



Study of Islamic Law on Animal Slaughter in the Halal Industry in the Era of Society 5.0

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Abstract

Increasingly advanced technology provides its own advantages for some people who are able to control it. Technology developing in the era of society 5.0 from an Islamic perspective can actually be a threat if you cannot control it. Indonesia is a country with great potential in the agricultural, livestock and fisheries sectors. The livestock sector plays an important role in Indonesia's economic development. One of the achievements of the livestock sector is to obtain from meat a rich source of protein for humans. The magnitude of creative technological progress regarding animal slaughter methods, especially if it is believed to be proven halal. The study in this paper is very important, namely the big influence on advanced methods in the era of society 5.0. Will he admit that animal slaughtering is halal even though it uses robots? Empirical normative research is obtained from a lot of direct information through several existences and obstacles to the progress of animal slaughtering equipment in the competitive industry of the era of society 5.0. The results obtained in this study were that if robots were to carry out the slaughtering of animals, it would be highly doubtful whether the animal meat was halal. The regulations are controlled by half the human staff as implementers. The obstacle obtained is the demonstration of each cut quickly with a robot. Islamic law must be prioritized, especially in the food sector. The implementation of obtaining halal quality meat will be achieved without having to use petrification robots in the era of society 5.0. There is a need for government supervision and an MUI fatwa to firmly confirm the explanation of technology that will enter the era of society 5.0.

Keywords: *Cutting; Islam; Progress; Halal*

A. Introduction

The importance of guaranteeing halal value for meat that will be consumed by the public. The public will only know from reading the halal label attached to ready-to-consume or ready-to-use products. The slaughter certification standards provided are halal according to Islamic law. Not many people

understand the importance of a halal certificate for a product. Research on the slaughter/butchering of chickens by examining various legal reviews is not something new. However, it seems that no research has been found that specifically examines the Halal Guarantee aspect of the cutting process.¹

After the author carried out various searches and searches related to the title of this research, the author found several previous studies related to the title of the research, namely first, a thesis written by Muhammad Tantowi entitled "Analysis of Halal Guarantees in Slaughtering Broiler Chickens in Perbutulan Village, Sumber District, Cirebon Regency" The results of the research show that the Sharia Chicken Lathe (BAS) has carried out the slaughtering process in accordance with the provisions of Law No. 33 of 2014, such as reading Bismillah, slaughtering by simultaneously cutting off 3 (three) channels, namely the respiratory tract, feeding tract and vessels. blood. The similarity between the research above and the research carried out is that they both discuss animal slaughter.²

Tool modifications in the era of the industrial revolution 4.0 make human work easier. The era of society 5.0 clearly shows that robots are replacing humans in completing work. Also thinking about animal processing work is that it can be completed easily through fast and light work. The implementation of Islamic sharia regulates that increasingly advanced technology provides its own advantages for some people who are able to control it. Technology developing in the era of society 5.0 from an Islamic perspective can actually be a threat if you cannot control it. Various information enters through technology. The information obtained provides new ideas for families to be able to use this information, both tools and how to use objects. Implementation of the use of technology must also be accompanied by Islamic sharia. For example, if a robot is used to slaughter animals, is it still within Islamic rules and can be said to be halal?

This society, which is called a super smart society, uses technology to make life easier, so that various future services emerge to accommodate these needs. Several job sectors and needs are starting to enter digitalization which utilizes Artificial Intelligence, Big Data, and the Internet of Things. This is a challenge for information technology services so that this need can be met immediately by utilizing high-level technology.

Society 5.0 is a concept initiated by the Japanese government by considering technological aspects to make human life easier. The idea is to consider humanities aspects to obtain a concept of balance in the implementation of this technology. The goal of achieving a community that is defined as a super smart society, requires various future services in various sectors. This can be fulfilled with increasingly sophisticated technological capabilities, as well as the presence of competent human resources in their respective fields to carry out their profession digitally while contributing to providing better services to society.

There needs to be an understanding of Islamic law as a guard against going outside the lines of religious rules when using increasingly sophisticated technological media. Technological tools can really help solve problems, especially towards the era of society 5.0. This description provides motivation for the author to analyze the influence of technology in the era of society 5.0 on Islamic families and the legal consequences of technological developments in the era of society 5.0. The study in this paper is about the magnitude of influence on advanced methods in the era of society 5.0. Does the existence of animal slaughter receive halal recognition even though it uses robots? and obstacles to the progress of animal slaughtering equipment which is a competitive industry in the era of society 5.0.

In preparing this research, the author used qualitative research. According to Parsudi Suparlan, the qualitative approach is often also called the humanistic approach. For John W. Creswell, defining a

¹ Aan Nasrullah, "Analisis Potensi Industri Halal Bagi Pelaku Usaha Di Indonesia," *At-Tahdzib: Jurnal Studi Islam Dan Muamalah* 6, no. 1 (2018): 50–78.

² Dede Al Mustaqim, "SERTIFIKASI HALAL SEBAGAI BENTUK PERLINDUNGAN KONSUMEN MUSLIM: ANALISIS MAQASHID SYARIAH DAN HUKUM POSITIF," *AB-JOIEC: Al-Bahjah Journal of Islamic Economics* 1, no. 2 (2023):54–67.

qualitative approach as an investigative process to understand social problems or human problems based on creating holistic images formed with words, reporting informants' views in detail, and arranged in a scientific setting.[2] This type of research uses field research. To observe and describe the actual situation in a systematic, factual and accurate manner regarding the Islamic slaughtering process. The research method used for this research, the author uses is a descriptive method, namely examining the status of human groups, objects, conditions, systems of thought or current events with the aim of making systematic, factual and accurate descriptions of the facts being studied.

The study in this paper is very important, namely the big influence on advanced methods in the era of society 5.0. Will he admit that animal slaughtering is halal even though it uses robots? Empirical normative research is obtained from a lot of direct information through several existences and obstacles to the progress of animal slaughtering equipment in the competitive industry of the era of society 5.0.

B. Discussion

1. The existence of animal slaughtering is gaining halal recognition in economic competition in the era of society 5.0

New industrial technology is starting to adapt to industry 4.0, which is what they are currently focusing on. Industrial revolution 4.0 is marked by rapid developments in the IT world. The key is in several words such as automation, big data analysis, robot technology, artificial intelligence (AI), to the internet of things (IoT). While many are still adapting to the industrial revolution 4.0, discourse regarding the next revolution, namely the Industrial Revolution 5.0, is already underway.

As a refinement of the 4.0 era, technology such as AI and robots are here to work together with humans. The Industrial Revolution 5.0 encourages efficiency and productivity thanks to technology utilized by human intelligence. For example, many people use AI technology called ChatGPT to find out and do many things. However, ChatGPT will not be able to function optimally without the support of human intelligence in giving the right commands. Another example is the use of HRIS software with cloud technology. With human help, this technology can streamline HR work and even in certain features is oriented towards employee welfare.³

Several examples of the differences between Industrial Revolution 4.0 and 5.0

As mentioned above, the fundamental difference between industry 4.0 and 5.0 is a shift in focus from focusing on economic value to focusing on sustainability and prosperity.

Examples of other differences are as follows: Industry 4.0 focuses on how to automate work, while Industry 5.0 focuses on how to optimize working hours to complete work. Industry 4.0 focuses on the effectiveness of automation of machines and technology, while Industry 5.0 focuses on how to optimize one's knowledge with the help of AI. Industry 4.0 focuses on computerized systems, while Industry 5.0 focuses on how to speed up work with the help of machines for human sustainability and welfare.⁴

Understanding Halal Guarantee Halal guarantee comes from two words, namely guarantee and halal. According to the KBBI, guarantee means guarantee and halal is something that is not prohibited by Islamic law or permitted according to sharak. In article (1) paragraph 1 of Government Regulation no. 39

³ Solek, M. (2018). Juru Sembelih Halal Berbasis Pada Walisongo Halal Research Center (WHRC). *Dimas: Jurnal Pemikiran Agama untuk Pemberdayaan*, 17(2), 297-312.

⁴ Krisnanda, K., Munachidilil 'Ula, A. N., & Mukhlisin, A.. (2023). PENDAMPINGAN JURU SEMBELIH HALAL BERBASIS ASUH DI RPH PUTRA BAROKAH JETIS KAPUAN KUDUS. *Community Development Journal: Jurnal Pengabdian Masyarakat*, 4(3), 6159–6163.

of 2021 concerning the Implementation of the Halal Product Guarantee Sector explains that Halal Product Guarantee, hereinafter abbreviated to JPH, is legal certainty regarding the halalness of a product as proven by a halal certificate.

Objectives of Halal Guarantees In Article 3 of Law of the Republic of Indonesia Number 33 of 2014 concerning Halal Product Guarantees, the objectives of halal product guarantees are as follows: a. Providing comfort, security, safety and certainty of the availability of Halal Products for the public in consuming and using Products; and b. Increasing added value for Business Actors to produce and sell Halal Products.⁵

Meanwhile, the General Guide to the Halal Guarantee System of the Indonesian Ulema Council explains that the aim of preparing and implementing the Halal Guarantee System in companies is to maintain the continuity of the halal production process, so that the products produced can always be guaranteed to be halal in accordance with LPPOM MUI provisions.

Legal Basis for Halal Guarantee a. Al-Qur'an Among the basic laws regarding halal guarantees are as follows:

Surah Al-Baqarah verse 168 Meaning: O people! Eat of the halal and good (food) found on earth, and do not follow the steps of Satan. Indeed, Satan is your real enemy.

An-Nahl verse 114 Meaning: So eat what is halal and good from the sustenance that Allah has given you; and be grateful for Allah's blessings, if you only worship Him. The two verses above explain that Allah has ordered his faithful servants to eat and drink what is halal and good. Islam prohibits foods and drinks that are haram in terms of their substance, such as pus, blood, pork, wine and dog meat. On this basis, a halal guarantee is very important to consider for every company or manufacturer that produces food and drinks.

Meaning: From Abu Abdillah Nu'man bin Basyir r.a, "I heard Rasulullah SAW say, 'Indeed, what is halal is clear and what is haram is clear. Between the two there are doubtful (vague) matters that are unknown to many people. So, whoever is afraid of doubt means he has saved his religion and honor. And whoever falls into a matter of doubt, he will fall into a matter that is forbidden. Just as a shepherd grazes his livestock around (a field) where it is forbidden to enter, so gradually he will enter it. Know that every king has prohibitions and Allah's prohibitions are what He has forbidden. Know that within you there is a lump of flesh, if it is good then the whole body is good and if it is bad then the whole body is bad. Know that he is the heart" (HR. Bukhari and Muslim).

The above hadith suggests that humans should eat halal food and abandon what is haram. Because inside you is a lump of flesh. If the food eaten is halal then the whole body will be good, if the food eaten is haram then the whole body will be bad.

Slaughter comes from the word sembelih, according to the KBBI slaughter means cutting or slitting the throat. Slaughtering an animal is not the same as killing an animal. Killing an animal can be done in various ways, such as hitting it, slashing it with a weapon, dousing it with hot water, or burning it. However, these methods were not exemplified by the Prophet Muhammad. because it is a cruel and disgraceful act. Slaughtering an animal means cutting off the way of eating, breathing and the arteries in the neck of the slaughtered animal with a knife, sword or sharp instrument in accordance with the provisions of the Sharia.⁶

⁵ Setiawan, Y., & Lathifah, A. (2024). Ekosistem Halal Rumah Potong Hewan. *Jurnal Alwazikhoebillah: Kajian Islam, Pendidikan, Ekonomi, Humaniora*, 10(1), 113-127.

⁶ Mail, D. A. A., Fahmi, N. F., Putri, D. A., & Hakiki, M. S. (2021). Kebijakan pemotongan sapi di RPH (Rumah Potong Hewan) dalam kaitannya dengan prinsip manajemen halal dan HACPP (Hazard Analysis Critical Control Point). *Halal Research Journal*, 1(1), 20-38.

Pillars and Conditions for Slaughter, both normal and emergency, must fulfill the five pillars: slaughterer, tools, location, intention, mention and action. Each of these pillars must meet certain requirements. Apart from the religious issue of the person slaughtering the animal, what also really determines whether or not animal slaughter is correct in Islamic law is the issue of the slaughtering technique itself. There are several important conditions so that the slaughtering technique complies with the Shari'a, including:⁷

a. Still Alive When Slaughtered The animal being slaughtered must be an animal that was still alive at the time of slaughter, not dead. Allah says:

Meaning: Indeed, He has only forbidden you carrion. At least there are still signs of life, for example still breathing or still having a heartbeat, even though it is weak. Animals that are run over by vehicles and still have time to be slaughtered before they die, the slaughtering law is legal and the meat is halal to eat. Likewise, pets that are torn apart by wild animals, if they still have time to save them and are still breathing, if they are slaughtered immediately and they still have time to slaughter them before they die, then the slaughter is legal and the meat is halal to eat.

b. Another technical tool for slaughtering animals is the use of tools for slaughtering. It should be noted that what is meant by slaughtering an animal is cutting the jugular vein and blood vessels, so that all the blood in the animal's body leaves the body as quickly as possible and then the animal dies. The most appropriate place for slaughter is the neck. Why? Because it is in the neck that the blood flows the most and the discharge is the highest. Because the blood that flows to the brain is pumped strongly by the heart through the neck. So according to sharia, it is in the neck that the slaughter should be carried out, considering the possibility that blood will quickly exit the body through the neck of the slaughterer. Therefore, the tools used must be sharp. In essence, objects that can cut or slice the respiratory tract and food tract. The material may be made of iron, wood, stone, or other materials. In other words, tools that are blunt objects and are used for killing rather than slaughtering, for example sledgehammers, hammers, bats, and the like may not be used.

c. Intentions and Objectives: Animals that are slaughtered to sacrifice to idols are animals that do not comply with sharia rules in their slaughter, so they are counted as carrion. The slaughter of people of the book can be halal as long as it is known for certain that they do not use any name other than Allah. If it is known that they used a name other than Allah when slaughtering, for example they slaughtered in the name of Isa the Messiah, 'Udzair, or an idol, at this time their slaughter becomes not halal based on the word of Allah. Meaning: It is forbidden for you (to eat) carrion, blood, pork, (animal flesh) slaughtered in the name of someone other than Allah.

d. Basmalah Reading the lafadz basmalah (is something that is generally used as a condition for the legality of slaughter by the ulama. However, there are differences between the number of ulama and the Ash-Shafi'yah sect in this case, which does not make it a requirement but is only limited to the sunnah.

Procedures for Slaughtering According to the Guidebook and Procedures for Halal Slaughtering of Animals from the Ministry of Religion of the Republic of Indonesia, the order of slaughtering animals is as follows:⁸

- a. The animal to be slaughtered is laid down, then its legs are tied, then faced to the left side of the rib to make it easier to slaughter;
- b. Facing yourself towards the Qibla, so does the animal to be slaughtered.
- c. Cut the veins and esophagus on either side of the neck, until they are severed so they die quickly. The esophagus is the food pipe. These two veins must be severed.

⁷ Setyaningsih, R. P. (2022). Isu halal internasional dan regional. *Jurnal Kajian Wilayah*, 12(1), 121-134.

⁸ Sucipto, S., Wardani, R. I., Kamal, M. A., & Setiyawan, D. T. (2020). Analisis teknoekonomi alat penyembelihan ayam untuk mendukung implementasi sistem jaminan halal. *Jurnal teknologi industri pertanian*, 30(1).

- d. When slaughtering, read basmallah.
- e. For animals whose necks are quite long, slaughter them at the base of the upper neck so they die quickly.
- f. For animals whose necks cannot be slaughtered because they are wild or have fallen into holes so that their necks cannot be slaughtered, the slaughter is carried out anywhere on the body, as long as the death is caused by the slaughter and not for any other reason, without forgetting to mention the name of Allah.
- g. Once the animal or animal is completely dead, it may be skinned. Some things that are makruh in the slaughter of animals include:
 - a) Slaughtering until the neck is broken
 - b) Slaughtering with blunt tools
 - c) Skinning or dismembering the animal before its body is lost.

2. Barriers to the progress of animal slaughtering equipment which is a competitive industry in the era of society 5.0.

It is stated in Law Number 33 of 2014 concerning Halal Product Guarantees. That the law explains that all products circulating in Indonesia must have a halal certificate and are not voluntary. This is stated in article 4 of Law number 33 of 2014 which states "Products entering circulation and trading in Indonesian territory must be halal certified". However, the problem experienced by chicken traders in traditional markets is that there is no halal certification for chicken slaughter workers for chicken traders who sell in the market. The circulation of tiren chicken meat is very disturbing to buyers, they are afraid of consuming chicken meat that died before being slaughtered. Increasingly open product competition is a challenge for the food industry to meet consumer expectations for halal, safe and quality products. One of them is by implementing an effective halal guarantee system. A halal guarantee system is a system prepared and implemented by companies holding halal certification which aims to guarantee that the production process and products produced are halal according to the rules outlined by LP POM.⁹

The objectives of perfect economic activity according to Islam can be summarized as follows: 1. Fulfilling one's life needs simply; 2. Meeting family needs; 3. Meet long-term needs; 4. Providing for the needs of the families left behind; 5. Providing social assistance and donations according to God's ways.

Choosing products and services that are halal based is a form of a Muslim's obedience to Islamic Sharia. Halal products are a guarantee not only for Muslims. Anything related to halal food or/and non-food products must comply with Islamic rules including logistics activities for halal products. In order to serve Halalan-Toyibban products to end consumers, all parts of the halal supply chain for halal products must be carried out in accordance with Halal practices including operational activities at the Slaughterhouse (RPH) as well as distribution practices.¹⁰

Using animal slaughtering equipment, the slaughtered animal is confirmed to be clinically dead (the respiratory system and blood circulation stops) for about 5 minutes, then treatment can be continued. Handling here is intended to separate the parts of the slaughtered animal according to their groups, namely carcass, offal, feet, head and skin. After that, weighing is carried out to determine the weight of the product. After that, it reaches the final process, namely the loading process and is ready to be distributed to the market.

Food safety systems such as Hazard Analysis Critical Control Point (HACCP) are also needed to ensure products are safe from potential hazards. HACCP is a monitoring system to prevent the possibility of poisoning or foodborne disease. HACCP includes hazard analysis and critical point control to ensure the products consumed are safe from physical, chemical (pesticides) and microbiological hazards. The

⁹ Rosyidi, D., & Saputro, E. (2022). *Pemingsanan Pada Penyembelihan Hewan Halal*. Universitas Brawijaya Press.

¹⁰ Dilla, Z. U., & Fathurohman, M. S. (2021). Implementasi Halal Traceability Supply Chain Dengan Model Supply Chain Operation Reference (Scor) Industri Makanan Halal. *Jurnal Ekonomi Syariah Teori dan Terapan*, 8(5), 617-629.

HACCP concept can be applied in all food processing processes. HACCP applications are generally carried out with critical control analysis in the process of receiving raw materials, the production process, up to storage before the product is marketed. The steps for implementing HACCP are establishing a HACCP team, product description, determining flow diagrams, identifying hazards, determining Critical Control Points (CCP), determining critical limits for each CCP, monitoring, corrective action, microbiological verification, and documentation.

The minister responsible for agriculture is responsible for managing halal slaughterhouses. Decision of the Head of BPJPH n. 57 of 2021 concerning Halal Product Guarantee System Standards, Halal Guarantee System Standards 23103 RPH and SNI 99003: 2018 concerning Halal Slaughter of Ruminant Farm Animals Regarding Halal Guarantee Systems. The Codex Alimentarius Commission (CAC 2004) defines a good slaughterhouse as all practices in a slaughterhouse that relate to the conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain.

The implementation of these standards must be carried out to ensure the halal meat production process by the slaughterhouse. Apart from that, a halal guarantee system must also be implemented, because this is required in the application for halal certification for slaughterhouses. The monitoring system should start with livestock rounding. Knowing the health condition of livestock, depending on the type of feed and treatment carried out during handling, makes the identification process easier. Traceability of the growth process is needed to determine the feed given to livestock. Even though the cultivation process does not require Halal certification, the feed provided must be free from pork and manure. This is very useful when the manufacturer wants to export to the UAE. A number of pre and post mortem examinations as well as slaughter procedures are part of the Veterinary Health Surveillance function at RFH, so the presence of a veterinarian or paramedic and a curry master is important. In addition, halal guards and halal supervisors are an important part of a halal slaughterhouse.

Cleanliness detection can certainly be easily carried out by the robot sensors that have been created. In technology where it becomes strange when robots are seen as capable of replacing humans in reciting bismillah, this condition is very impossible. During implementation, animal slaughter must also be carried out with due observance of Islamic customs, namely: a. The animal to be slaughtered is laid down, then its legs are tied, then faced to the left side of the rib to make it easier to slaughter; b. Facing yourself towards the Qibla, so does the animal to be slaughtered. and c. Cut the veins and esophagus on either side of the neck, until they are severed so they die quickly. The esophagus is the food pipe. These two veins must be severed.¹¹

However, of course the halal industry will be less able to compete in the economic field in the era of society 5.0. This situation is not a bad thing if the animal slaughtering process is not able to accept the technology of the 5.0 era of society. Islamic law must be prioritized, especially in the food sector. The implementation of obtaining halal quality meat will be achieved without having to use petrification robots in the era of society 5.0.

Conclusion

Technological developments towards the era of society 5.0. One side is beneficial, but there are several implementations where the use of this technology is not accompanied by a good understanding of Islam. The implementation of animal slaughter cannot also be represented by robots. Accepting increasingly advanced technological improvements must be accompanied by a comprehensive understanding of Islam. It is necessary to have an MUI fatwa so that it firmly confirms the explanation of technology that will enter the era of society 5.0. It is hoped that people will believe in prioritizing sharia over convenience but will doubt the halal process.

¹¹ Manurung, R. A., & Kurniawan, R. R. MENYEMBELIH HEWAN DENGAN TEKNOLOGI LASER, MESIN ATAU SEJENISNYA.

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