

Conference Paper

The Mapping of Halal Critical Points in the Process of Distribution Chain of Chicken Meat Products in West Java (Case Study: Traditional Slaughtering House in Y Chicken House West Java)

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Abstract

Chicken meat is one of the most popularly consumed meat in Indonesia, particularly in West Java, according to the socio-economic research and chicken meat production in 2013 issued by the Official of Animal Husbandry West Java. The consumption of chicken meat each year reaches 3.6 kg. Cognizant that the population of Moslems is up to 99.67%, each production and consumption of meat has to fulfill the requirements of its halalan tayyiban (considered good and permitted according to the Islamic syaria law). Speaking of which, a number of activities directly concerning on its halal or haram, later called the halal critical point. This point produces variables and factors that affect both the halal and the haram of the chicken meat. The use of resource referred is to simplify the description of the existing variables and factors. The research method is that which explores the chain of chicken meat production supply. The result of this research is the mapping of the halal critical point, and the measurement in the form of scoring to slaughterhouse and market with the help of experts using AHP. Thus, it could be concluded that the most critical points lurk within the semi-modern slaughterhouse activities, while traditional slaughterhouse has fewer critical points. In the scoring results, the fulfillment of the scores is gained more in semi-modern slaughterhouses as well as modern markets than in that of traditional.

Keywords: Halal Critical Point; Chicken Meat; Supply Chain; Mapping; Halalan Tayyiban

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TABLE 1: Production of Chicken Meat in West Java 2013 [1].

Commodity	Production (Kg)
Local Chicken	27.149.266
Laying Chicken	7.511.630
Broiler	563.528.587
Total	598.189.483

INTRODUCTION

Chicken is one of the more favored food commodity for Indonesians than beef. This is evident in the abundant number of chicken- meat-based enterprises in the society. Nationwide, the needs of chicken meat overlaps that of beef, particularly broiler, being superior to local chicken or even beef in terms of demand. According to the Official of Agriculture of Indonesia 2013, a rise and a decline of the chicken meat and beef consumption from 2009 to 2013 each year constantly occurs. The need of meat commodity from 2009 to 2013 raises 4.60% from 3.076 kg/year in 2009 to 3.650 kg/year in 2013. Compared to other types of meat, Broiler has the highest consumption volume. Although there is a decline of consumption in 2011 – 2012, chicken meat remains the most favored commodity among the people. In West Java, with population size reach 46.7 million people in 2013, its production consists of 3 types As shown in Table 1.

West Java contribute 39.94% of national broiler production which is 1,497,625.66 tons per year. With the high number of broiler production particularly in West Java, it is necessary to retain insurance on the *halal* process, range of slaughterhouses, meat-selling spots, and the workers' proficiency in supplying and processing chicken to be a safe and *halal* edible commodity [2].

The safety and *halal*-ness aspects are also importance for Indonesian commodities. In West Java alone, almost 93.14% of the people are Moslems [3], indicating that all edible commodities in West Java has to fulfill the requirement of its *halal*. Based on a previous research, the *halal* agroindustry needs to be synchronized with the insured *halal* along its supply chain [4]. From that statement, in par with the development of chicken-based agroindustry from infrastructure, logistics, up to supply chain, it is influential to the *halal* of the chicken agroindustry commodity itself.

The *halal* supply chain could be interpreted as a flow system that construes how to distribute products from one place to another in the production activity; therefore, the sale uses an organized and spot-on infrastructure compatible with the existing *fatwa*

(argument of interpretation based on Islamic laws) [5]. Specifically, in the upstream activities in Animal Slaughterhouse and market, in which there is a crucial and influential activity to the *halal* of chicken product, from the *halalan tayyiban* slaughtering, treatment to the selling based on the existing regulations. This is important because in the early process of chicken procurement, the slaughtering process would not be done based on that regulation. That being said, it is assured that the activity of the derivative process will be *haram* and not allowed to be consumed. Having that in mind, a controlling of any activity regarding supply chain of chicken agroindustry products, is necessary in both upstream and downstream areas. Such controlling is done to ensure the quality of the product's quality, reduce latent fraud, and guarantee the *halal* of the chicken product by observing the condition of materials, tools, and the workers' proficiency. Therefore, the activity directly related to the *halal* of chicken commodity could be referred to as halal critical point, as to identify the *halal* of chicken production chain [6].

METHODOLOGY

The methodology used is that of Case Study through direct observation as an attempt to study each process flow of meat procurement supply chain, from the Animal Slaughterhouse to the selling spots of chicken meat in West Java. This concerns with the determination and assessment of halal critical point fulfillment. The use of 5M resource aspects (Man, Machine, Material, Method, and Money) facilitates the categorization of halal critical points as we can see on Table 2. The condition data of this observation results are then compared to the existing literature (SJH 2008 and PPADH 2010) and are drawn out to the halal critical point grand scheme both in the Animal Slaughterhouse as well as in the meat-selling spots. Then, the assessment of halal critical points is continued based on the resources categorization.

RESULTS AND DISCUSSION

Based on the research's results, the supply chain of chicken meat agroindustry product particularly in West Java is divided into two (2) sectors such as that of upstream from breeders to the slaughterhouse and that of downstream from the slaughterhouse to final consumers. These results show that some actors involved are as follows:

TABLE 2: Detail of Critical Controlling Points in Meat-Selling Spots [7].

	Aspect	Objective	Information
A. Actor	Knowledge on Halal Meat	Only halal meat for sale	Not contaminated with haram meat
	Hygiene	Avoiding contamination of dirt	Guaranteeing that the meat for sale are halal
	Differentiating Workers	Avoiding contamination of dirt	Differentiating workers and vendors between halal and non-halal meat
B. Commodity	Meat-selling Spots	Avoiding contamination of dirt	Differentiating halal and non-halal meat selling spots
C. Facilities	Distribution Tools	Avoiding contamination of dirt	Avoiding the use of tools with non-halal meat
D. Method (distribution, display, and restoration)	Handling	Avoiding contamination of dirt	Differentiating tools of display, restoration, and distribution with non-halal meat

Upstream Actors

These actors are breeders, distributors, and final consumers (slaughterhouse). Breeders play the role as chicken custodian (from eggs to ready-cut) and living chicken suppliers. Distributors play the role as the messenger from breeders to slaughterhouses. Meanwhile, slaughterhouses act as the final receiver in the upstream area.

Animal Slaughterhouses Actors

These actors are workers, butchers, chicken breeders, and meat entrepreneurs. Workers observe the activity of Animal Slaughterhouses operation, butchers slay the animal, breeders supply chicken and entrepreneurs receive final products (carcass).

Downstream Actors

These are meat sellers / vendors type one and type two, receiver / consumer one / processor and receiver two / final consumer.

To ensure that the meat being sold to the consumers are *halal*, some documents are required from each actor of supply chain in order to guarantee that the carcass / breed

TABLE 3: *Halal* Supporting Documents [8].

Certificate	Institution	Objective
Chicken Breeder		
SKKH (Information Letter on Animal's Health)	Veterinarian / Official of Agriculture	Identification of the animals to slaughter
Business License	Official of Trade / Official of Agriculture	Legality of animal husbandry enterprise
Animal Slaughterhouse (AS)		
Halal Certification	Indonesian <i>Ulama</i> Panel (MUI)	Proof of any operational activity process based on Islamic laws
NKV Certificates (Veterinarian Control Number)	Official of Agriculture	Proof of fulfillment of sanitation hygiene operation
ISO Certificate (90001 - 2008)		As a guarantee for the working system quality acknowledged by international management quality system
Entrepreneur / Meat Vendor type 1 and 2		
SKKD (Information Letter on Meat's Health)	RPH	Proof of meat sold from a healthy animal
Halal Certificate (Origin of AS)	RPH	Proof of meat vendors are qualified and Proof of Slaughtering is halal to be done
NKV Certificate (Origin of AS)	RPH	As a proof that the meat being sold are HAUS (Halal, Safe, Complete, Healthy)

they are selling are *halal*. These documents, as detailed on Table 3, are in the supply chain of chicken meat procurement.

Flow of Halal Supporting Documents on the Mapping of Supply Chain of Chicken Meat-Based Agroindustry Product (Described clearly in Figure 1)

The role of AS is as a place of slaughtering chicken breeds to carcass and its distributor complying with the consumer's demand. The actors are vendor type 1, vendor type 2, and consumers of the advanced processing place.

The role of vendor type 1 and two, in the operational chain of AS, is represented by the processing industry, modern and traditional markets. Vendor type 1 is represented by AS, doing trade operational activity to the processing industry and to both modern

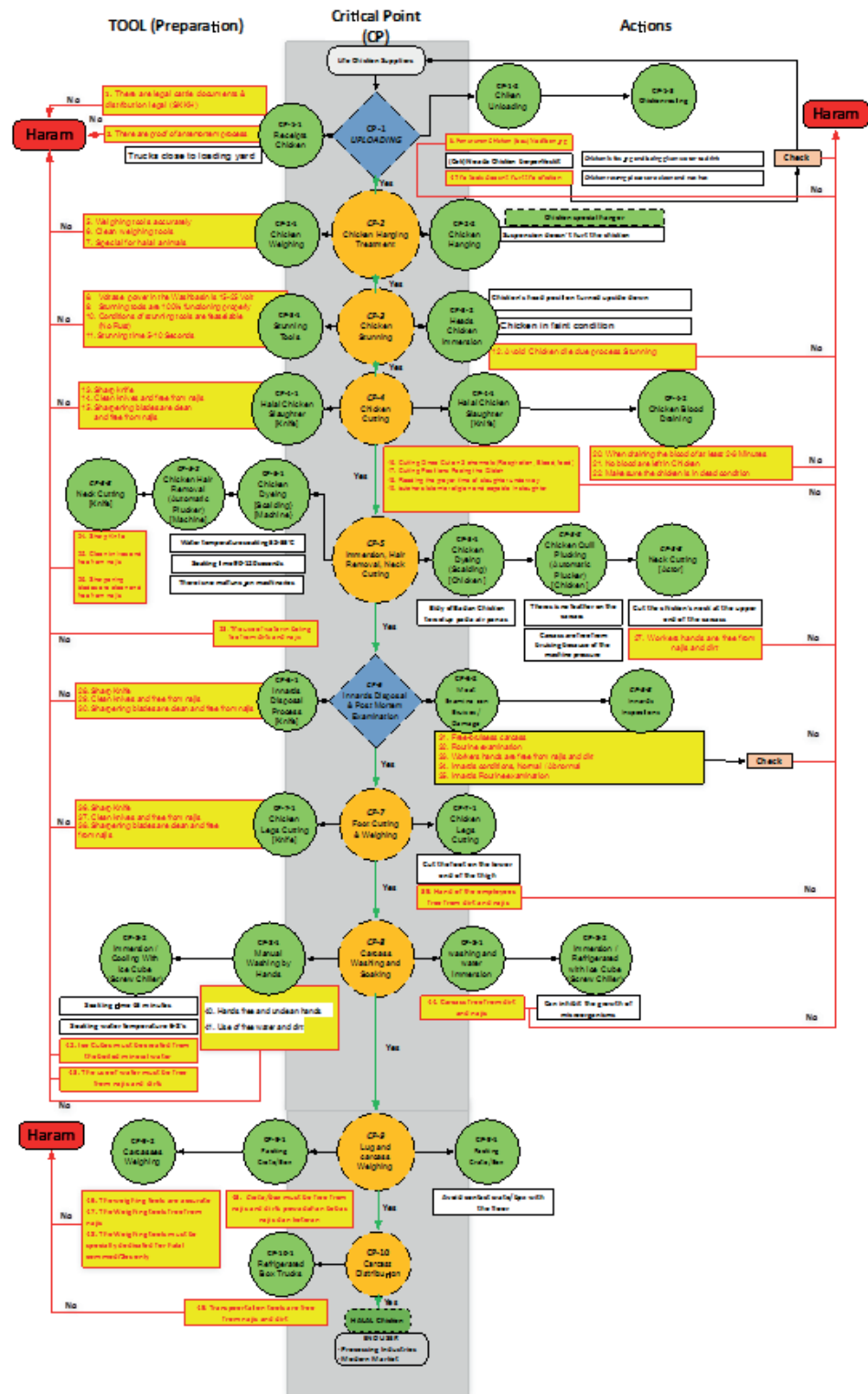


Figure 1: Flow Diagram of Halal Critical Points in AS Process Flow. Based on the interview and observation in AS, the entity/actor related to the operational activities of AS are breeders, meat entrepreneurs type 1 (one) and 2 (two). The role of breeders is suppliers for living chicken, their custodians, and caretakers of their health. These breeders are in another region in West Java and some in Central Java with the relation of trading business, work partner, and self-owning breeders of AS..

and traditional market. Vendor type 2 transacts with either final consumers or Middle-Small Enterprises. The product from AS activities has to fulfill the Islamic syaria law—that is halalan tayyiban. One thing to identify the halal of the product is through the proper slaughtering application according to the existing MUI regulations and thus is safe for consumers.

CONCLUSION

The conclusions from the research of mapping of halal critical point of chicken meat agroindustrial product in West Java (AS) are as follows:

1. The highest critical point including semi-modern AS is the neck cutting, related to surah Al-Maidah verse 5.
2. The critical point in AS including semi-modern AS retains twelve (12) critical points, hand in hand with the use of facilities and infrastructure in its activity chain.
3. The determination of critical point of semi-modern AS is identified by looking at the process occurring in the AS operational activities, directly linked to the halal and haramness based on SJH 2008 and PPADH 2010.

To obtain an in-depth critical point results, it is necessary to conduct a further and more measurable mapping with the help of experts in specifically and accurately discovering those critical points.

References

- [1] "Final Report on Investment Potential Study of Poultry Meat Processing Development in East Priangan," Bandung, 2014.
- [2] D. Purnomo, "Strategy of Halal Agro Industry Development in Anticipating Global Halal Business," Bogor Agricultural University, 2011.
- [3] BPS Provinsi Jawa Barat, "Jawa Barat Province in Figures 2016," 2016.
- [4] D. Gemasih, "Mapping the Halal Critical Point on the Supply Chain Process Chain of Beef Based Agro-Industry Products," Padjadjaran University, 2014.
- [5] D. Purnomo, E. Gumbira-Sa'id, A. M. Fauzi, K. Syamsu, and M. Tasrif, "Outstanding Product Competitiveness and Institutionalization of ASEAN Halal Agroindustry," J. S T Policy R D Manag., vol. 9, no. 1, pp. 73-92, 2011.

- [6] D. Purnomo, "Concept of Quality Assurance Traceability In Logistics Infrastructure and Supply Chain of Halal Agroindustry," Padjadjaran University, 2013.
- [7] Directorate of Veterinary and Post-Harvest Public Health, "Guidelines on Production and Handling of Hygienic Chicken Meat.pdf," 2010.
- [8] L. M. Halal Assurance System, "General Guidelines of Halal Assurance System," Cosmetics. Institute for Food Assessment of Medicines and Cosmetics MUI, Jakarta, 2008.