Application of Halal Supply Chain in Food Manufacturer

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Abstract: This study aims to find out the application of halal supply chain in production. The background of the research is motivated by the high number of Muslims in Indonesia which is offset by the high consumption rate of halal products. Many manufacturers issue halal products with official halal labeling. Researchers want to know the application of halal supply chain theory in a product that has been labeled halal officially. The research method is a descriptive qualitative method. In this study, the data collection techniques used are interviews, observations, documentation, and literature reviews. The interview was conducted directly with 4 informant and observations were conducted by researchers 2 times. Documentation and literature reviews are used by researchers to add references and data. Then the analysis method used by researchers in this study is through the stages of data reduction, data presentation, inference, and verification, as well as conclusions. The results of the study conducted by researchers showed that selected manufacturer has implemented a halal supply chain on production, packaging, storage, and transportation activities quite well. It has maximized its production activities on these four aspects in intoxicating elements and does not take in any unlawful way. But researchers found some flaws in aspects that were not harmful and were not dirty, unclean, and disgusting. This can be reduced by increasing sterilization in each process, providing repeated education, and adding an expiry date to each product.

Keywords: Halal Supply Chain, Halal Labeling, Halal Production, Manufacturer

I. INTRODUCTION

Indonesia has the largest Muslim population compared to the population of other religious communities. Based on percentage data managed by ibtimes.id, Indonesia has a percentage of 87% of the population who are Muslim. This shows that there is great potential for the halal industry to meet the needs of Muslim consumers. One of the current standards is the MUI's official halal labeling for marketed products. Halal labeling become a competitive advantage to gain consumer trust, especially the Muslim community.

Halal producers need to keep halal integrity for creating high quality products. Halal supply chain is something that needs to be understood and implemented by relevant producers. Halal supply chain is management of a halal network with the objective to extend halal integrity from original source to the point of consumer purchase [1]. Halal supply chain is needed to control the process from obtaining raw materials until they can be delivered and consumed by consumers.

Consumption is one of human needs to survive. Consumption practice defined as a consumer behavior to illustrate the income for buy, use, evaluate, and correct some goods and service [2]. Consumption theory based on Islamic economic views has some similar definition with conventional economic. Islamic consumption theory aims to achieve life's benefits accordance to Sharia. Muslims are required to consume products with halal criteria. Therefore, this could be a large market potential for halal producers.

II. LITERATURE REVIEW

Supply Chain Theory

Supply chain defined as a relationship or cooperation of several parts that are interconnected with each other in meeting the needs [3]. An interconnected activity ranging from natural resources used to the hands of consumers also can defined supply chain [4]. Other researchers defined supply chain as a production activity that includes the process of manufacturing, distribution, marketing, consumer management and transportation [5]. These definitions make conclusion as supply chain is a cooperative relationship between the parties contained in a business process ranging from the main resource supplier to customer's hand for use. The parties related in supply chain called by stakeholders. Those are five stakeholders, they are: supplier, manufacture, distributor, retailer, and customers [6].

Halal Supply Chain Theory

Halal supply chain defined as process that must begin with something halal by selection from natural resources on the offer made to become something accepted by customer's hand [4]. Those are three aspects based this theory, those are: (a)prohibiting any association with the illicit elements, (b)risks of mixing illicit elements, and (c)the view of Muslim consumers in choosing product to use [7]. These three aspects become the basis for running halal supply chain in production activity. A supply chain should have the appropriate halal standardization. It intended a supply chain has been running well to produce products with guaranteed halal levels.

Islamic Production Theory

Production in conventional economic can defined as a process of transfer or transformation from input to output through a request [8]. Production in Islamic concept is not only interpreted as limited to meeting human needs but also as a product that can provide benefits and prosperity to humanity on this earth so that the profits and blessings obtained are mashlahah that can contribute to the achievement of falah [9]. The main measure for carrying out production process is value of benefits (utility) taken from the production. Production should refer to the value of utility and still in value of halal and do not harm oneself or a group of people [10]. This opinion refers to Surah Al-Baqarah verse 219 [11], which reads:

يَسْئَلُوْنَكَ عَنِ الْخَمْرِ وَالْمَيْسِرِّ قُلْ فِيْهِمآ اِثْمٌ كَبِيْرٌ وَمَنَافِعُ لِلنَّاسِ وَاِثْمُهُمَا اَكْبَرُ مِنْ نفْعِهِمَا ..... (البقرة : ٢١٩)

It means: "They ask you about win and gambling. Say: 'in both, there is a great sin and some benefits for mankind. But his sin is greater than its benefits'."

According to Baqir Asshadr, production is processing goods from nature to create the best form for completing human benefit [12]. Researchers make conclusion for definition of production based on Islamic economic views as a process of finding, allocating, and processing resources into goods or services that can be used to give and improve maslahah for people.

III. RESEARCH METHOD

This research used descriptive qualitative analysis method with case study method in one of manufacturer in Indonesia which has been labeled halal from MUI standardization. Qualitative research is a research whose specifications are systematic, planned, and structured from beginning until the creation of research design [13].

Type and Data Collection Technique

Researcher used primary and secondary data for this research. Primary data obtained through interviews, observations, and documentation from direct research objects. Interview is a process of obtaining information for research purposes through question and answer, face-to-face between the interviewer with the respondent using interview guide. Observation is a way of retrieving data using the eyes without help of other standard tools for such purposes [14]. Documentation obtained directly from object research. Secondary data obtained of books and journals to help researchers strengthen the basic theories of research.

Data Analysis Technique

Data analysis is an activity to organize, sort, group, code or mark, and organize findings data based on focus or problem of research. Qualitative data analyzes data with the following stage [15], those are: (a)data reduction; (b)data presentation; (c)inference and verification; (d)final conclusion.

IV. DISCUSSION

The application of halal supply chain at one of halal manufacturer in Indonesia based on MUI standardization tested by four indicators, those are aspect of production, packaging, storage and distribution [1]. Each indicator will be tested with sub-indicators not allowed in halal production according to Kamali [7], those are: (a)harmful; (b)intoxicating; (c)impurity, unclean, and disgusting; (d)obtained unlawfully.

Halal Supply Chain in Production Section

Based on first sub-indicator, harmful, manufacturer didn't produce any harmful products and didn't give any dangerous impact to environment. Factory waste after the production process was not found, because in its process didn't throw a harmful substance. Even get some dirt in its place after production, it should be clean every Sunday during the day off. Once happened, resources weren't in good condition and give bad impact to products until customer return it back. Manager stopped the production and called technician to check and repair all the machine. Production was halted for two weeks. Manufacturer has been trying to evaluate and find solutions in producing so as not to harm consumers.

Second sub-indicator, intoxicating. The process of production in selected manufacturer are only two kinds, they are ozone and UV. Both of these substances are not dangerous or intoxicating. Resource also wasn't an intoxicating material. Then, manufacturer didn't produce any intoxicating products.

The third, containing dirt, unclean, and disgusting. This aspect related to sanitation and cleanliness, because halal always associated with thayyib. Halal is everything that is permissible according to Islamic law as long as it isn't forbidden in Holy Qur'an and Hadist, while thayyib is everything that is good, clean, and not harmful for health [16]. Researchers reviewed in terms of materials, where found conformity of material criteria with SJH criteria. The criteria of SJH is a sentence that explains the requirements that must be met by company to implement SJH so that halal products are produced consistently. Researchers found some garbage and construction materials at production place. The condition of floor filling with traces of water causes of washing process. The corner of treatment machine room is still lacking quality. This is not accordance with standardization of production. Production must perform cleaning and sanitation on the site of environment of production and its equipment [17]. Researchers found machine production has been avoided from pork production facilities. The machine used to process halal products only. These criteria fulfil halal standardization production dedicated facility only used for halal production [18].

The fourth, obtained in an unlawful manner. Researchers found source obtained by manufacturer is halal clearly. Raw materials and maintenance fund come from legal source and achieved in a good way. Selected manufacturer also run ubbudiyah environment in his employee. Every morning after absence, worker must to pray together first after briefing. When the prayer times arrives, they also ought to pray together with being led by one of manager. This level of ubudiyyah more guarantees to not do any frauds that occur in the production process or can reduce the level of halal production.

Halal Supply Chain in Packaging Section

Packaging for product is an effective way to prevent contamination from illegal things [19]. Halal products require brand name of product, list of ingredients and its composition, product code, factory name, expiration date, and most important halal logo certified from official organization [17]. Researchers found the production didn't produce any waste that can give bad effect for environment. Plastic waste should be collected and sold. Other garbage should be collected too in one place for managing soon. But researcher found expiry date only found on the cardboard part. It can become some troubles for consumers when buying only one retail product. From first sub-indicator, harmful, selected manufacturer still less operated halal production.

Based on second sub-indicator, intoxicating. Researchers found selected manufacturer didn't produce any intoxicating products or containing with some intoxicating elements. Packaging products avoid from some items with causing possibility to change characteristic of products. Storage for saving raw materials and finished products has been kept all things well.

The third, containing dirt, unclean, and disgusting. Those are some rooms to package products according to its type. Each room has air conditioner to keep temperature in low level, so employees didn't feel hot and sweat. Packaging process divided into two type; manually and using machine. Some employees didn't wear gloves during manual process, but they are ought to clean their hands first before start their works. Manager argue that his factory has enough level of cleanliness, just less professional. Last, obtained in an unlawful manner. Manager has list of some wholesale name. It has been recorded systematically in management book. Address and contact number have been written well to review the ordering process of raw materials until delivered safety into selected manufacturer.

Halal Supply Chain in Storage Section

Selected manufacturer has two storage warehouses. Those are for keeping raw materials and finished products. Finished products storage was placed in production place and raw materials places inside storage next to production place. Manufacturer using its own place and didn't harming others. These were used for own purposes and didn't have any conjunction with other factories. This condition rejected first sub-indicator, harmful, so keep selected manufacturer in halal production. Selected manufacturer also rejected second sub-indicator, intoxicating. It caused storages didn't keep any intoxicating properties.

The third sub-indicator is dirty, unclean and disgusting. Researcher found level of hygiene still lacking. This indicated by presence of piles from some raw materials no longer to use. Those are placed around finished products storage. The last sub-indicator is obtained in an unlawful way. All storages owned by selected manufacturer and there isn't any factory placed there.

Halal Supply Chain in Transportation Section

Manufacturer has two vehicles for distributing consumer orders, one truck and one L300 pickup. If there any problem, selected manufacturer cooperated with other regular and trusted transportation units. In this section, manufacturer rejected all sub-indicator who can damage halal production. Vehicles didn't harm any parties because it has been owned by himself. Those aren't any intoxicating, dirty, unclean, and disgusting elements. It caused vehicles didn't use for distributing any products except their products. Vehicles are also sterilized once every week while it was day off.

V. CONCLUSION

Researchers found selected manufacturer almost fulfil all the criteria of halal supply chain. Halal production from standardization terms of not intoxicating, and obtained illegally was really good. But researchers found shortcomings in halal production elements in terms of not harming, and not dirty, unclean, and disgusting. This is indicated by text of expiry date and the lack of sterilization that affects the level of cleanliness production process. Researcher found the expiry date only printed on the cardboard part. It can become some troubles for consumers when buying only one retail product Besides from harmful shortcomings, researcher found some lack of sterilization. Some process of packaging still operated manually without gloves and accumulation of raw materials that are not used also places around finished products storage.

REFERENCES

[1] K. Supian, "Cross-contamination in processing, packaging, storage, and transport in halal supply chain, Malaysia: University of Selangor, Malaysia, Faculty of Business and Accountancy, Preparation and Processing of Religious and Cultural Foods, Woodhead Publishing, 2018, pp. 309-321.

[2] M. Huda, "Indikator perilaku konsumen dalam memenuhi kebutuhan primer (Studi maslahah Imam Al-Gazali kitab Al Mustafa min 'Ilm Ushul)", Islamic Economics Journal, vol. 3, no. 2, December 2017, pp. 201-220.

[3] M. Tieman, "Synergy in halal supply chain", Islam and Civilisational Renewal, 2014, 274.1713: 1-6

[4] Omar, E. Normalina, and H. S. Jaafar, "Halal supply chain in the food industry – a conceptual model", IEEE Symposium on Business, Engineering and Industrial Applications (ISBEIA), IEEE, 2011, pp. 384-389.

[5] Wong and Wong at M. Manzouri, M. N. Ab-Rahman, and H. Arshad, "Order management in supply chain: A case study in automotive companies, American Journal of Engineering and Applied Sciences, vol. 4, no. 3, 2011, pp. 372-379.

[6] I. R. Eko and R. Djokopranoto, "Konsep manajemen supply chain: cara baru memandang mata rantai penyediaan barang", Jakarta: Grasindo, 2006.

[7] M. Tieman, J. G. Van der Vorst, and M. C. Ghazali, "Principles in halal supply chain management", Journal of Islamic Marketing, vol. 3, no. 3, 2012, pp. 217-243.

[8] Rusmijati, "Teori ekonomi mikro I", Yogyakarta: Graha Cendekia, 2017.

[9] M. Tartila and A. Tahiyati, "Production principles in Islam: a review of canned food product", Journal of Multi-disciplines Science (ICECOMB), vol. 1, no. 1, 2023, pp. 49-55

[10] N. R. Al-Arif, "Pengantar ekonomi syariah – teori dan praktik", Bandung: Pustaka Setia, 2015.

[11] Holy Qur'an

[12] S. Wahyuni, "Teori konsumsi dan produksi dalam perspektif ekonomi islam", AKUNTABEL, Jurnal Ekonomi dan Keuangan, vol. 10, vo.1, March 2013.

[13] Siyoto, "Dasar metodologi penelitian, Yogyakarta: Literasi Media Publishing, 2015.

[14] Nazir, "Metode penelitian", Bogor: Ghalia Indonesia, 2017.

[15] V. W. Sujarweni, "Metodologi penelitian", Yogyakarta: Pustaka Baru Press, 2019.

[16] Indonesia Halal Training and Education Center, Kriteria Sistem Jaminan Halal HAS 23000:1, Criteria No. 1-5.

[17] M. N. Riaz and M. M. Chaudry, eds. "Handbook of halal food production, CRS Press, 2018.

[18] Indonesia Halal Training and Education Center, Kriteria Sistem Jaminan Halal HAS 23000:1, Criteria No.6-11