

Halal Practices on the Shrimp Paste Processing Industries for Business Development in Rokan Hilir, Riau Indonesia

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ABSTRACT

This survey research aims to analyse the application of halal practices on the *terasi* (shrimp paste) processing industry in Rokan Hilir Regency, Riau Province, Indonesia. The location was determined purposively because it is the centre of the largest shrimp paste processing industry in the province. There're 10 of 54 the total shrimp paste processing companies were sampled: two large companies, two medium companies, and six small companies. Data was collected by interviewing the owner of the company as a respondent, using a questionnaire guide. Data of halal practices refer to the Halal Fatwa Standardization of the Indonesian Ulema Council, include: manufacturer management, physical facilities, production equipment facilities, processing procedure, and storage procedures. Data processing used descriptive statistical methods with SPSS version 25. The results showed that the halal practices application level on the shrimp paste processing industries in Rokan Hilir was still low, the average is only 67.10%. The application rate showed that large companies (69.66%), small companies (50.66%), and medium (94.98%). The low application of halal practices in shrimp processing large-companies, because the owner come from non-Muslim circles so they don't understand well the principles of halal. Meanwhile in small companies, it's caused by limited capital, especially to build processing facilities whose quality's standard and could be well controlled. This phenomenon's worried because it could threaten the sustainability of the shrimp paste processing industry in Rokan Hilir in the future. The last, the products're marketed to Java Island, Indonesia and Malaysia, which are Muslim dominantly.

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1. Introduction

The *terasi* (shrimp paste) processing industry is one of the potential businesses in the Riau Province, Indonesia. The industry is centred in Rokan Hilir Regency [1]. Shrimp paste is a processed product of shrimp and fish in the form of a paste, which is made through a process of salting, fermenting, grinding, and drying. Shrimp paste is an important condiment in chili sauce and food, found in Southeast Asia (Indonesia, Malaysia, Singapore, Brunei Darussalam, Vietnam, Philippines,

Myanmar, Laos, and Thailand). The product is popular because of its savoury taste, and sold in wet, and dry/cut forms [2].

Rokan Hilir is a source of shrimp paste raw material, because it is a potential fishing area, which production is 45,797.79 tons per year [3]. The shrimp paste processing industry centres is spread over four locations: Halang Island (Kubu Babussalam District), Panipahan (Pasir Limau Kapas), Bagansiapiapi (Bangko), and Sinaboi. There are 54 shrimp paste processing companies in the area, which produce 12,632 tons of shrimp paste per year, or a value of IDR 6.2 billion. Around 50% of these products are exported to Malaysia and Singapore, while the rest is marketed domestically [4]. However, this business can only develop if it is managed properly, especially the production halal aspect. The reason, because most of the shrimp paste consumers are Muslim peoples: local Indonesian consumers and Malaysian consumers [5].

Islamic law (sharia) requires a person to consume halal food. Halal comes from Arabic, *halal* which means to allow, solve, and liberate. Halal food is food that can be consumed according to Islamic law. Halal is not only limited to its contents, but also how to find, pick and collect, and its legality [6]. So far, it is not known for certain how the current process of processing shrimp paste in Rokan Hilir is seen from the aspect of halal practice. This study aims to analyse the level of halal practice application in the shrimp paste processing industry in the context of developing the business in Rokan Hilir Riau Province, Indonesia.

2. Materials and methods

This research was done by survey research [7]. It was conducted in April 2021 in Rokan Hilir Regency [8] [9]. The location was determined purposively because it is the main center of the shrimp paste processing industry in Riau. There are 54 shrimp paste processing companies in this regency, consisting of large companies (seven units), medium companies (nine units), and small companies (home industries) are 33 units. The sample was 10 companies: large companies (two units), medium companies (two units), and small companies (six units). They were taken proportional purposively [10] [11].

Data collection was carried out by interview techniques using structured questionnaires to company owners [12] [13]. The data collected includes the demographic data of the shrimp paste industry; and data on the application of halal practice in shrimp paste processing. This data consists of five indicators that refer to the Halal Fatwa Standardization of the Indonesian Ulema Council [14]. Data analysis was used is descriptive statistical methods with SPSS software version 25 [15] [16] [17]. Five indicators that refer to the Halal Fatwa Standardization of the Indonesian Ulema Council are:

- (1) *Manufacturer Management*: (i) halal considerations on the purchase of raw materials/additives/auxiliary materials; (ii) written instructions regarding the halal consideration policy; (iii) certainty that only halal shrimp paste is produced; and (iv) administrative system support in the shrimp paste production process;
- (2) *Physical Facilities*: (i) the building/place for processing shrimp paste is free from dirt/unclean; (ii) free from pig and dog activities; (iii) far from the location of the farm/pig slaughter; (iv) the layout of the shrimp paste processing building is neat, protected from dirt/unclean; and (v) equipped with sanitation/clean water/toilet facilities;
- (3) *Production Equipment Facilities*: (i) clarity of origin of raw materials/additives/ auxiliary materials; (ii) do not use alcohol; and (iii) do not use ingredients that are doubtful of halal;
- (4) *Processing Procedure*: (i) the certainty of implementing processing procedures that mention the contamination possible points of shrimp paste products by haram ingredients; and
- (5) *Storage Procedures*: (i) ensure that the warehouse is equipped with a list of stored materials; (ii) Separate production raw materials from non-production materials; (iii) the use of materials is

always supervised by the halal responsible person; and (iv) records all types and production materials taken from the warehouse.

3. Results and Discussion

Shrimp Paste Industry Profile in Rokan Hilir. The result showed that the number of shrimp paste processing companies in Rokan Hilir was 54 units, spread over four locations: Bagansiapi/Bangko, Sinaboi, Halang Island/Kubu Babussalam, and Panipahan/Pasir Limau Kapas as shown in Table 1.

Table 1. The number of shrimp paste processing companies in Rokan Hilir

Location	Companies (units)				Production per Month (ton)
	Large	Medium	Small	Amount	
Bagansiapiapi/Bangko	2	1	13	16	222
Sinaboi	-	3	5	8	8
Halang Island/Kubu Babussalam	5	5	14	22	764
Panipahan/Pasir Limau Kapas	-	-	6	6	6
Total	7	9	38	54	1,000

There were only seven large companies of shrimp paste in Rokan Hilir or 12.96% of all companies. However, its production reached 950 tons per month, or 95% of the total shrimp paste production in the regency. The products of shrimp paste by small and medium companies were only 50 tons per month. Most of the production came from Halang Island/Kubu Babussalam (764 tons, or 76.40%), and Bagansiapiapi (222 tons, or 22.20%).

The shrimp production of large companies was generally semi-finished product (wet shrimp paste) which was marketed to Java Island and exported to Malaysia. Small companies also produce semi-finished product which was marketed to medium companies (to be processed into a packaged shrimp paste). This product marketed domestically. The value of Rokan Hilir shrimp paste reaches IDR 500 million per month.

Halal Practices in the Terasi Processing. The results showed that the application level of halal practices in the shrimp paste processing industry in Rokan Hilir was still very low, only 67.10%. The application rate by large companies was also very low, only 69.66%. They only provide 40% halal physical facilities, and production equipment facilities (33.3%). Aspects of maximum halal practice are only applied to factory management, and the procedures for each processing shrimp paste (100%) as shown in Table 2.

Table 2. The application level of halal practices in the shrimp paste production processing

Indicators of Halal Practice	Application level on the company (%)			
	Large	Medium	Small	Average
Manufacturer Management	100.0	100.0	75.0	91.67
Physical Facilities	40.0	100.0	70.0	46.67
Production Equipment Facilities	33.3	99.9	83.3	72.17
Processing Procedure for Shrimp Paste	100.0	100.0	0.0	66.67
Shrimp Paste Storage Procedures	75.0	75.0	25.0	58.33
Average per scale of company	69.66	94.98	50.66	67.10

The low application of halal practices in the shrimp paste processing industry on a large companies may be due to the fact that the majority of the owners are citizens of Chinese descent who are non-Muslims. So, their understanding of the halal principle was very limited. However, this phenomenon needs attention, because 95% of Rokan Hilir shrimp paste was produced by them. More importantly,

about 50% of their production, exports to Malaysia, and the rest was marketed domestically (Java Island) [18]. Both of the marketing destinations are predominantly Muslim peoples.

If the application of halal practices was not immediately improved, it's feared that it could disrupt the business continuity of the shrimp paste industry in the area. This is due to the increasing public awareness of choosing halal food products. A study revealed that Indonesian people's interest in halal products during 2016-2019 tends to increase. The increase occurred in five provinces: Nanggro Aceh Darussalam, South Kalimantan, Riau, Riau Islands, and Banten (Nurbaiti, 2019).

In addition, the understanding of the importance of consuming halal food has now been realized by non-Muslim consumers in various countries such as the UK, Thailand, Australia, and Japan. This was due to the freshness and safety factors in halal food, which are relatively more awake [20] [21]. Thus, the application of halal practices in the shrimp paste processing in Rokan Hilir in the future will be very important.

Another finding was the lack of application of halal practices in shrimp paste processing by small companies (home industries). The reason was limited capital owned. Although all of them are Muslim, they have not implemented halal practices optimally due to limited funds to purchase standard shrimp paste processing equipment and are safe from contamination of non-halal ingredients. The maximum application of halal practices was carried out by medium companies, which had reached 94.98%. However, there were only nine units' medium companies (16.67%) of the entire shrimp paste processing industry.

4. Conclusion

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section. Suggestion placed after the conclusion contains a recommendation on the research done or an input that can be used directly.

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