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Quality Assurance Development of Halal Food Products for Export to Indonesia

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Abstract

This paper deals with the vital problems of Halal food manufacturers in accordance to the changes in requirements and regulations of importing/exporting food to Indonesia. It is clearly known that the biggest market of Halal food products in Asia is Indonesia, thus the quality assurance of Halal products in this country has been developed to be a part of Food Security Strategy and Non-Tariff Barriers (NTBs). The Halal requirements and regulations are emphasized on Halal manufacturing process. Indonesia's Council of Ulama Majelis Ulama Indonesia (MUI) - the Indonesian most famous Halal certifier - has verified and accepted that many organizations of Halal certifiers around the world created much confusion in ways to properly follow the quality assurance for manufacturers/exporters. Therefore, this research focuses on exporters of Halal products to Indonesian food market by using the tools and methods of Halal certifier interview, Halal market survey and synthetic data of regulations and requirements. The result demonstrates insight details for manufacturers/exporters about crucial and up-to-date Halal regulations. Also, the paper depicts the Halal export process to Indonesia in practical manner.

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Keywords: Halal Food; Quality Assurance; Halal Regulatio;, MUI

1. Introduction

The world Muslim population today is estimated to be around 1.6 – 1.8 billion, about one fifth of the total world population. Indonesia is the most populous Muslim country in the world. In 2004, more than 200 million people or 88% of the Indonesian population were practising Muslims, almost exclusively Sunnis (Sunna: the path of the prophet). Shiites represent only a small part of the Indonesian Muslim population. Muslims constitute the dominant majority of the population in Java, Sumatra, Kalimantan, West Nusa Tenggara (NTB), Sulawesi and North Maluku. In contrast, Muslims make up the minority of the population in other parts of Indonesia, such as Papua, Bali, East Nusa Tenggara (NTT), North Sumatra and North Sulawesi [1]. Main Islamic organizations in

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Indonesia include 1) Muhammadiyah 2) Nahdlatul Ulama (NU) 3)Majelis Ulama Indonesia (MUI; Indonesian Ulama Council). Although Indonesia has the biggest Muslim population in the world, the accomplishment of national concerns on Halal foods just appeared in 1989, especially after the Assessment Institute for Food, Drugs and Cosmetics – Indonesian Council of Ulama (AIFDC – ICU, or LPPOM-MUI) was established. Since then, Halal certification activities to foods industries increases rapidly as the awareness and demand for Halal products of Muslim people increases. The demand for Halal foods is huge and this leads Indonesia to become a great and lucrative market for Halal food business. The fast development of Halal food industry is supported by the highly developed Halal certification system. In this country, the Halal assurance system (HAS) set up by companies is a basic prerequisite for application of getting Halal certificate. Indonesia also has a big chance to take part in the Halal food business competition in the global market [2]. Recently, the issue of Halal food, which focuses on the food and beverage industry, has attracted publicity in Malaysia. They especially do the implementation of food quality practices such as Good Manufacturing Practices (GMP) and ISO9000/ Hazard Analysis Critical Control Point (HACCP). Consequently, Department of Standards Malaysia has developed a Halal standard for foods, MS1500:2004, covering from the production of Halal foods, preparation, handling and storage. Besides these, food quality is also required to be safe, hygienic and healthy [3].

Halal Food is clean and safe without any traces of dirt as well as free from prohibited ingredients (Haram), which are lawfully enforced by Islamic law [4]. Muslims shall have food which is lawful according to Islamic law with healthy ingredients. The phrase "Foods which are lawful according to Islamic law or Halal food" has a broad meaning. First, sources of food are lawfully acquired and free from thievishness or corruption -- those are ethical Halal. Second, it has to be Halal in terms of types or categories of things to be consumed such as animals or ingredients that are contained in any food approved by Islam, those are the physical consideration that are they permit. In addition to both conditions above, It also focuses on "Processing" or stages of manufacturing commencing from slaughter, washing and cleansing, packaging, storage, transportation, selling etc. Any practices relate to personnel and premise hygiene which assured for safety, good manufacturing practice, storage and distribution. Measures are applied to food production chain to assure that the step of food preparation is safe to consume.

This research emphasizes to exporters of Halal chicken and poultry products for the Indonesian markets by using of Halal certifier interviews, Halal market surveys and synthetic data of regulations and requirements in this country. The information provides the quality assurances developed recently for the manufacturers and exporters to Indonesia who needs to be familiar with - and most especially - the Halal market, food safety, food hygine, Halal regulations and requirements. Moreover, these also investigate the organizations of Halal certifiers located in each area of this country.

2. Halal Food Trend

In 2010, the global Halal food market is worth around US $651 billion. The estimated demand for Halal food will be US$2.1 trillion in 2015[5]. The Halal market in Indonesia alone represents US $78.5 billion. It is considered to be a high trend and is the third from 6 areas of global Halal food market as shown in table1 [6]. It is also the biggest in Asian Countries.

Some South East Asian Countries now is making effort to develop their Halal food industry to strengthen their share in the global market of Halal food. While Indonesia is the largest Muslim country in the world, developing Halal food industry in this country is important due to two benefit targets, i.e., to protect domestic consumers from consuming non-Halal products, and to gain earnings from export of Halal food products.

Table 1. The global Halal food market sizes classified by region

Global Halal Market Sizes classified by Region in US $ billions				
Region	**2004**	**2005**	**2009**	**2010**
Asian Countries*	369.6	375.8	400.1	416.1
Africa	136.9	139.5	150.3	153.4
Indonesia	72.9	73.9	77.6	78.5
Europe	64.3	64.4	66.6	67.0
American	15.3	15.5	16.1	16.2
Australasia	1.1	1.1	1.5	1.6

Source: World Halal Forum

* Included: Indonesia, GCC Counties, Malaysia, China, and India

2.1 Halal Products Import

The statistic information of the Halal products is imported from about 22 groups, which are followed by Harmonized Commodity Description and Coding System (HS). Table 2 has shown that import is a high trend for first- third group of Halal food in Indonesia.

Table 2. Import value of Halal products

HS Code	**Import Value ($1000, US)**					**Average per year**
	2006	**2007**	**2008**	**2009**	**2010**	
10 Cereals	1,229,151	1,804,498	2,199,782	1,506,214	2,159,217	1,779,772
17 Sugar and Confectionery	639,958	1,116,417	457,971	704,561	1,252,842	834,350
12 Oil, Seeds/Misc.	375,866	568,394	845,773	826,902	1,102,261	743,839

2.2 Marketing Potential

The ranking of marketing potential for import in Indonesia is shown in table 3, which identifies in products list of HS code group in HS 10, HS 17 and HS 12.

Table 3. Marketing Potential of Halal products in Indonesia

Products	**HS code**	**Import Value ($1000, US)**			**Potential**
		2008	**2009**	**2010**	
Wheat	HS 100190	1,975,172	1,314,128	1,387,186	Highest
Soybeans	HS 120100	697,985	621,281	840,037	Most likely
Pure Sugar	HS 170199	242,993	53,982	422,016	Fair

3. Food and Agriculture Import Regulations and Standard

Republic of Indonesia Act No. 7 of 1996 concerning Food is the most comprehensive legislation governing production, import, and distribution of foodstuff. Gradually, additional government regulations to implement the provisions have been released, such as the latest Head of National Agency of Food and Drug Control (BPOM)

regulation No. HK 00.05.23.3541 dated July 8, 2008 on The Guideline for Food Safety Assessment of Genetically Modified Products.

Requirements for labeling of food products are broad in scope. At the end of 2003, the head of BPOM published guidelines food labeling to implement Government Regulation No. 69/1999 on Label and Food Advertisement. Government regulations for food labeling and advertising require that the nutrition content information shall include the vitamin content, mineral, or other kinds of nutrition supplements in the following order: total volume of energy based on amount of energy derived from fat, protein, carbohydrate, sodium, total volumes of fat, saturated fat, cholesterol, carbohydrate, fiber, sugar, vitamins and minerals. BPOM guidelines for nutrition value information on food labels were issued in 2005.

Packaging is regulated under the Food Act of 1996 as follows: Any person producing food for sale is forbidden to use any material that has been banned or can release contaminants that are dangerous or harmful to human health. Food for sale is to be packaged using methods that avoid spoiling or contamination. The government identifies forbidden packaging materials and methods for packaging certain food. If the effects of a packaging material on human health are not known, it can not be used before being checked for safety. New types of material may be used for packing food only after receiving government agreement. No person is permitted to unwrap and re-pack food, except in the case of bulk food intended to be packed into smaller packages. Food additives produced, imported, or distributed must comply with the Indonesian Food Codex or conditions approved by BPOM. For food additives not listed in the Indonesian Codex, or not having conditions determined by BPOM, then the FAO/WHO Codex Alimentarius Commission, Food Chemicals Codex, or appropriate European or FDA regulation applies.

The registration process should be conducted by a local agent or importer. Typically, it takes longer than the officially reported time frame and costs more than the published rate. Detailed requirements from the food manufacture and product samples are needed for the registration process, which can be sent to the local agent or importer.

Importer must obtain an import permit (SPP) or import recommendation before product is shipped. Directorate General of Livestock in the Ministry of Agriculture is responsible for issuing SPP for animal based processed food, where as an import recommendation for the remaining processed food products and food additive are issued by BPOM. For example, import procedures as following [7]:

Rice

Imports of specialized rice such as rice for medicinal purposes, 100 percent broken rice, and some other types of rice not produced in Indonesia are allowed only after obtaining approval from the Ministry of Trade based on a written recommendation from the Ministry of Agriculture.

Sugar

The May 29, 2008 amendment to the Minister of Industry and Trade decree No. 527/MPP/Kep/9/2004 states that plantation white sugar (semi-refined, HS No. 1701.91.00 and 1701.99.90) must have ICUMSA ranging from 70 IU to 200 IU.

Seed

Indonesian seed import procedures are mainly regulated based on the Minister of Agriculture Regulation No. 37 and 38/Permentan/OT.140/8/2006 issued on August 31, 2006.

3.1 Important Association Halal Certifier

The Indonesian Council of Ulama (ICU) (Majelis Ulama Indonesia, MUI) is the renowned organizing body to overcome this crisis. As a result, supported by some Muslim scholars and academician MUI established the Assessment Institute for Food, Drugs, and Cosmetics (AIFDC) (Lembaga Pengkajian Pangan, Obat-obatan dan Kosmetika, LPPOM) on January 6, 1989 in Jakarta (Husein, 2009). LPPOM is an institution that assists MUI as an authoritative Halal certifying body in Indonesia. The LPPOM members are competent scientists with various

disciplines including chemistry, biochemistry, food science & technology, veterinary, agro-industry and so on. In 1995, MUI issued decree on the permission of Provincial MUIs in Indonesia to establish a Provincial LPPOM. In following years, some Provincial LPPOM-MUIs were established including West Java, East Java, Central Java, Yogyakarta Special Region, West Sumatra, South Sulawesi, Bali, and so forth. Up to the present time, there are 28 Provincial LPPOMMUIs being established. The Assessment Institute for Food, Drugs, and Cosmetics (AIFDC-ICU) (LPPOM MUI) is to become a trusted Halal certifier in Indonesia and also worldwide to give tranquility to Muslim ummah (society) and to become the world Halal center which extend information, solution, and Halal standard admitted in national and international level. The mission are: 1) to make and develop Halal auditing system, 2) to perform Halal certification for products spread and consumed by Muslim society, 3) to educate and aware the society to consume Halal products, and 4) to give complete and accurate information about Halal status of products from all point of view.

The Indonesian Council of Ulama (Majelis Ulama Indonesia, MUI) certifies the Halalness of a product in accordance to Islamic law and is issued based on the assessment and audit by LPPOM – MUI. Halal certificate is a requirement for a license from the authorized government institution – National Agency for Drugs and Foods Control (BPOM - RI) to attach a Halal label in each product package. To get Halal certificate, a company must set up and implement Halal Assurance System (HAS), that ensures the continuity of Halal production process during holding the certificate. The data of number of company, number of halal certificate issued, and product items that have been Halal certified by LPPOM-MUI from 2005-2010 is shown in Table 4.

Table 4. Number of company, halal certificate issued, and product items that have been halal certified by LPPOM-MUI, Year 2005-2010

Year	Number of Company	Number of Halal Certificate	Number of product items
2005	414	969	2.408
2006	443	1.123	12.533
2007	488	1.013	8.636
2008	548	921	10.242
2009	353	470	10.55
2010	619	641	21.834

Source: *Republika,* January 21, 2011.

3.2 Halal Certification Process

Halal food certification refers to the examination of food processes in its preparation, slaughtering, cleaning, processing, handling, disinfecting, storing, transportation and management practices. The application of Halal should apply to all stages of processing "from farm to table" [8]. Halal food certification directly is concerned with the both the food hygiene and the safe food. Food hygiene is important to be applied by food producers in providing foods that are safe and suitable for consumption. They also need to ensure that consumers are provided with clear and easily understood information by labeling or other appropriately. This prevents food from contamination from food borne pathogens. Food hygiene practice should apply throughout the food supply chain from primary production through to a final stage for consumption; setting out the key hygienic controls and conditions at each stage of production.

A company which will apply for Halal certificate must fill in an application form provided by LPPOM-MUI for registration. In the same time, the company must set up Halal Assurance System (HAS) and officially assign persons to be a Halal team of the company or Internal Halal auditors whose responsible in ensuring the Halal production by implementing HAS. The completed application form attached with all supporting documents including HAS document be submitted to LPPOM – MUI Secretariat to be checked for completeness. Then, LPPOM – MUI will assign Halal auditors team to inspect or audit to the company's plants at running time of processing. The result of auditing are evaluated and discussed in LPPOM meeting. Auditing result which is not

complete yet will be informed to the company, and which is already complete and conformed with the requirements will be submitted to the Fatwa Committee of MUI meeting to get decision of the Halal status. The Fatwa Committee of MUI can reject the report of auditing results, if it is not met the whole requirements stipulated. Halal Certificate is then issued by MUI after the Halal status has been determined by Fatwa Commission. The validity of the Certificate is 2 years upon the date of issuance, and three months before expiry date the company should make renewal Halal certification according the policy of LPPOM - MUI. The scope of audit process covers company management in ensuring Halal production (implementation of HAS), the documentation, materials, process and facilities in the plant and material or product sampling when necessary.

Halal Assurance System (HAS) is a system designed, applied, and maintained by a company holding Halal certificate to assure the sustainability of Halal production process, hence the Halalness of its products continuously and consistently. The objective of HAS is to keep the sustainability of Halal production process and management in order to assure its Halalness according to the rule stated by LPPOM-MUI. Halal Assurance System is a part of company management policy and must be documented. As a management system, the main components of HAS are Halal policy (commitment), planning, doing (implementation), monitoring and evaluation, and, corrective action as a cycle.

3.3 Safe and Hygienic Food

Safe food is the food that does not cause harm to the consumers when it is prepared and/or eaten according to its intended use. In order to assure that the food is safe, the food producers should take necessary steps to comply with Good Manufacturing Practice (GMP) and Good Hygiene Practice (GHP). Good Manufacturing Practice is where the producers apply the combination of manufacturing and quality control procedures to ensure the product are consistently manufactured to their specifications. The Codex General Principles of Food Hygiene and the Malaysian Standard MS 1514 on General Principles of Food Hygiene lay down a firm foundation in hygienic practices in ensuring food hygiene. These principles are internationally recognized and the guidelines can be used together with other specific and appropriate codes of hygienic practice. There are several key principles that are critical to assure food hygiene

1. Emphasis should be on primary production, which should be carried out in an area where the presence of potential harmful substances does not contaminate the food until it reached unacceptable level.
2. Establishments or premises where food is produced ought to be located in areas free from potential sources of contamination, such as areas that are prone to pest infestation. Equipment and facilities should be located, designed and constructed to ensure minimum contamination, easy maintenance and cleaning, and regularly disinfected and protected against pest.
3. Control of operation through preventive measures is consistently implemented throughout the system to reduce the risk from food hazards at the appropriate stages of the production.
4. Ensure adequate and appropriate maintenance and cleaning program, pest control system, waste removal and storage, and sanitation systems.
5. Ensure personal hygiene is carried out.
6. Endure adequate control measures during transportation to prevent contamination from dust, fumes, or fluctuation of temperature and humidity.
7. Product should be labeled with lot identification and product information.
8. Workers who are in direct or indirect contact with food should be trained and/or instructed in food hygiene to a level appropriate with the operations they are performing.

Food hygiene contains steps and procedures that control the operational conditions within a food establishment, allowing for favorable environmental conditions for production of food that are safe and suitable

for human consumption. Food hygiene is the basis for the production and preparation of safe food. Unsafe food may cause food poisoning and food borne illnesses. Thus, food safety has impact on individual health.

Food safety has been of concern to humankind since the dawn of history and this concern is growing as food borne diseases, which has remain one of the most widespread public health problems in this contemporary world we live in. Hence, there is a need for a preventive and cost-effective food safety assurance method. The HACCP system has proven to be such a system. The HACCP System is a scientific, rational and systematic approach to identification, assessment and control of hazards during production, processing, manufacturing, preparation and use of food to ensure that food is safe when consumed. Hence, the application of HACCP is compatible with other management systems such as ISO 9000 and Halal standard. However for Muslims, there is another issue that need to be addressed and that is, the safe food must also be Halal. This means that the food chain must be safe as well as Halal. Implementing HACCP and Halal Systems is the next logical step for food industries. HACCP system ensures that the product is safe whilst the Halal system ensures that the food can be consumed by anyone including non-Muslims.

The definition of food in the Act further indicates its comprehensive coverage: [7] 'Food is everything that originates from biological sources and from water, either processed or unprocessed, that is intended to be eaten or drunk by humans, including food additives, basic food materials and other materials used in the preparation, processing and/or manufacture of food and drink.'
Food Safety covering:

1. Sanitation.
2. Food additives.
3. Genetic engineering and irradiation.
4. Food packaging.
5. Quality assurance and laboratory testing.
6. Contaminated food

4. Conclusion

Indonesia is the greatest Muslim population in the world with more than 210 million Muslim, with The Halal market in Indonesia alone represents US $78.5 billion. First-third of highest value for Halal Products import includes wheat, soybeans, and sugar. Therefore, exporters and foreign manufacturers always have to follow and the up-to-date regulations and information. It is clear that Halal issues recognized safety and quality assurance. It means the product prepared must be up to the standards, which also include hygiene. safety and quality assurance ensured that the Halal products are also clean, safe and well taken care of with good presentation and served in a proper manner, and of quality for everybody. The enormous potential of the world wide demand for Halal food must be seized by local manufacturers. The fast development of Halal food industry is supported by the highly developed Halal certification system. In this country, LPPOM MUI is a trusted Halal certifier in Indonesia, Halal assurance system (HAS) set up by company is a basic prerequisite for application of getting Halal certificate. Indonesia also has a big chance to take part in the Halal food business competition in the global market.

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