slaughtering of allowed animals. Slaughtering can only be done by men, Muslim, mentally competent and familiar with Islamic procedure of anima slaughtering. Animal must be alive, and phrase "Bisimillah" must be said. Slaughtering is done using sharp device in the neck region with minimal hurting of the animal and bleeding out (see *ANONYMOUS: General Guidelines for Use of the Term "Halal")*.

In case of implementation of HAS system, representatives of top management, quality service, procurement have to be included in the system and coordinated by the internal reviewer. Internal reviewer organizes, directs and

controls all sectors included in HAS. Also, he must be in contact with regional organization issuing the certificate. Recommendation is that internal halal reviewer be someone who is well informed and knowledgeable about halal laws.

Control of HAS standards

Control of HAS quality standards relates to:

1. Determination of compliance of HAS elements with specific requirements
2. Determination of the efficiency of HAS application in realization of specific goals
3. Confirmation that incompliance observed in previous inspection has been corrected.

Haram analysis and control of critical points (HrACCP)

Considering that HAS derives from concept of "3 zeros", from the very beginning the possibility for introduction of haram substances into production process has been reduced to minimum. During storage of raw materials, production process and post production handling with products, it has to be ensured that prohibited substances do not contaminate halal products. It is necessary to establish system similar to HACCP, which will indicate all haram hazards and critical points, and this system is called HrACCP, i.e. Haram analysis and control of critical points. This system consists of 6 points:

1. Identification and assessment of all haram substances
2. Identification of critical points
3. Establishment of supervision procedure
4. Establishment of corrective actions and measures
5. Establishment of the archive system
6. Establishment of verification procedure.

Diagram of the flow of production substances should follow inputs, raw materials from the phase of the procurement, storage, production and processing to final product. Analysis of diagram should indicate critical control points, primarily procurement/purchasing of raw materials and ingredients which can not be haram.

When critical points are established, corrective actions and measures are defined as well as supervision procedure. The last step is verification of HrACCP program and forming of system documentation (*Dewanti-Hariyadi, 2001*).

Halal instructions and halal data base

Halal instructions contain general regulations of halal products and production procedure standards. They can also contain specific procedures and regulations.

Halal data base contains a list of raw materials and substances that are used in production process, information on origin and production method for each raw material and substance, their halal status and other important information. This data base enables producers to choose easier desired raw materials and substances.

Conclusion

Islamic community in Serbia has restored the certification agency issuing halal quality certificates since food producers who want to sell their products on the market of islamic countries, need this certificate. In Serbia, quantity of halal food produced is very low. Market for halal products in World is estimated on approx. 630 billion dollars annually with tendency of increase, of which 170 billion is generated on food products and remaining amount is generated from cosmetic preparations and drugs, medications. Serbian industry used to export food products to countries of Near East 35 years ago, but unfortunately, halal certificates from that period are not valid any more. Because of the development of market, there is increased interest for halal products and agency issuing certificates is present. Introduction of halal certification will undoubtedly make life of people of this religion is Serbia easier, but at the same time it represent huge export opportunity for Serbian food industry.

Mogućnosti i značaj implementacije has (halal assurance system) u postojeći sistem kvaliteta u prehrambenoj industriji

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Rezime

Islamska zajednica u Srbiji je otvorila agenciju za sertifikaciju halal sistema kvaliteta u prehrambenoj industriji i time izašla u susret proizvođačima hrane koji žele da svoje poslovanje razvijaju u tom pravcu. Halal je izraz suprotan od haram i znači zakonit. Svaki proizvođač koji želi halal sertifikat mora prethodno da uvede

takav sistem kontrole kvaliteta koji će obezbediti ne samo proizvodnju po halal standardima već i nabavku halal sirovina i pratećeg materijala. Halal sistem kvaliteta je moguće implementirati u već postojeći sistem kvaliteta. Istovremeno, taj sistem definiše organizacionu strukturu, odgovornosti, procedure, aktivnosti, mogućnosti i resurse koji zajednički teže da proizvodi, procesi ili usluge zadovolje definisani cilj- halal proizvod.

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