

Identification of Stakeholder Roles in The Beef Halal Logistics Process at Purwokerto Slaughterhouse

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Keywords

Halal Logistic
Beef
Stakeholder

Abstract

The halalness of a product is an important consideration that is gaining traction among customers today. It is because awareness of the importance of halal products consumed by Muslims is crucial. Many factors, including logistical factors, determine the halalness of a product. Many stakeholders are involved in the beef supply chain to produce halal beef. This study will identify stakeholders who play a role in the slaughtering process and inbound and outbound logistics of beef at the Purwokerto Slaughterhouse. Five main stakeholders have a role in producing halal and tayyib beef: cow transporters, veterinarians, halal butchers, carcass transporters, and beef haulers.

Introduction

The halalness of a product is now crucial for customers to know. Especially, in Muslim-majority countries such as Indonesia with the most significant Muslim majority in the world, with a total of 273.87 million people or about 86.93% of the total population (Viva Budy Kusnandar, 2021). Thus, the government issued Law Number 33 of 2014 concerning the Halal Product Guarantee, which guarantees that all products circulating in the territory of Indonesia must have the halal certified. Even though there are still many products that do not have halal certification. The demand for halal certification for a product increases from 2019 to 2021; with 1,292,392 products have been certified halal (MUI, 2021). It shows that Indonesian people increasingly understand the urgency of halal products. Today's consumers not only want to know the halal substance of the product to be consumed but also the entire supply chain process to ensure that the product they consume is truly halal. (Supian, 2018) (Zulfakar et al., 2014). The halal concept starts from the time the product is produced until the end consumers consume it (Haleem & Khan, 2017). Products in Islam are said to be suitable for consumption if they contain halal elements, which are permitted by Islamic law and also toyyiban which means whole (healthy, safe, nutritious and quality) (Alqudsi, 2014).

Halal beef is Indonesia's third most consumed protein after halal chicken and fish (Mahbubi et al., 2019). Cows are halal animals for consumption but need to be traced to the halalness of the meat because there is a risk of contamination at every stage of the supply chain (Wahyuni et al., 2020). The logistics process is one of the stages that have the risk of contamination between halal and unclean meat and other non-halal items. This research was conducted at the government-owned abattoir, namely the Purwokerto Slaughterhouse. The logistics process at the Slaughterhouse starts with the inbound logistics process and the outbound logistics. Inbound logistics starts from choosing the mode of transportation, picking up cattle at the farmer's house by the transporter, and then receiving and holding them in the cage at the Slaughterhouse. In contrast, outbound logistics includes the selection of

transportation modes, distribution and storage, and handling of the carcass. The approach used in this study is Halal Logistics which has the aim of ensuring that the logistics process, which is one of the supply chain activities, can produce halal-toyyiban products for consumption by end consumers (Tarmizi et al., 2014). To maintain halal beef at every stage of the supply chain, many stakeholders, from breeders, transporters, slaughterhouses, and others, play a role. Each stakeholder in this supply chain has a significant role in ensuring the halalness of the beef produced, mainly to prevent and take preventive actions to prevent contamination at every phase in the halal supply chain. It requires awareness of the halal-toyyiban concept by all stakeholders at all stages of the beef supply chain.

Method

This research was conducted at the Purwokerto Slaughterhouse by observing the halal beef supply chain process, which focused on the logistics process, namely inbound and outbound logistics, as well as the slaughtering process. The research method was carried out by direct interviews with the stakeholders in the beef logistics process at the Purwokerto Slaughterhouse, namely the head and employees, transporters, butchers, and transport workers, to obtain the information needed in this study. The steps for collecting data in this study are as follows:

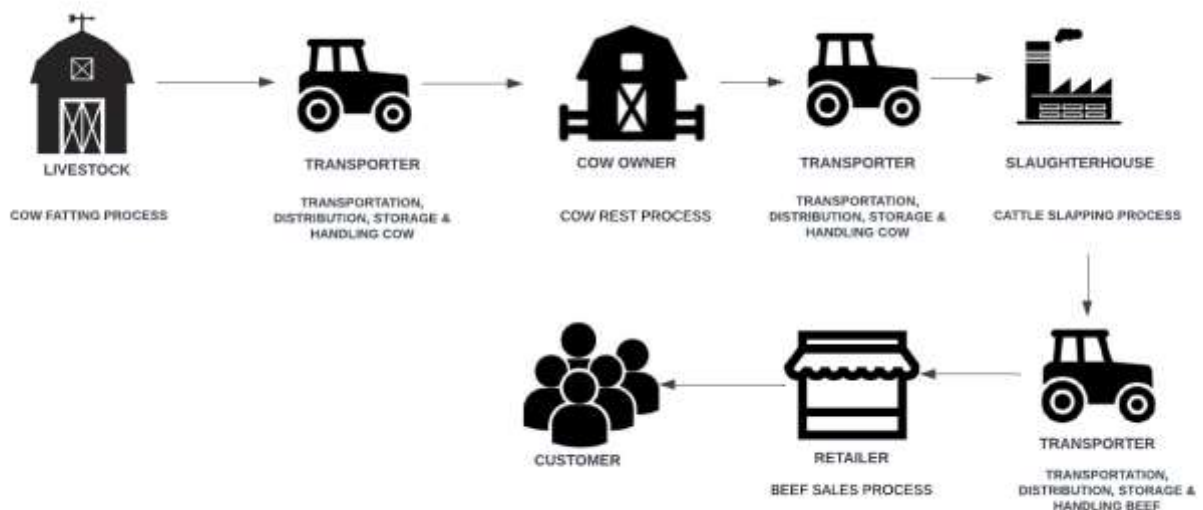
- Observing all supply chain activities at the Purwokerto Slaughterhouse
- Mapping logistics and slaughtering activities
- Identify the role of each stakeholder in the logistics and slaughtering process

Observations were carried out for two weeks to collect all the data needed, starting with interviewing the head and staff of the Purwokerto Slaughterhouse, then seeing firsthand the slaughtering process and interviewing the butchers and transport workers as well as the transporters.

Results and Discussion

Supply Chain Activities

Based on the observation of all supply chain activities at the Purwokerto Slaughterhouse, the description of supply chain activities is as follows:



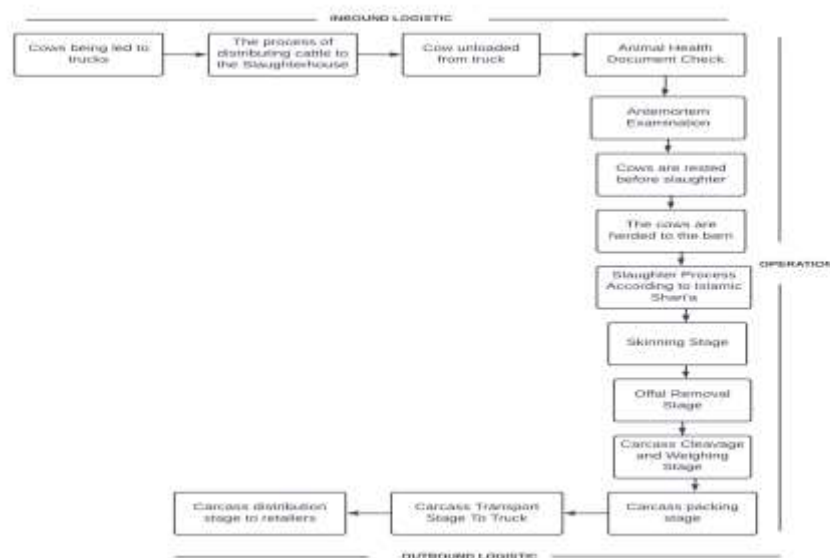
Picture 1. Purwokerto Slaughterhouse Supply Chain Activities

Beef supply chain activities starting from the process of fattening cattle on farms. Livestock supplying cattle comes from three regions: Magetan, Magelang, and Wonosobo. The consideration of choosing a breeder that is far enough from the location, namely Purwokerto, is that the price is much lower than buying cattle from farmers in the area around Purwokerto. To distribute live cattle from these three areas, a transporter, a third party hired by the cattle owners, is needed. The transporter carries out activities in the form of transportation, distribution, storage, and handling as well as ensuring that the sent cattle can be received safely and in good health. After the delivery of the cows, Cows will be rested in the cow owner's cage. After that, the cows are sent using trucks that are adjusted to the capacity of the cows to be sent. The owner of the cow is the owner of the truck, so do not use a third party to send the cow to the Slaughterhouse due to the close distance. The slaughtering process begins with an antemortem examination, which is a general physical examination of the cow to ensure that the cow is in good health and that the meat produced is of good quality (Dini Wahyuni & M. Fauzan Rizki, 2019). Furthermore, the cows are rested and fasted for several hours before being slaughtered.

The slaughtering process is usually carried out in the early hours of the morning due to the demand for fresh beef by retailers. A postmortem examination is carried out to ensure that the carcass is slimy or emits a foul odor so the meat can be consumed. To transport the carcass, the cattle owner employs several haulers to move the meat and offal that has been cut into several pieces onto the transport truck. Meat and offal that are transported are put in separate containers, use special trucks to transport meat, and are not to be confused with trucks transporting cattle to avoid najis contamination. The beef and offal are distributed to several retailers, namely traditional markets, and meatball mill owners.

Logistic and Slaughtering Activities Mapping

This research focuses on the inbound logistics process, namely from cattle owners - slaughterhouses and outbound logistics from abattoirs to retailers; this is because the critical point of halal beef is mainly in this process. The process of logistics and slaughtering can be seen in the flowchart below:



Picture 2. Mapping Logistic and Slaughtering Process

The Role of Stakeholders in The Supply Chain to Ensure Halal Beef

Every stakeholder in the beef supply chain has a role in ensuring that the beef produced is halal and of good quality. The role of each stakeholder in the halal beef supply chain can be seen in the table below:

Table 1. The Role of Stakeholders in The Supply Chain to Ensure Halal Beef

Activity	Sub Activity	Stakeholders	Stakeholders Role	Product Output
Inbound Logistic	Transportation & Distribution	Transporter	Choose the appropriate mode of transportation by looking at the capacity of the cow being carried. The choice of the path from the cow owner's pen to the nearest and safest slaughterhouse does not stress the cows. Handling cows with attention to animal welfare.	Cow
	Storage & Handling			
Slaughtering	Antemortem Check	Veterinarian	Checking animal health to make sure the cows are in good health so that they produce good quality meat - The slaughtering process must be carried out according to Islamic law with a certified halal slaughterer	Cow
	Slaughtering	Halal Butcher	- The process of peeling and cutting carcass pays attention to cleanliness - Separating The carcass cutting and offal production	Carcas, offal
	Postmortem Check	Veterinarian	Checking the carcass, offal, and others to ensure the quality of the meat is good	Carcas, offal

Activity	Sub Activity	Stakeholders	Stakeholders Role	Product Output
Outbound Logistic	Transportation & Distribution	Transporter	<p>Inspection of carcasses, offal and others to ensure good meat quality.</p> <p>Selection of meat transport trucks that are free from unclean or non-halal objects then avoid direct contact with the floor and surface of the vehicle (Sayuti et al., 2021)</p> <p>- Ensure carcass and offal are placed in different containers during the distribution process</p>	Carcas, offal
	Storage & Handling	Hauler	<p>- Ensure The process of transporting meat is carried out correctly and pay attention to cleanliness to reduce the risk of contamination with unclean objects</p>	Carcas, offal

Conclusion

The results and discussion concluded that the halal beef production process has a risk of being contaminated with non-halal objects during the logistics and slaughtering process. Therefore, an active role from stakeholders is needed to ensure that every stage of the beef supply chain process is free from the risk of contamination of non-halal objects. Five stakeholders have a role in producing halal and toyib meat: cow transporters, veterinarians, halal butchers, carcass transporters, and beef haulers.

Recommendations

This research can be developed into research that focuses on identifying and mitigating the risk of halal beef because there are many opportunities for risks that threaten the halal beef produced at the Purwokerto Slaughterhouse.

Acknowledgements or Notes

This research was funded by the Ministry of Education and Culture in 2022. We thank the managers of the Purwokerto Slaughterhouse, who have helped a lot in this research, and our fellow lecturers at the Purwokerto Telkom Institute of Technology.

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