

Sustainable Supply Chain: Assessing The Emerging Values in The Halal Supply Chain of The Poultry Industry

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Abstract

The purpose of the paper is to assess the underlying values that exist along the halal supply chain of the poultry industry in Malaysia. The initial phase of halal supply chain process begins with sourcing activities which is the pre-slaughtering process ie farm is the focus of this paper. The paper adopts qualitative method by using in-depth interviews and software Nvivo for data management of the transcriptions. Interviews were conducted with the owners of the farms, who are the experts in the area of poultry farming and have in-depth knowledge. Results specify that the values found in the halal supply chain in the poultry farm can be enhanced by the farm operators in order to ensure the existing supply chain to become halal supply chain. This study provides policy recommendation to the relevant government agencies to adopt and apply as well as instill the model for the policy application to the players or suppliers in the halal poultry industry operators specifically farm operators. The issues of the existing supply chain of the poultry industry were highlighted in this paper due to the reason that it has not much been discussed in previous studies.

Keywords: Values, Halal supply chain, Poultry

Introduction

The sustainable supply chain takes into consideration the aspects of environmental, economic and social issues in order to improve the supply chain long-term economic performance (Beamon, 2008). Besides, supply chain management is characterized by three features; sustainable development, environmental and social criteria which must be met by the supply chain (business units) and the competitiveness of the chain, which will help to meet the needs of the customer (Carter & Easton, 2011; Paksoy, Bektaş, & Özceylan, 2011). Therefore, halal is considered as part of sustainable development in the supply

chain management. Moreover, the growth of the supply chain integration has made the logistics players able to find a new area of business opportunities such as the halal market. As the global halal market trade increases, it makes the market of supply chain grow tremendously. Development of the halal industry in today's business environment plays a significant role towards the enhancement of the economic growth of a country especially Malaysia. Therefore, the Malaysian government in supporting and promoting the halal industry as well as introducing Malaysia as an international halal hub progressively has done a lot of efforts. Accordingly, this study will be focusing on halal food through the halal supply chain.

The Halal Industry

The Muslim population is close to 3 billions and is expected to be 30 per cent of the world's population by 2025 (Asia, 2010; Halal Industry Development Corporation, 2008). With the increase of the world Muslim population, the halal products and services trade is also increasing yearly. This has led to the growth of the halal consumer market internationally both in Muslim countries and non-Muslim countries. The halal market also includes the quality of the products itself (Halal Industry Development Corporation, 2008). Since 2006, the importance and awareness of halal products and services have been realized by all parties such as government agencies, regulatory bodies, industry players, and others; this can be seen through the first World Halal Forum 2006. Malaysia has the potential to be a regional halal hub for production, the supply of halal products, services, and guidelines. In order to develop a global halal market, there is a need to identify the challenges of the halal industry, harmonize halal guidelines, and form events which act as a platform to create networking in trade for various players in the halal markets (Halal Journal, 2007). According to the Third Industrial Master Plan 2006-2010 (IMP3) (Ministry of International Trade and Industry, 2006), the halal industry comprises food, non-food products including pharmaceuticals, health products, medical devices, cosmetics and toiletries; and services including

logistics, packaging, branding, and marketing, printed and electronic media and travel and tourism. The halal industry creates a centre of attention for both the Muslim and the non-Muslim population in the international business markets due to the fact that halal product is hygienic, contamination-free principles of food production and others. This shows that the notion of the halal market only includes food and beverage is not true. In fact, the halal industry has been broadened to pharmaceuticals, cosmetics and other consumer goods, food services, finance, logistics and even tourism (Halal Industry Development Corporation, 2008).

The Poultry Industry

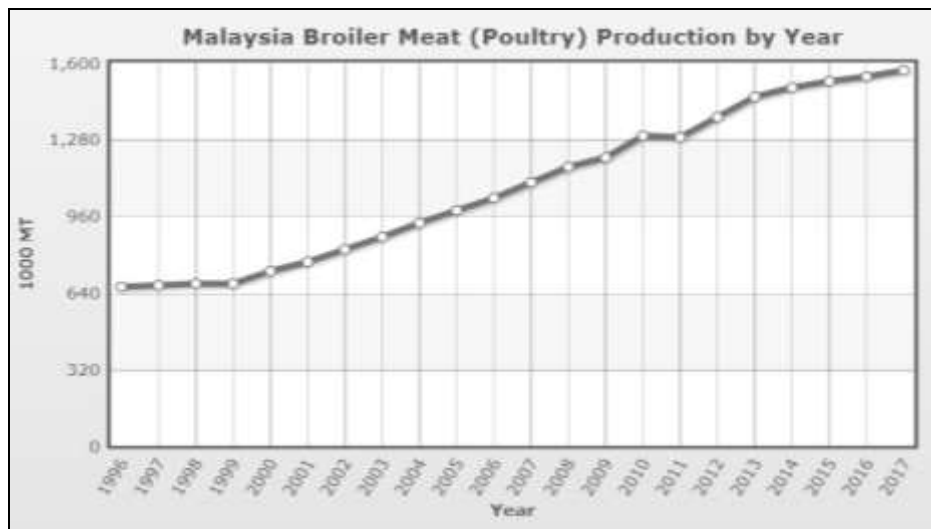


Figure 1. Malaysia Broiler Poultry consumption by year (United States Department of Agriculture, 2017)

As seen in Figure 1, the consumption of poultry in Malaysia is increasing annually in the past twenty years. In the recent year, i.e. the year from 2015 to 2017, the growth rate of poultry consumption had also increased by 1.85 percent. In worldwide, Malaysia's poultry meat per capita consumption is amongst the highest. Daily chicken consumption by Malaysians is at about 1.8 million chickens and 2.8 million chicken eggs (Orissa International Sdn Bhd, 2017).

Issues of Halal

Handling, storage and transportation of products are the common issues in

logistics. During the activities of transportation and warehousing of halal products, direct contact with something that is haram could dismiss the halal status of the product (Tieman, 2012). Another issue is the animal welfare. The supply of poultry to the abattoir may come from various farms. These poultry products that have bruises at legs are definitely due to being squeezed tightly at the thighs by the handlers at the abattoir (Grandin, 2017). This makes the welfare of the animal is ignored by the handlers. Furthermore, transport problems can lead to lack of animal welfare in which we can assess at the poultry condition such as bruises, death losses and injured animals. On the other hand, issues at the farm which can be seen at the abattoir from the body condition, lameness, lesions, injuries, animal cleanliness and internal pathology do affect the animal welfare (Grandin, 2017). Therefore, this shows that the poultry producers are neglecting the animal welfare.

Besides, during the World Halal Forum in Europe in 2009, it was declared that the animal wellbeing is important in the making of halal food in regards to spiritual slaughter that have lessened animal stress, soreness, and other inconvenience in the supply and handling of the animal throughout nurturing, transferring, and slaughtering (IHI, 2010). Accordingly, this situation may further increase the critical importance to be linked to the *halalan toyyiban* principle that is embedded in the halal supply chain practice.

Another issue is sourcing which can be seen at the farm. The drinking water, husbandry production, and source of water for the animal must be safe for consumption. Furthermore, the location of the farm must be away from the locality of pig farms or run-off from the pig farms (Soon, Chandia, & Regenstein, 2017). The animal food has also become another issue since it was exposed in 2006 and it caused exasperation among Muslims due to animal by-products (pig intestines) that is being fed to the cultivated fish. As a result, Malaysia National Fatwa Council has announced that animals fed with non-halal food are decreed haram (Saidin & Rahman, 2016).

Methods

Case study is an approach that provides a practical inquiry which studies the current phenomenon within the real-life context; whereby the boundaries between phenomenon and context are not clearly evident; and used various sources as evidenced by Yin (1984). Therefore, this study used case study and chose poultry operators who supply halal poultry around Klang Valley, Malaysia, as the case studies. Because Selangor is the third largest poultry supplier in Malaysia, this research focused on Klang Valley by using convenience sampling. and data were collected by using qualitative. Qualitative data were analysed by utilising an inductive approach. The inductive approach involved analysing the detailed parts and proceeded to more general perspectives called categories, themes, dimensions, or codes, which depended on the analytical method prescribed by the methodology selected by the researcher. Accordingly, Nvivo software was used for management of data. This research focused on the small-scale industry in Selangor, which emphasised on poultry farm. The study examined how poultry operators described their personal experiences, what influenced their practices, and what the impacts of their beliefs on their poultry product practices were. The interviewees were selected by using a purposive sampling. The criterion for purposive sampling was that the interviewees should have more than five years of experience in the industry. In-line with Merriam and Nilsson (1994), purposive sampling was an appropriate sampling strategy in a case-study research design, and it provided the researcher a degree of control (Barbour, 2001). Blaxter, Hughes, and Tight (2006) and Blumberg, Cooper, and Schindler (2008) highlighted the advantages of using case studies were that it could be investigated in an in-depth manner; more attention was given to details; the data were strong in reality due to its reference on people's experience; generalisations were allowed; and data could be archived for future research.

Currently, the company was a big company and had various types of business such as broiler, feed mill, parent stock, grandparent stock, hatchery and processing plant. The company also ventured into aquaculture sector consisting of

fish and prawn industries. The company headquarters was located in the central region of Selangor. The company had various farms in the entire Malaysia and outside Malaysia. These farms could be categorised into several areas, which included central, north and south region. In the central region itself for instance Selangor, the company had forty farms. However, for this research, the researcher only managed to get through one of the farms, which was located at the central region. The central region farm could supply more than 100 000 poultry products.

The farm which had 16 years of operation had a single storey chicken coop and the size was about 40' x 400' sq. ft. The coop was a closed coop, fully automatized and equipped with air-conditioner to maintain the temperature around the area. The company started to use closed coop in the year 2000 because the weather in Malaysia had become hot and various disease had been spread out. This affected the growth of the poultry breeding. The coop was estimated to accommodate about 16,500 chicken breed. The coop was specifically imported from Germany because of the sophisticated technology required for chicken husbandry. It was a private property land, which was located about 30 kilometres from the nearest small town and other housing areas (**Error! Reference source not found.**) in order to ensure the surrounding areas of the poultry farm was hygienic and not contaminated by any pollution. This is important for the safety and growth of the poultry.

With more than 10 staff and 1 supervisor to monitor and handle, the farm was still under a contract farm, which binded under the term 'contract farming credit'. Under this term, the company would supply starting from the poultry breed or chicks, chicken vaccine, chicken feed, chicken coops and anything needed for poultry breeding. With the guidance from the company on how to grow the poultry, the farmers' responsibility was only to look after the poultry until they were matured. Farmers were also responsible to clean the coop in ten to fourteen days to ensure the virus was either dead or not spreading. The poultry breeding started from 1 until 52 days and on the 53th days, it began with the new cycle for poultry for rearing. For normal poultry cycle, there were usually six cycles in a

year, while sometimes in abnormal cases, there could be seven cycles. After a certain period of time, which was in between 35 to 37 days of the poultry living in the farm, the company would take the poultry back. At this particular time, each of the poultry was estimated at about 2.1 kilogram per chicken, which was suitable for the company to market the poultry. The farm could supply about 16 500 of poultry. The company would market about 90 percent of living poultry to the whole market in Malaysia and the balance of 10 percent were for their processing plant to produce processed products from poultry such as chicken nuggets and burgers.

Findings and Discussion

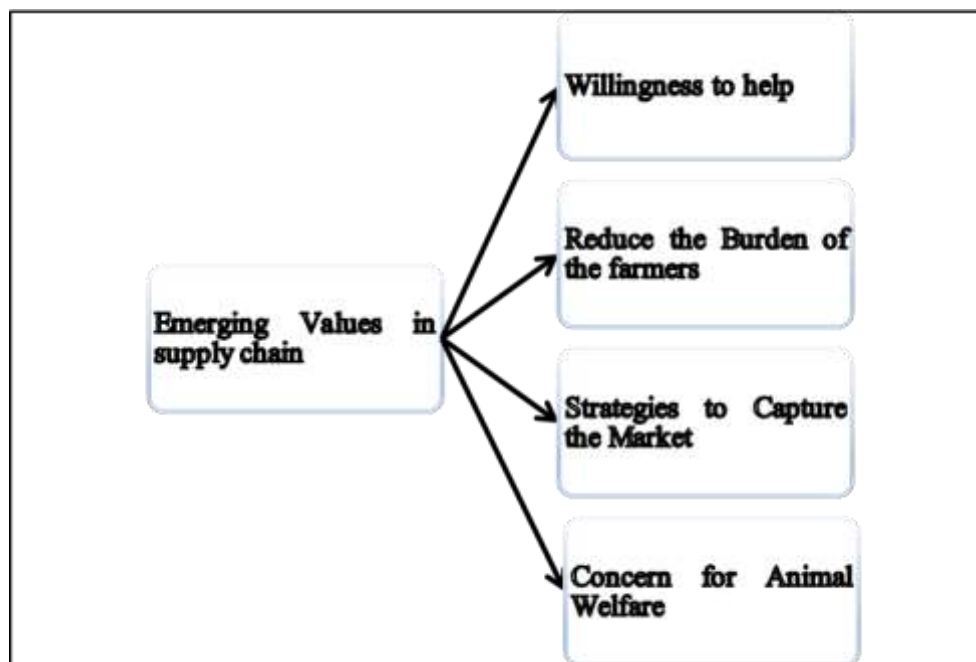


Figure 2. Framework of Emerging Values in the Halal Supply Chain

Farm (Sourcing)

This case focuses on the farm as the initial part of the pre-slaughtering phase in the poultry supply chain. The research analysis in this case consists of a

farm whose main activities are sourcing poultry to various suppliers. The first case study consists of a case at the poultry.

a) Willingness To Help

The farm is the first point of poultry sourcing, which is the initial phase in the poultry supply chain. In assessing the halal supply chain, 'contract farming' is a well-known farm concept in Malaysia. In 'contract farming', everything is supplied by the company such as poultry coops, feed mill, antibiotics and other materials. As stated by Manager Farm A (FA);

'The farm is under 'contract farming', whereby the company will give the farmer a credit scheme. The scheme consists of anything needed for poultry breeding such as feed mill, antibiotic, chicks and others. Farmers are responsible to look after the chicks until they grow bigger'

Therefore, the halal concept at the farm can be regulated by the chicken supplier or the company involved in the contract farming method. Thus, 'willingness to help' is an Islamic value which is currently applied at the sourcing point of poultry supply chain at the farm.

b) Reduce The Burden Of Farmers

The main aim of contract farming is to help the farmers to grow poultry according to the poultry suppliers' requirements. The poultry supplier supplies day-old-chick (DOC) and other facilities for the poultry breeding. As highlighted by Manager FA;

'The company that gives credit scheme to the farmer will guide on poultry handling and also supply the day-old-chick (DOC), poultry feed, medicine and others that are needed for breeding the poultry. In the credit scheme, the farmers do not have to pay to the suppliers.'

c) Strategies To Capture The Market

Marketing strategies are important for the company to capture the halal

poultry market, as well as assess the Islamic values of halal supply chain. Therefore, 90 per cent of the live poultry will be sold in the market, while the rest of 10 per cent is for making processed food such as chicken nuggets.

'.....we will sell about 90% live poultry in the market and another 10% is for our processing plant. Usually in the processing plant, they will make frozen products such as nuggets which use various packaging and brand such as XP brand, 7x star, Perim & AyamPerim. ...these brands are still under our company but different subsidiaries.'

This situation demonstrates the various strategies planned by the manager to widen the halal market of poultry meat. Thus, customers would gain a variety of poultry products in the markets. In addition, they also have many farms for poultry breeding in various states in Malaysia to cater to the demand for poultry. As mentioned by manager FA;

'we have many poultry farms indeed, Selangor is the central region; we have about 40 farms.'

This indicates that the business strategy is also important in assessing the Islamic values of halal supply chain.

d) Concern For Animal Welfare

Given the increasing importance of assessing the Islamic values of halal supply chain, this research seeks to establish a relationship between concern over animal welfare and the success in assessing the Islamic values of halal supply chain.

In order to gain a proper view of the importance of animal welfare, some discussions were carried out to investigate the interviewees' opinion regarding the matter, as well as to make appropriate suggestions based on the collected data. The interviewed manager FA asserted that:

'The poultry coops are fully automatic. There's a water tap that is used to shower the chickens in order to ensure the chickens are cool. If the temperature outside of the coop is hot, the temperature inside of the coop will automatically turn cold. And it is vice versa.'

Furthermore, discussion with Manager FA stresses the crucial role of automated coops in ensuring the poultry live in a cool area and are less exposed to unwanted diseases. Henceforth, the number of poultry to be accommodated in a basket must not exceed ten poultry, as overcrowding will be fatal for the poultry. This shows the dire emphasis on animal welfare in maintaining the quality of the poultry, as well as assessing the halal supply chain.

Conclusion

In conclusion, this research is to develop a model that ascertains the underlying values along the activities in halal poultry supply chain. Therefore, for future research, it is recommended that further studies can be undertaken based on the following aspects:

This study only listed dimensions which influenced the operations of the halal supply chain poultry industry to be *halalan toyyiban* supply chain. However, the results of this study were limited to the information and narrow findings obtained from case study, where the interviewees were the key person of the organisation. Therefore, it is recommended for future researchers to conduct similar studies by choosing a different unit of analysis for an organisation that carried out halal product especially fresh product. Furthermore, this study focuses on the small-medium company when identifying the poultry industry. Conversely, future studies can be carried out by identifying other types of industry such as meat and many more.

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