

Evaluation of Halal Assurance System on Goat Milk Products in OPQ MSME, Sleman, Yogyakarta

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ABSTRACT

OPQ MSME is an industry engaged in processed products derived from fresh Etawa goat's milk, namely powdered goat's milk and caramel candy. Evaluation of halal assurance system based on the HAS 23101 standard was done to maintain the sustainability of the halal process, in accordance with the provisions of LPPOM MUI. The purpose of this research is to analyze the conformity of halal assurance system on powdered goat milk products at MSME OPQ. The method used in analyzing the problem is interview, literature study, documentation and participatory methods. The results showed that the implementation of the halal assurance system was quite appropriate, but there were several things need to be improved, especially halal policy section, halal management team, training and education, internal audit and management review. Obstacle experienced by MSME OPQ in extending the halal certificate was hindered by the renewal regulation which has now moved from MUI to BPJH, therefore MSME OPQ has not yet received the latest information.

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1. INTRODUCTION

MSME OPQ is a pioneer in the industry that produces powdered goat milk in Indonesia. MSME OPQ also develop innovative products while maintaining the quality such as powdered goat's milk with various flavors especially vanilla, strawberry, chocolate and ginger. MSME OPQ also produces caramel candy. Powdered goat milk produced by MSME OPQ has good taste, sweetness, attractive color, healthy, and the price is affordable, therefore is in great demand by consumers.

Etawa Peranakan (PE) Goat spread throughout rural areas in Indonesia and is well

known as a dairy and meat-producing livestock. Productivity of PE goats varies greatly, with milk production ranging from 0.45 to 2.2 kg/head/day (Adriani et al, 2003). Development of goat's milk into beneficial dairy products is necessary considering the advantage of goat's milk and processed goat's milk products for human health (Rozani et al., 2021; Yamin et al., 2021). Halal Assurance System (HAS) implementation is a requirement from LPPOM MUI to obtain a halal certificate (Wurnaningsih 2016).

Law of the Republic of Indonesia Number 33 of 2014 concerning Halal Product Warranty with purpose of holding halal guarantee, meanwhile scientific and advanced technology in the field of food is developing rapidly. Halal is Islamic rule to state that some things are permitted or prohibited for consumption by Muslims on the basis of Al-Quran, hadith or ijtihad (scholars' agreement) (Salehudin, 2010).

Indonesian consumers who are predominantly Muslim will doubt the halalness of a product, especially in the absence of a halal certificate and halal guarantee. After this happens, it will raise concerns about health problems, endanger lives and reduce consumer confidence in these products (Dewi, 2007). HAS 23101 is a guideline for meeting the standards of the food industry halal guarantee scheme. The Indonesian food industry has to implement halal assurance system. Halal Assurance System is a management system created, implemented and maintained by companies that have Halal certificates to maintain the continuity of the halal process in accordance with the provisions of LPPOM MUI (LPPOM, 2018).

2. MATERIALS AND METHODS

2.1. Materials

The tools used in this study were measuring cups, stainless steel shovels, filters and cloth, cutters and scissors, frying pans, stoves, wooden spatulas, dippers, and digital scales. The materials used in this study were fresh goat's milk, granulated sugar and food flavours.

2.2. Research Methods

Several stages to solve the problem are, (1) Methods of interviews and discussions with parties involved in the implementation of all activities. Interviews and discussions were conducted related to the process of providing raw materials, the process of making powdered goat milk and also how the packaging process was carried out; (2) Literature study method, namely by using various literature from various library sources regarding the halal assurance system to support the results of research data; (3) Documentation, which is done by collecting evidence of implementation in the form of photos related to the product quality control process at MSME XZY (4) Participatory method, namely by participating in processing activities for MSME OPQ products; (5) conclusion, which is done after processing and analysis data.

3. RESULT AND DISCUSSION

3.1. Evaluation of the implementation of the Halal Assurance System for Powdered Goat Milk products at OPQ MSME

Good and healthy food is an absolute obligation for Muslims. Maqashid syariah as a basic human need provides guidelines, among others, safeguarding religion, safeguarding the soul, safeguarding reason, safeguarding offspring, and safeguarding property (Sari 2008). Food industry increased 12.7% from the previous year which ranked second after the machinery and equipment industry (14.98%) in 2018 (Pusdatin Ministry of Industry 2018). Halal Assurance System is a management structure structured by the company to maintain

consistency in producing halal products in accordance with applicable LPPOM MUI provisions (MUI, 2018). In maintaining its consistency, LPPOM MUI has provisions with certain criteria in accordance with HAS 23101.

The main product produced by MSME OPQ is powdered goat milk with various flavours such as original, vanilla, strawberry, chocolate and ginger. Table 1 checked the conformity of the criteria for the halal guarantee system for powdered goat milk products in MSME OPQ based on the HAS 23101.

Table 1. Check sheet for fulfilling the MSME Goat Milk Halal Assurance System
OPQ

Num	Process	Result		Improvement
		Yes	No	
1	Halal Policy	√		The halal policy is made in written form
2	Halal Team Management	√		The halal management team should not be part of the company
3	Training and Education		√	Training and education are immediately implemented and carried out on a scheduled basis
4	Material	√		
5	Product	√		
6	Production Facility	√		
7	Critical Activity Written Procedure:			
	a. Raw material production		√	
	b. Purchase of Materials	√		
	c. Product formulation procedures		√	Writing in a recipe book
	d. Incoming material inspection procedure	√		
	e. Production procedure	√		
	f. Procedures for washing production facilities and auxiliary equipment	√		The washing area for production facilities is kept away from the toilet and production room
	g. Material storage and handling procedures	√		Storage space is done in a wider place
	h. Transport procedures	√		
8	Traceability	√		
9	Handling of products that do not meet the criteria	√		
10	Internal Auditing	√		Internal audits are carried out periodically and do it soon
11	Management Review		√	Management review do it soon

3.2. Evaluation of the conformity of the halal assurance system criteria for goat milk powder products at MSME OPQ

Evaluation was carried out to find out whether MSME OPQ had implemented halal guarantee system in accordance with the HAS 23101 standard. The following is an evaluation of the conformity of the criteria for the halal guarantee system for powdered goat milk products in MSME OPQ.

1. Policy

Halal policy is a form of government protection for Muslim consumers (Wahid, 2010). MSME OPQ SMEs have implemented halal policy which shows the

company's commitment to produce halal products that will be consumed by consumers. Business owners confirmed that the halal policy has been implemented and stated in the form of the MUI logo on the packaging. Halal policies in companies could be written separately from other system policies such as food safety, Hazard Analysis and Critical Control Points (HAACP), Good Manufacturing Practice (GMP) and so on (Hartoyo 2016). The dissemination of the MSME OPQ halal policy has been carried out and proven by Muslim employees and the materials used have met the established criteria. The implementation of halal policies by MSME OPQ was nonoptimal because MSME OPQ have not yet provided written records of halal policies within the company.

2. Halal Management Team

The halal management team is a group of people appointed by top management as responsible for planning, implementing, evaluating and continuously improving the halal assurance system in the company (LPPOM MUI 2015). MSME OPQ already has halal management team that is determined in writing (Table 2). However, the team was not optimal because members of the halal management team were preoccupied by the workload of the company.

Tabel 2. MSME OPQ halal management team membership structure

Num	Position	Derived from section	Task
1	Chairman	-	-
2	Head of production	Head	Supervised the production department
3	Treasurer	Treasurer	Auditors

3. Training and Education

Halal management system training is an activity that aims to increase knowledge, skills and attitudes of all personnel involved in critical activities (MUI, 2018). MSME OPQ do not have training procedures that refer to HAS 23101. The training conducted at MSME OPQ was done by direct practice. Training and educational materials provided to employees are only in the form of a job desk to produce goat milk properly and keep the product halal and safe. MSME OPQ has an internal training plan shown in Appendix 6 but no evidence of training and education attendance data has been found.

4. Material

Materials are elements that are used to make or produce products. The raw materials used in the manufacture of powdered goat milk consist of raw materials and additional materials used by MSME OPQ, namely fresh goat milk, sugar and flavours. The materials used at MSME OPQ already have halal logo therefore safe and lawful to use. Raw materials are materials used in the process of making a product and are part of the product composition (MUI, 2018). List of raw material that used at MSME OPQ shown in Table 3.




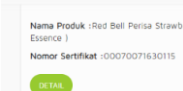
5. Product

Products are whole materials that are registered for certification, including intermediate products and final products, whether sold retail (retail) or bulk (MUI, 2018). Products sold at MSME OPQ are free from names that lead to something that is forbidden. This is evidenced by the fact that products can be bought and sold and have received MUI halal certificates. Goat Milk Products at MSME OPQ have been certified halal by MUI with certificate number 12030002650616 (Figure 1).



Figure 1. Etawa Goat Milk Products

Table 3. Raw materials for powdered goat milk in MSME OPQ

Name and Brand	Material Type *)	Manufacturer	Country	Supplier	Halal Certificate Issuing Agency	Halal Certificate Number	Validity Period of Halal Certificate	Supporting Documents
Goat Milk	Raw Materials	Breeder	Indonesia	Breeder	-	-	-	Positive List
Sugar	Raw Materials	PT. Sentra Usahat ama Jaya	Indonesia	PT. Sentra Usahat ama Jaya	MUI	002300333 30205	July 9, 2021	
Vanilla and Milk Flavors	Additional Material	CV.Verra co	Indonesia	Avia Bakery	MUI	000700544 20310	February 19, 2021	
Chocolate Flavor	Additional Material	PT. Cares	Indonesia	Avia Bakery	MUI	001100406 00606	July 7, 2022	
Strawberry Flavor	Additional Material	PT. Verra co	Indonesia	Avia Bakery	MUI	000700716 30115	February 19, 2021	

6. Production Facilities

Production facilities (Table 4) are facilities that convert constituent products into final products that are ready for sale (MUI, 2018). According to Hidayah (2016) halal production facilities start from the use of sterile machines and equipment, the use of clean and holy water, and also demonstrating worker sanitation to produce products that are of higher quality and are safe for consumption. OPQ SMEs do not have equipment for production processes that contain unclean/unlawful ingredients such as pork and its derivatives. Even though there is no contamination with unclean or unclean things and is not critical, cleanliness needs to be improved when producing powdered Etawa goat milk because there is dust which can affect the hygiene of milk.

Table 4. Production Facilities at MSME OPQ

Name	Status	Critical (Yes/No)
Sealer	No Contamination	No
Digital Scales	No Contamination	No
Pan	No Contamination	No
Spatula	No Contamination	No
Stove	No Contamination	No
Mug / Plate Stainless	No Contamination	No
Stainless	No Contamination	No
Measuring Cup	No Contamination	No
BJ Tool	No Contamination	No
Filter	No Contamination	No
Stainless Basin	No Contamination	No

7. Written Procedures for Critical Activities

Written procedures for critical activities are a set of standardised work procedures for controlling critical activities (MUI, 2018). MSME OPQ is included in the Written Procedure for Critical Activities divided into several parts, namely:

a. Raw Material Selection Procedures

Written procedures for critical activities must ensure that the materials used for processing certified products have been approved by LPPOM MUI. Since MSME OPQ received halal certificate from the MUI, there has been no change in the ingredients used to produce powdered goat milk.

b. Purchase Procedure

The procedure for purchasing materials for certified products can refer to the list of materials approved by LPPOM MUI. According to Tempelmeier (2002). When purchasing raw materials, it is necessary to consider storage availability and production requirements when dealing with different suppliers. Purchased materials of MSME OPQ have been registered at LPPOM MUI.

c. Product Formulation Procedure

Product formulation procedures are formulations for products that have been certified (MUI, 2018). All materials used in the product formulation must be approved by LPPOM MUI. All powdered goat milk products produced by MSME OPQ have provisions for the formulation of the ingredients used. The formulation that has been determined must be used as the basis for the production process which aims to maintain the quality of the product to be produced.

d. Incoming Material Inspection Procedure

Inspection of incoming materials is an examination of the material packaging label, to ensure the conformity of the information contained on the label with that contained in the material supporting documents (MUI, 2018). MSME OPQ always checks incoming ordered materials. The inspection is carried out by the company. Things that are checked include the expiration date, brand name, price, order quantity and the halal logo.

e. Production Procedure

The production process is a process that combines from one part to another (Karimi, 2003). The production process does not meet the criteria because MSME OPQ have not implemented proper sanitation, such as workers not using gloves during the production process, using footwear inside and outside the process. production is not differentiated so that the floor in the production room can be contaminated with unclean materials from outside. At the production stage at

MSME OPQ it is certain that the materials used have been approved by LPPOM MUI.

f. Procedure for Washing Production Facilities and Auxiliary Equipment

This procedure must ensure a cleaning process that can remove various contaminations, including unclean/unclean other than pork and ensure that the material is not contaminated with unclean/unlawful materials (MUI, 2018). The washing of production facilities at MSME OPQ is carried out after completing the production process for making powdered goat milk. Washing is done with running water. Equipment such as stoves are cleaned by using a cloth that has been moistened with water.

g. Material Storage and Handling Procedures

Material storage and handling procedures are materials and products in storage facilities during the material production process (MUI, 2018). Storage and handling of materials in the MSME OPQ warehouse are stacked according to materials and are regulated using the FIFO (First In First Out) system. Materials that arrive earlier must be issued first (Naibaho, 2013).

h. Transportation Procedures

The transportation in question includes transporting materials from suppliers to company warehouses and between production locations within the company, as well as transporting goods from the company to distributors (MUI, 2018). Transportation in MSME OPQ is still done manually. Transportation to the main warehouse is assisted by employees. The materials brought by the supplier are also ensured to be in tight packaging and in good condition.

8. Traceability

Traceability is the ability to trace certified products originating from materials that meet standards (approved by LPPOM MUI and produced in factories that meet standards excluding raw materials/derivatives thereof) (MUI, 2018). Following are the search results on MSME OPQ:

- a. Fresh goat milk is obtained from breeders around the production area who have not been certified halal by the MUI
- b. The additional materials used are materials that have been certified halal and have received a halal label from LPPOM MUI
- c. The ingredients used in the production process of powdered goat milk do not fully obtain a halal certificate from LPPOM MUI such as fresh goat milk
- d. The products that are sold are ideal because there are no elements that lead to haram things
- e. The production facilities have met the criteria set by LPPOMMUI and free from haram elements
- f. The packaging used for the production of powdered goat milk is made from PP plastic and aluminium foil, but its halal status has not been traced.

9. Handling of Products that Do Not Meet the Criteria

Products that do not meet the criteria are halal-certified products that are already made from materials that are not approved by the LPPOM MUI and or are produced in facilities that are not free from pork/derivatives (MUI, 2018). Based on the results of the research through interviews and observations MSME OPQ do not sell products that do not meet the criteria set by LPPOM MUI. Destroying products that are not fit for sale is maintaining the halal assurance system in the food industry (Riaz and Chaudry, 2004).

10. Internal Audits

Internal audit is a process of assessing and evaluating the management of the halal management business to assess the suitability with the requirements of the MUI halal certificate (MUI, 2018). The internal audit has been carried out by MSME OPQ but not periodically. MSME OPQ has halal management team but no evidence of training data was found at LPPOM MUI. The products sold do not contain unclean or haram, there are no additional production facilities, the procedures carried out are in accordance with the SOP but need to be improved. No evidence of internal audit implementation due to the process of extending the MUI halal certificate during the pandemic, the check sheet was carried out only via video call by the MUI and the MSME OPQ owner and there was no evidence during the management review.

11. Management Review

Survey management review conducted by top management or their representatives to assess the effectiveness of SJH implementation and formulate continuous improvements (MUI, 2018). MSME OPQ has never conducted a management review of the halal assurance system and there is no evidence of holding a management review meeting.

3.3. Identification of obstacles in extending halal certificates

Halal certificate for MSME OPQ has expired, therefore, Halal certification must be carried out again, starting from the initial stage. According to the results of interviews with the owner, namely Mr. Poniman, the company had taken care of the renewal of this certificate before it expired, but was hindered by new regulation where the arrangement for the renewal of halal certificate was through the Ministry of Religion (Kemenag). Powdered Goat Milk has received halal certificate since 2016. This is the reason why MSME OPQ have not received the latest halal certificate and halal logo.

4. CONCLUSIONS

Implementation of Halal Assurance System for powdered goat milk products at MSME OPQ is quite good but some do not yet meet the criteria for the Halal Assurance System. constraints for MSME OPQ in extending halal certificates was hindered by certificate extension regulations which have now moved from MUI to BPJH.

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