

Elements of Food Product Safety and its Relationship with the Concept of Preserving Life in Maqasid Shariah

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Received: 30 April 2022
Accepted: 12 October 2022
Online First: 23 December 2022

ABSTRACT

The safety of food products is an important factor in preserving consumers' lives. Preserving life is one of the main concepts in achieving the objectives of legal legislation, which is referred to as maqasid shariah. This study focuses on implementing the concept of maqasid shariah, preserving life through the safety of food products to maintain the body and ensure human health, starting from preparing raw materials until the product is ready to eat. This study aims to refine the safety elements of food products and their relationship with the concept of preserving life in the maqasid shariah. Several elements of food product safety were found to be related to the concept of preserving life in the maqasid shariah, namely: (a) material elements in production (buildings and premises, manufacturing and logistics workers, raw materials and ingredients, and equipment and fittings); and (b) elements of the production process (product manufacturing, product packaging, product storage, and product logistics). In conclusion, this study suggests that the concept of preserving life in the maqasid shariah can be applied to the food manufacturing chain process through the food product safety elements identified. A field study approach using primary data as the main data is recommended for future studies to obtain a realistic picture of the implementation of the maqasid shariah in food product safety.

Keywords: Food Product; Food Safety; Maqasid Shariah; Preserving Life

INTRODUCTION

The safety of food products is an important factor in preserving consumers' lives. Food is very close to human life because food is a source of nutrients that provide energy directly to the body. Safe food is important in building a strong and healthy body and can form an active mind. Preserving life is one of the main concepts in achieving the objectives of legal legislation, which is referred to as maqasid shariah. Among the main themes of the maqasid shariah is to bring benefits and reject any harm to the human being (Ibnu Ashur, 2001).

Preserving life starts with consuming safe and quality food because these factors will be able to prevent the body from being infected with various diseases. Diarrheal, vomiting, fever, and dizziness are the symptoms caused by food poisoning. Salmonella is a bacterium that can cause foodborne illness caused by food contaminated by animals such as rats and cockroaches, and also as a result of human negligence that does not maintain food hygiene and quality (My Health, 2021).

This study focuses on implementing the concept of maqasid shariah, preserving life through the safety of food products and aims to protect the body and ensure human health, starting from preparing raw materials until the product is ready to eat. It is hoped that this concept will give an understanding to Muslims as a whole that Islam places great emphasis on the safety of food products not only in terms of halal and haram laws but also covers the quality, hygiene, and safety of products. This study aims to refine the elements of food product safety and its relationship with the concept of preserving life in the maqasid shariah.

Definition and Concept of Maqasid Shariah

Maqasid and shariah consist of two words that have different meanings. Maqasid is masdar mimi from the word qasada, which means purpose or objective (Al-Maany, 2021). Shariah, in terms of language, has several meanings. Among them is the way to achieve a goal, the path taken to get a source of water to drink, and the religious teachings prescribed by God (Al-Qurtubi, 1964; Ibnu Manzur, 2003).

While in terms of terminology, shariah means the rules and regulations determined by Allah SWT to his servants, which include laws related to faith, worship, morals, muamalat, and procedures of life that have various purposes to regulate the human relationship with his god (Al-Kattan, 2001). Therefore,

the maqasid shariah has been defined by Islamic scholars with several definitions, among them as the objective of shariah or the goal of shariah law entrusted to human beings (Al-Shatibi, 2004).

Al-Ghazali stated that the maqasid of shariah is to take care of five basic things, namely things that touch on the aspects of taking care of religion, taking care of life, taking care of the mind, taking care of offspring, and taking care of the property (Muhammad, 1997). Ibn Ashur defines the maqasid of shariah as a general objective containing meaning and wisdom and the nature of Islamic law, purpose, and specific meanings (Ibnu Ashur, 2001). Maqasid syariah is also defined by al-Zuhaili as the goal of syariah law prescribed by Allah SWT (Al-Zuhaili, 1986). Ibnu Bayyah (2018) also states that the maqasid shariah is something that contains meaning in whole or in part that contains certain laws and wisdom that can be understood from shariah law.

Based on the above definition, it can be concluded that the maqasid shariah is the goal of a law that contains the wisdom behind the provision of every shariah law entrusted by Allah SWT to human beings. This provision must be understood and dissected so that human beings get benefits and goodness (masalahah), which can reject harm (mafsadah). Maqasid shariah has existed since the religion of Islam was revealed to the Prophet Muhammad SAW. As Allah SWT has stated the purpose of human creation in His word:

وَمَا خَلَقْتُ الْجِنَّ وَالْإِنْسَ إِلَّا لِيَعْبُدُونِ

“I did not make jinn and humans except to worship (enslave myself to me that is Allah SWT”

(al-Zariyat, 51: 56)

According to Ibnu Kathir (1999), the creation of man by Allah SWT aims to worship Him. Worship is only perfect with physical strength from a healthy body. A healthy body is the result of safe and quality food. Thus, the safety of food products to ensure human physiological and physical health can be achieved through the concept of preserving life in the maqasid shariah.

Food Product Safety in Life

Food product safety means food that is free from any risks to the physiological and physical health of the consumer (Ghani, 2019). Food product safety is a major global agenda for maintaining the physiological and physical health of the public (WHO, 2021). The relationship between food

product safety with preserving human life is very significant. Food product safety can build a coalition to form an agreement to build benefits and avoid harm. Safe food means clean quality and nutritious (Abd Rahim et al., 2018).

Consumers must choose food products that are safe and not harmful to the body to be used as a source of energy (Saad & Ramli, 2019). Food products from halal sources are pure and do not contain faeces (Aris et al., 2020). The operator must ensure that the raw materials used during the product's manufacturing process are safe to eat (Bahagian Keselamatan dan Kualiti Makanan KKM, 2021). Safe food not only emphasizes halal and pure aspects from the point of view of Islamic law but must include health, safety and hygiene practices to ensure consumers' physiological and physical health (Abdullah et al., 2021). Allah SWT said:

إِنَّهُ لَكُمْ عَدُوٌّ مُّبِينٌ يَا أَيُّهَا النَّاسُ كُلُوا مِمَّا فِي الْأَرْضِ حَلَالًا طَيِّبًا وَلَا تَتَّبِعُوا خُطُوَاتِ الشَّيْطَانِ

“O people! Eat of that which is lawful and good in the earth, and follow not the footsteps of the devil, for he is an open enemy to you”

(Al-Baqarah, 2: 168)

According to al-Tabari (2001), Allah SWT has commanded human beings to eat halal, safe and quality food to guarantee human physiological and physical health. Preserving life in the maqasid shariah can improve the quality of something. In this context, the quality of the food product manufacturing process is very important because safe food can avoid poisoning and injury to the digestive system (MOH, 2021; My Health, 2021).

Elements of Food Product Safety Based on the Concept of Maqasid Shariah Preserving Lives

Maqasid shariah is a manifestation of syariah law that can reject harm and bring good to human beings. Several food product safety elements have been partially discussed separately by Jais (2021) and Ghani (2019). These elements (Diagram 1) were found to have a relationship with the concept of preserving life in the maqasid shariah. The elements are:

- (a) Material elements in the production of food products:
 - i. Building and premise
 - ii. Manufacturing workers and logistic workers
 - iii. Raw material and ingredients

- iv. Equipment and fittings
- (b) Process elements in the production of food products:
 - i. Manufacturing
 - ii. Packaging
 - iii. Storage
 - iv. Logistic

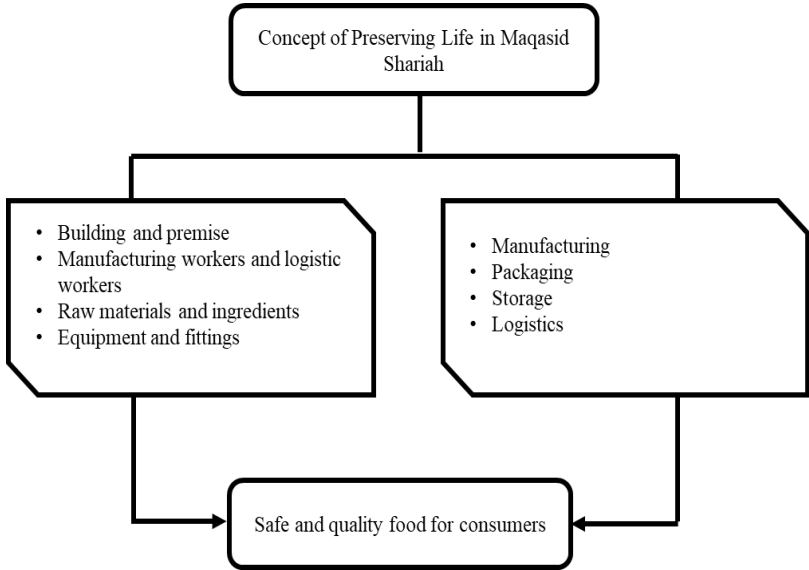


Figure 1. Summary of the Relationship between the Concept of Preserving Life in Maqasid Shariah with the Elements of Food Product Safety

(a) Material Elements in the Production of Food Products

a (i) Building and Premise

Premises refer to buildings and areas that are the place of business management (DBP, 2017). In the context of food product safety, the premise needs to meet the aspects: (a) Premise location; (b) Premise infrastructure; (c) Buildings dan premise area; (d) Cleanliness outside and inside the premises; and (e) Responsibilities of the owner of the premises.

The location of food industry premises should be located away from chemical pollution, sewage treatment and landfills (Jabatan Standard Malaysia, 2021; JAKIM, 2021). The selection of premises that are free of

flood risk and free of air pollution is very important. Food operators need to refer to the guidelines provided by the Ministry of Health Malaysia to identify the location of suitable premises before starting operations (Bahagian Keselamatan dan Kualiti Makanan KKM, 2021; MOH, 2021).

Premises infrastructure plays an important role so that the manufacturing process can be done safely without inviting danger to humans, products and the environment (Awang, 2020). The infrastructure of the premises that need to be taken into consideration by the operator is a perfect drainage system for cleaning purposes. A well-functioning drainage system will facilitate cleaning work around the premises to prevent odour and dirt pollution (Ghani et al., 2019). Infrastructure not following the outlined specifications will directly invite danger to workers and products.

Buildings and premises must meet the requirements to carry out food product manufacturing operations, such as processing areas, packaging areas, storage areas, and areas for storing raw materials and washing areas (Jabatan Standard Malaysia, 2021; JAKIM, 2021). Hygiene outside and inside the premises must be well maintained to prevent pests. Premises cleaning schedules must be recorded and updated so that monitoring can be done (JAKIM, 2021). It is the responsibility of the owner of the premises to ensure that every part of the premises is in good condition, such as the floor is not damaged, the water is not stagnant, the lights are covered, the window nets are not torn, and the ceiling is not leaking (Ghani, 2019). Responsible premise owners also always adhere to the safety standards of food product manufacturing premises.

a (ii) Manufacturing Workers and Logistic Workers

Employees are the main drivers of a company and assets in an industry. Employees who suffer from health problems and are at risk of contaminating raw materials and ingredients, at the same time, are not allowed to be on the premises (Salleh et al., 2020). Workers in the food product industry are required to receive anti-typhoid injections and must undergo food handling training (Bahagian Keselamatan dan Kualiti Makanan KKM, 2021). Through anti-typhoid injections, workers can protect themselves from typhoid fever because food handlers risk spreading it or diseases caused by salmonella typhi bacteria (My Health, 2021).

In order to produce skilled and efficient employees, training needs to be done by the management regularly, either monthly or annually. The training includes food safety and operational SOPs (Bahagian Keselamatan dan Kualiti Makanan KKM, 2021; Ghani, 2019; JAKIM, 2021). Food product handling training can improve employees' efficiency in hygiene, such as hand washing practices, neat clothes and personal hygiene (JAKIM, 2021; Salleh et al., 2020).

a (iii) Raw Materials & Ingredients

Raw materials and ingredients are used in the manufacturing process of food products and must be certified halal, safe, and of good quality (JAKIM, 2021). Raw materials and certified halal ingredients are believed to have complied with the conditions set by JAKIM. Raw materials and ingredients are important components in the process of manufacturing food products because there are chains that play a major role in determining the halalan tayyiban to the entire process carried out. Raw materials and ingredients consist of animal, vegetable and marine life sources. Sources of raw materials from animals are in the critical category (JAKIM, 2021). Raw animal materials must be halal certified by JAKIM or a foreign certification body recognized by JAKIM (JAKIM, 2021). Raw materials from vegetable and marine sources must ensure quality and cleanliness. These raw material sources could be contaminated due to improper handling.

a (iv) Equipment & Fittings

Equipment and fittings are the hardware used for processing purposes (DBP, 2017). Maintenance for equipment and fittings must be performed according to the food product. Maintenance schedules are recorded to facilitate monitoring and compliance with procedures. Equipment and fittings that are not properly maintained can cause a biological hazard, especially after the manufacturing process is carried out. Damaged equipment and fittings should be removed from the processing area for fear of reuse without being aware of the damage (Bahagian Keselamatan dan Kualiti Makanan KKM, 2021). If there is a need for such equipment and fittings, it must be carried out by a company registered with JAKIM or the state religious authority (JAKIM, 2021).

(b) Process Elements in the Production of Food Products

b (i) Manufacturing

The product manufacturing process is closely related to raw materials and workers. During the manufacturing process, the mixing of raw materials must be done carefully so that there is no contamination due to the negligence of workers. Raw materials and ingredients should be placed on the floor with a base and exposed (Ghani et al., 2019). Workers in the manufacturing process area must follow established SOPs such as wearing clean clothes and equipment, washing hands before starting the manufacturing process, and removing personal items such as watches and rings.

Cross-contamination is at risk of occurring while processing is in progress, such as the transfer of bacteria through hand contact to the raw material being processed as a result of workers not washing their hands before handling the manufacturing process (Bahagian Keselamatan dan Kualiti Makanan KKM, 2021). Practising SOPs can ensure the product's safety from cross-contamination (JAKIM, 2021).

b (ii) Packaging

Product packaging refers to the act or process of packaging (DBP, 2017). The packaging specified in Standard Malaysia, MS 2565: 2014 includes closed products such as using plastic, containers, and trays and not using illegal materials and faeces (Jabatan Standard Malaysia, 2021; JAKIM, 2021). Adherence to these packaging standards can guarantee product quality. Frozen and dried products have different types of packaging. The use of plastic packaging that complies with food packaging standards (food grade) can ensure the product's durability.

In order to comply with food packaging standards, an authoritative agency needs to verify the labelling on the packaging. MARDI is among the agencies that can help verify the labelling on product packaging. Labelling product information, such as nutritional facts and expiration dates, can be ascertained with laboratory tests (MARDI, 2021). Accredited private laboratory services can also verify labelling on product packaging. The information included on the packaging must contain the correct labelling information. If there are complaints from consumers related to information errors and damage to product packaging, the product recall process must be done to avoid harm to consumers.

b (iii) Storage

A storage place is a space or area reserved for storing an item or product for future use (Cambridge Dictionary, 2022). Storage of food products should be done carefully and by established criteria. The process of storing food products is done before the product enters the logistics phase. The storage process that complies with standards depends on several things (JAKIM, 2021; My Health, 2021): (a) Type of product; (b) Product size; (c) Product durability; (d) Storage temperature; and (e) The practice of prioritizing product entry and exit according to the order of production date (First In First Out).

The process of storing food products is done in separate rooms according to type. This is stated in MS 1514: 2009, MS 2565: 2014 and MS 1500: 2019 (Jabatan Standard Malaysia, 2021; JAKIM, 2021). Storage of food products is done according to the type of product (My Health, 2021; Ghani et al., 2019): (a) Dried food products, such as biscuits and bread at room temperature (23-26 degrees Celsius); (b) Dairy products such as yoghurt at cold temperatures (0-5 degrees Celsius); and (c) Frozen products such as ice cream at freezing temperatures (-18 degrees Celsius and below).

Product layout in the storage area also ensures the quality and safety of products, such as the use of shelves and bases. The product's position from the floor is 6 inches and two feet from the ceiling. Position and distance are important for sanitary purposes in the storage area and for using iron shelves that are not easily corroded (Ghani, 2019). Storage of finished products should not be done off-premises to avoid contamination and pest disturbance (JAKIM, 2021).

b (iv) Logistic

Logistics means transportation and maintenance (DBP, 2017). Transportation and maintenance in this logistics process must comply with the Manual Prosedur Pensijilan Halal Malaysia (MPPHM) (JAKIM, 2021). The logistics process of food products is done using business vehicles or private courier services. Frozen products must use a vehicle with a temperature of -18 degrees Celsius. The vehicle used must be suitable for the product's capacity so that the product is not damaged and contaminated due to the narrow space.

Outer packaging, such as bubble wrap and boxes, will be able to avoid contamination due to damage during the logistics process. Logistics

processes that use private courier services and segregation between halal and non-halal products must be ensured to avoid cross-contamination. SOP monitoring needs to be done on private courier service companies to ensure the safety of food products (Yaacob et al., 2016). Cross-contamination can occur when there is a mixture of different food products with different storage temperatures. Food products are at risk of being damaged if the logistics vehicle used does not follow the storage temperature of the correct type of food product.

CONCLUSION

In conclusion, this study suggests that the concept of preserving life in the maqasid syariah can be applied to the food manufacturing chain process through the food product safety elements identified. The manufacturing process of food products must comply with food safety certification standards to produce safe food products. The elements that have been identified are expected to form a holistic product manufacturing ecosystem to ensure human physiological and physical health. A field study approach using primary data is recommended for future studies to obtain a more realistic picture of implementing other syariah concepts in food product safety about human physiological and physical health.

ACKNOWLEDGEMENTS

The authors wish to express gratitude to Academy of Contemporary Islamic Studies, Universiti Teknologi Mara (UiTM) Shah Alam, Selangor for continuous morale and technical support.

CONFLICT OF INTERESTS

The authors declare no competing interests, such as financial or personal relationships, regarding the writing of this article.

AUTHORS' CONTRIBUTIONS

Khairul Effendi Hashim and Mohd Amzari Tumiran designed the study, gathered the literature, and conducted the data collection. Nasharuddin Mohammad organised, analysed the data, and wrote the whole article

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