Controlled Elements of Internal Halal Assurance System at Food Premises

Arif Sazelin, Sidek Safiah and Hassan Muhammad Haziq
Centre for Languages and Human Development,
Universiti Teknikal Malaysia Melaka (UTeM),
Hang Tuah Jaya, 76100 Durian Tunggal, Melaka, Malaysia

Abstract: The high demand for halal products has led many food manufacturers to seek for halal certification in Malaysia. However, prior to receiving the halal certification, the Department of Islamic Development Malaysia (JAKIM) imposes that multinational manufacturers to implement the Internal Halal Assurance System (IHAS). However, this rule has yet to be made compulsory for the medium and small scale operators, including the operators of food premise who wish to apply for the certificate. Although, there have been a number of medium and small sized food operators implement the IHAS, there are still a lot of evidences that the operators of food premise who take an indifferent attitude and not serious in complying with the IHAS. Further, the guidelines provided by JAKIM are found to be too general and do not provide clear guidance for the food operators to comply with the IHAS system. Therefore, this study aimed to identify and describe the controlled elements in IHAS that can be used as a guidance for the food operators at the food premises. Based on document analysis of the relevant standard documents, four important controlled elements in the IHAS have been identified and described. The four controlled elements are the halal critical points, cleanliness and hygiene, documentation system and internal halal committee. The results of this study provides valuable guidance for the halal executives working at food premise to implement IHAS. Further, the compliance of IHAS can ease the process of securing halal food certification from JAIM in Malaysia.

Key words: Internal halal assurance system, food premise, controlled elements, standard, halal executives

INTRODUCTION

Halal products have a huge market not only in Malaysia but also in the international market. As stated in Harian Metro (2013), Malaysia has succeeded in exporting halal products worth of RM33 billion in 2012 in which 71% of the exported halal products were contributed by multinational corporations and large-sized companies. The high demand for halal products has resulted in many manufacturers, including the non-Muslims sought to get the Malaysian halal certification. In Malaysia, the government agency responsible to provide the verification and certification of halal food and consumables in Malaysia is the Department of Islamic Development Malaysia (JAKIM). This agency is responsible for making sure that the procedure of halal certification is in compliance with the halal standard MS 1500: 2009 (Department of Standards Malaysia, 2009a), Malaysian Halal Certification Procedure Manual (MPPHM) and other standards such as the MS 1514: 2009 (Department of Standards Malaysia, 2009b) and the MS 1480: 2007 (Department of Standards Malaysia, 2007).

The procedure of issuing the halal certification is based on two important considerations: the first consideration is that relevant standards and guidelines are used as references and the second is that its procedure should be based on the standard procedure set by JAKIM or the Department of Islamic Religion at the state level (JAIN). Further, the officers, from both the Shariah Unit and the Technical Unit of the related agency have to monitor and verify the compliance of the procedure before the halal certificate can be issued (Arif and Sidek, 2015). Specifically, the halal certification is only issued after a detailed inspection of the product traceability has been carried out. The product traceability focuses on three aspects: the “supplier traceability” “process traceability” and “customer traceability”.

Aiming to ease the process of issuing halal certificate, JAKIM has required that all new applications to carry out the Internal Halal Assurance System (IHAS) before applying for certification. This requirement is effective from 1st July 1, 2013 and applicable for multinational companies only. Additionally, the existing

Corresponding Author: Arif Sazelin, Centre for Languages and Human Development, Universiti Teknikal Malaysia Melaka, (UteM), Hang Tuah Jaya, 76100 Durian Tunggal, Melaka, Malaysia

3692
applications from the relevant categories are given until the end of the 2013 to create and implement such a system. At the same time, JAKIM also promotes small-scale halal food operators such as the restaurant owners to implement IHAS, before submitting their application.

Although, JAKIM emphasizes the food operators to implement IHAS, there are still significant numbers of food manufacturer, especially the Small and Medium Enterprises (SMEs) that do not have the halal food certification. Several reasons for their failure to secure the halal food certification have been documented. For example, Abang Hasni reported that the restaurant owners claimed that they have difficulties to comply with the halal requirements and standards that have been set. Additionally, the Muslim restaurant owners are confident that the food they provide is already halal. However, in reality many are doubtful that these restaurants adhere to hygiene practices and they have taken the necessary actions to ensure that the source of food they are selling is halal (Dersih atau tidak premis kita, November 13, 2011 Pilih makanan ikut man, July 14, 2011) (Berita Minggu, 2011). There are also restaurants that use raw materials such as soya sauce without halal sign and alcohol and the handling of food that does not conform to the concept of halal (JAIM, 2012).

Based on the above instances, it can be implied that food operators and restaurants are not serious in maintaining the cleanliness of preparing the food sold and ensuring halal food is sold. In fact as mentioned earlier, the halal certificate is issued for food operators who have proven that they adhere to the standard halal practice which covers the early process of determining the raw material and the preparation process of the related food until the finished production of the food ready to be served to the customers. In this case, it is necessary for food operators who wish to apply for halal certificate to consider the IHAS at their food premises. This process requires the food operators to observe specific controlled elements from the initial stage of preparing the food until it is served to the customers.

The study aims to identify and describe the necessary control elements for the compliance of IHAS particularly at the food premises. The elements of controlled are extracted from the Malaysian Halal Certification Procedure Manual, Halal Standard of Malaysia, other relevant standards and a checklist used as guidance by the auditors from JAKIM, consistent with the requirements for the issuance of halal certificate.

**Literature review:** This section is organized in two sections. The first section discusses the implementation of IHAS among food operators, highlighting the need for a specific guideline for the implementation of IHAS at food premises. The section section focuses on the descriptions of the documents used as reference to identify the controlled elements of IHAS for food premises.

**The Implementation of Internal Halal Assurance System (IHAS) in the food premise:** The need for Muslims to consume halal food makes it necessary to consider the risk of haram or syubhah (Rahman et al., 2011). In this case, it is important for food premises to offer a clean and safe food for their Muslim customers. According to Govindasamy et al. (2011), food operators need to make sure that they do not deliver poor quality food. They further highlighted that the safety and hygiene of the food served should be monitored continuously in order to prevent from food poisoning which is a common problem faced by customers in the food industry. Abdul Rahman and Md Yusof claimed that the main reason for food poisoning is the negligence of the food operators to prepare and present good quality food to their customers. Generally, IHAS is a guideline developed to guide the entrepreneurs in developing internal halal system that controls the implementation and production of halal food. Initially, IHAS has been imposed to large-scale food manufacturers (multi-national). However, it has yet to be imposed to the small-scale manufacturers and food premises, though they are encouraged to implement it. In relation to this, it is found that the majority of the small-scale food premises operators have implemented the IHAS at their premises, although this rule has not been made compulsory to them (Hassan et al., 2014, 2015).

IHAS is a system to decide the status of halal of the raw materials. Additionally, the processes and products that are given the halal status is maintained and continuously monitored over time. JAKIM has issued a set of guidelines for conducting the IHAS. These guidelines form us the reference for all operators who wish to carry out IHAS at their premises. It should be implemented concurrently with the Halal Assurance Management Planning which includes the objective of IHAS, the management structure, halal guidelines (such as the term of halal haram, the foundation of Quran, Hadith, Fatwa, JAKIM's Manual Procedures, MS 1500, guidelines for halal and haram of raw materials and production process), Halal Standard Operating Procedures (SOP), technical reference of IHAS, administration and documentation systems (including vendors, consumption of raw material, storage, assessment, monitoring and actions for improvement) (JAKIM, 2011).
Previous studies indicate that the implementation of IHAS as well as the controlled elements of IHAS, particularly at food premises operated in Malaysia is still non-existence. This is perhaps due to the fact that IHAS is a system newly implemented in Malaysia in comparison to other Muslim countries such as Indonesia. However, no doubt there are many previous studies that examine the performance of Malaysia’s halal certification and they could serve as a basis for the implementation of IHAS. Although, JAKIM has issued a guideline related to IHAS, the guidelines are too general to be applied to all categories of the multinational, medium or small enterprise. Therefore, this study was undertaken to identify the specific IHAS elements of control for the food premises so that it can be used as a guide to halal executives operating at food premises.

Reference documents for the controlled elements of Internal Halal Assurance System (IHAS): In this study, the detailed description of the IHAS elements of control is drawn from the analysis of five documents used as references for the certification of halal products. The relevant documents are presented in this study.

Halal standard food MS 1500 (2009): Halal food standard was first developed in 2000. The standard, known as the MS 1500: 2000 general guidelines regarding the production, preparation, handling and storage of halal foods was revised for the first time in 2004 with the title of the MS 1500: 2004 “halal” food: production, preparation, handling and storage-general guidelines (first revision). The second revision of MS 1500 was carried out in 2009 and this revision was made on the MS 1500: 2004. With the release of MS 1500: 2009, the earlier standard has been canceled and replaced the MS 1500: 2004.

This standard MS 1500 is a widely acceptable standard and recognized by the Organization of Islamic Countries (OIC). Considering that Malaysia practices the halal standard strictly, the United Nation has also acknowledged it as among the best standard of halal certification with respect to its justifications of halal food (Wina and Jongjit, 2006). This standard provides a guideline on the whole cycle of food preparation, covering from the initial stage of selecting the raw ingredients of food material to its distribution and marketing of the finished food product. Samori et al. (2014) claimed that this standard has been used as the basic guideline and requirements for food production in Malaysia. Specifically, this standard outlines the detailed procedures for slaughtering, processing and other related operations prescribed by Islam. It also outlines the halal standard for raw materials, ingredients and products based on quality, sanitary and safety standards. It is used as the main requirement for the requirement of food sold in Malaysia (Department of Standards Malaysia, 2009a).

This standard is consistent with other international standards such as good manufacturing practice, MS 1514: general principles of good hygiene and MS 1480: Hazards Analysis Critical Control Point (HACCP) and Guidelines for Good Hygiene Practices (GHP) for the Food Industry Small and Medium Scale Enterprises (SMEs) for the implementation of HACCP. This is a standard that guide for the food industry on how to prepare and handle halal food. It also provides guidelines on the requirements to be met during the processing of halal food, halal slaughtering process and legal requirements.

Manual Procedure of Halal Certification Malaysia (MPPHM, 2011): First published by JAKIM in 2005, this manual has been used to support other standards used as halal standards such as the MS 1500, MS 1514 and MS 1480. The manual procedure has similar roles as the other standards, wherein it used as guidelines for food operators to seek halal status for the food produced. It focuses on the process of application for halal status as well as the guidelines to inspect, monitor and enforce the halal food. In this regard, this manual has been used to coordinate the halal certification activities by JAKIM at the federal as well as the state level in Malaysia. The halal certificate is only issued once the applicants prove that they comply with the standards and requirements stipulated in the manual (JAKIM, 2013).

JAKIM has issued MPPHM as a guide to ensure that halal certification was made in an efficient and orderly manner. Among other things, this manual contains the application procedure, the level of service charges, the general requirements for halal certification, the inspection procedures, the panel for halal verification, the duration for halal certification, the duration for re-application of halal certificate, the conditions of the use of halal certification and logo, the responsibilities of the halal certification holder as well as the monitoring and enforcement procedures.

Standard for good manufacturing practice for food MS 1514 (2009): Standard MS 1514 is designed to provide guidelines to ensure food hygiene during the preparation process starting from basic products to the final product that reaches the consumers. This standard ensures that the food consumed by users is controlled, safe and suitable for consumption. Standard MS 1514 was developed for the first time in 2001 and then revised in 2009. The scope of these guidelines includes good practice to ensure hygiene raw materials including handling, storage and transportation, building and sanitary facilities. It also includes sanitary control.
operations, including food safety control, physical and chemical pollution control, food hygiene and information worker. These guidelines are established to ensure food hygiene, covering all levels of the food chain starting from the raw materials to finished products. The quality of the specified cleanliness is in accordance with the standard measurement to ensure that consumers consume safe and clean foods.

Standard food safety based on system of HACCP MS 1480 (2007): Standard MS 1480 includes guidelines on the requirements needed in ensuring the safety of the food consistent to the Hazard Analysis and Critical Control Point (HACCP). HACCP is used together with OHP and GMP. It covers all processes including the process during the preparation, manufacturing, packaging, storage, transportation, distribution, handling of food for the entire food chain. Standard MS 1480 was developed in 1999 and then revised in 2007. This standard is used as reference to establish preventive measures against product contamination existing at the early stage of acquisition, the stage of receiving raw material, processing, transportation and supervision and the final stage of finished goods. The inspection of products, processes and premises will be carried out through the analysis based on HACCP standard based on three categories of pollution control that are the point of physical, chemical and biological.

Food acts 1983 and food regulations 1985 (2007): Food Acts 1983 and Food Regulations 1985 provide legal provisions and regulations relating to halal products that contain harmful elements to people’s health. According to the Food Act 1983 Section 13 any person who provides or sells food containing poisonous elements and harmful or detrimental to one’s health is guilty of an offense and liable on conviction to a fine not exceeding RM1000 or to imprisonment not exceeding 10 years or both. If convicted of any offense under this Act, the court has the right to revoke any license issued to the person who was convicted and ordered any food of the same type or any thing found together with the food to be confiscated and disposed of.

RESULTS AND DISCUSSION

As mentioned in the earlier discussion, the guideline related to the IHAS was issued by JAKIM. However, the guidelines were too general and did not provide detailed information of the controlled elements of IHAS at the food premises. The standard document, manual procedures, certification of halal food and acts related to food were analysed and this study identified key controlled elements that have been extracted with appropriate application for food premises. The four controlled elements are described in the following section.

Halal critical points: The first element is the halal critical points that are directly related to the processing and producing of the food product. The definition of halal food, described in the standard MS 1500, states that halal food must fulfill the following conditions (Department of Standards Malaysia, 2009a), namely the food:

- Or its ingredients is not filthy (nafs) according to Shariah law
- Does not contain any filthy ingredients as defined by the Shariah law
- Is safe and not harmful
- Not prepared or manufactured using contaminated equipment with things that are filthy (nafs) according to Shariah law
- Or its ingredients does not contain any human parts or its derivatives that are not permitted by Shariah law
- During its preparation, processing, packaging, storage or transportation, the food is physically separated from any other foods that do not meet the requirements stated in the above items (a-e) or any other things that have been decreed as filthy (nafs) by Shariah law

MATERIALS AND METHODS

This study aimed to identify and describe the elements of control in the execution of IHAS at food premises. In this case, a document analysis has been carried out in order to identify the specific controlled elements of the IHAS. The controlled elements were drawn from five documents related to the Malaysian standards and guidelines on activities related to food preparation in Malaysia. These documents are the Malaysian Standard MS 1500: 2009 Halal Food Production, Preparation, Handling and Storage General Guidelines (Second Revision), Manual Procedure of Halal Certification Malaysia, Malaysian Standard MS 1514: 2009 Good Manufacturing Practice (GMP) For Food (First Revision), Malaysian Standard MS 1480: 2007 Food Safety According to Hazard Analysis and Critical Control Point (HACCP) System (First Revision) and the Food Acts 1983 and Food Regulations 1985.

Data analysis was carried out manually by categorizing the descriptions based on the four controlled elements, namely the critical points, cleanliness and hygiene, documentation system and internal halal committee. These elements are relevant for the category of food premises. They were then described in detail by referring to the documents that have been analyzed and approved by the relevant specialists.
Based on the above definition, the elements of halal critical points are the anchor to the IHAS for the food premises, considering the importance of controlling the source of raw materials. The raw materials used in food premises must be lawful according to the above definitions without being mixed with illegal elements, unclean, not harmful and comply with the practice of slaughter according to Islamic law. It is very difficult and critical for every food premise to control the raw materials and ingredients of the food prepared. The operators and executives of halal food need to really make sure that they have the knowledge and skill in controlling the use of the source of the raw materials of the food prepared or produced at their premises.

The key requirement for the compliance with the halal critical points is that the food sources selected need to have a valid JAKIM halal logo. The slaughtering procedure also needs to meet the conditions of slaughter according to Islamic law. The required aspects to be monitored are the person who performs the slaughter, the equipment used to perform the slaughter, the method used to perform the slaughter and the manner of performing the slaughter (Department of Standards Malaysia, 2009). Halal executives and entrepreneurs need to choose a halal slaughter-house and halal butcher with a certificate issued by JAKIM or certified by JAKIM. The food prepared on the premises should also be ensured clean of any impurities. Another critical point is the process of cleaning the eggs used as ingredient. The Food Act 1983 and Food Regulations 1985 need to be consulted to control the source of harmful food (Malaysian Law, 2007). The food act stipulates that permissible additives in a food product include coloring, flavoring, preservatives, food conditioners, stabilizers, anti-oxidants and additional nutrients according to the allowable rate. When a food product is found to use additives in an excess level permitted by the Act and Regulations Food, the food products are categorized as food injurious to health.

The halal critical points presented above have been extracted from the Malaysian Standard MS 1500: 2009 Halal Food-Production, Preparation, Handling and Storage General Guidelines (Second Revision), Manual Procedure of Halal Certification Malaysia (JAKIM, 2011), the Malaysian Standard MS 1480: 2007 Food Safety according to Hazard Analysis and Critical Control Point (HACCP) System (First Revision) and the Food Acts 1983 and Food Regulations 1985 (Department of Standards Malaysia, 2007).

Cleanliness and hygiene: Hygiene and sanitation are the second most important controlled element in the implementation of IHAS for food premises. The forms of control of hygiene and sanitation are important to prevent contamination of physical, chemical and biological properties of the food provided. It covers various aspects such as personal hygiene of the employees, equipment, premises and product according to the standards (MS 1500, 2009). Among the conditions of hygiene employees (Department of Standards Malaysia, 2009a, b; JAKIM, 2011) are:

- Every employee is required to take a shot of 'typhoid' to prevent typhoid infection through food the records will be presented to the officers to ensure these workers actually receive the injection
- Employees who have a fever, suffering from diarrhea, cough and scabies are not allowed to be involved in the handling of food
- Employees should dress modestly and neatly, wear a brightly colored apron, wear an appropriate head cover, clean and easy to wash
- Employees should maintain good personal hygiene at all times have short nails, wash hands after using the toilet and before handling food
- Employees do not smoke while handling food

Cleanliness of the premises as a whole will be reviewed, including the position and location of the premises must be far from the center of pig rearing and sewage plant within a radius of 5 km has access to adequate sanitation and properly maintained and adequate pest control. Additionally, a detailed cleaning process is practiced for equipment, tools, machinery and processing aids by ensuring that it does not contain feces confirmed by the Islamic law and it is used for halal food only. The cleanliness of the product is also monitored. The product should be processed, packaged and distributed in a condition that is absolutely clean in the licensed premises in accordance with GMP standards (Department of Standards Malaysia, 2009a).

Various methods can be implemented for the hygiene and sanitation controlled elements and one of them is enforcing the scheduled cleaning routine. Here, the important issues are the effective enforcement of the cleaning schedule. Another approach is the practice of cleanliness and hygiene during food processing for the production of safe food. The aspect of hygiene set by the Standard Operating Procedures (SOP) is related to controlling the movement of workers process of preparing.
the food processing. There are some executives at the halal food premises who have provided training for their workers. The training helps the workers to gain understandings of the cleanliness, especially at the food processing areas. The establishment of a committee to monitor the cleanliness at the food premises is another initiative taken by the halal executive. The issue of hygiene and safe food is also related to the actions taken to prevent multiple pollutions on the food prepared. Among the pollutions are the exposures of chemical products such as cleanser solutions, insect pesticides and many others which are stored in the food premises.

The documents referred for the analysis of the controlled elements associated with hygiene and sanitation are the Malaysian Standard MS 1500: 2009 Halal Food-Production, Preparation, Handling and Storage General Guidelines (Second Revision), Manual Procedure of Halal Certification Malaysia (JAKIM, 2011), the Malaysian Standard MS 1480: 2007 Food Safety according to Hazard Analysis and Critical Control Point (HACCP) System (First Revision) and the Malaysian Standard MS 1514: 2009 Good Manufacturing Practice (GMP) For Food (First Revision).

Documentation system: The third controlled element of IHAS is the documentation system. One of the requirements to comply with the IHAS is to have sufficient documents so that the practice of compliance with the IHAS can be traced. Controlling the documentation system is also important for the purpose of making sure that there is a consistent usage of raw materials and ingredients during the process of food production and the described procedures registered by the executives when applying for the halal food. This documentation system is used as a yardstick to make sure that the food premises comply with the ruling. The halal executives are required to open special file with documents that can be used as evidence to show that they comply with IHAS. It is important for the halal executives to know the requirements and keep all the necessary documents in the special file. This file should contain information of the company’s profile, the list of raw materials and ingredients used at the premise, which have been registered with JAKIM or JAIM, letters and reports issued by JAKIM and JAIM during their visit at the premise. Documents related to initiatives for improvements should also be kept in the file. These documents are such as the latest news and reports from JAKIM and JAIM about the raw materials and ingredients, available in the mass media and websites from JAKIM and JAIM. These documents must be kept for the precautionary actions regarding the raw materials they use at their premises (JAKIM, 2011).

This documentation system controlled element has been extracted from the Manual Procedure of Halal Certification Malaysia (JAKIM, 2011) and the Malaysian Standard MS 1500: 2009 Halal Food-Production, Preparation, Handling and Storage General Guidelines (Second Revision).

Internal halal committee: The fourth controlled element is the establishment of the internal halal committee members. The establishment of internal halal committee member is made compulsory by JAIM (2012). This is evident as indicated in the general requirements for halal certification (JAKIM, 2011; Department of Standards Malaysia, 2009a) which state that:

- Companies listed in the category of multinational and Small and Medium Enterprises (SMEs) are required to create Halal Internal Audit Committee and appoint an Executive Officer for Islamic Affairs (Islamic Studies) to handle and ensure compliance with the halal certification procedure
- The appointment of halal executive officers or committee made up of Muslims who have been given training on halal principles to ensure the effective implementation of the control system
- A minimum of two permanent Muslim employees who have a Malaysian citizenship working in the kitchen/handling/processing of the food

These requirements need to be adhered by all food premises that wish to obtain halal certification. It is one of the key conditions for ensuring the implementation of the IHAS really works. Operators of food premises shall appoint a formal and special committee to oversee the implementation of the IHAS. The committee members must not be appointed informally although they have some knowledge in Islam. The element regarding the documentation system have extracted from the Manual Procedure of Halal Certification Malaysia (JAKIM, 2011) and the Malaysian Standard MS 1500: 2009 Halal Food Production, Preparation, Handling and Storage General Guidelines (Second Revision).

Based on the above discussion, a summary of the description of the controlled elements to be included in the implementation of IHAS for the category of food premises together with the relevant documents in which the information is extracted is presented in Table 1.
Table 1: The controlled elements of the IHAS for the category of food premise

<table>
<thead>
<tr>
<th>Controlled elements</th>
<th>Documents referred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halal Critical points</td>
<td>MS 1500:2009 Halal Food-Production, Preparation, Handling and Storage General Guidelines (Second Revision)</td>
</tr>
<tr>
<td></td>
<td>Malaysian Standard MS 1480:2007 Food Safety According to Hazard Analysis and Critical Control Point (HACCP) System (First Revision)</td>
</tr>
<tr>
<td>Cleanliness and hygiene</td>
<td>MS 1500:2009 Halal Food-Production, Preparation, Handling and Storage General Guidelines (Second Revision)</td>
</tr>
<tr>
<td></td>
<td>Malaysian Standard MS 1480:2007 Food Safety According to Hazard Analysis and Critical Control Point (HACCP) System (First Revision)</td>
</tr>
<tr>
<td></td>
<td>Malaysian Standard MS 1514:2009 Good Manufacturing Practice (GMP) For Food (First Revision)</td>
</tr>
<tr>
<td>Internal halal committee</td>
<td>MS 1500:2009 Halal Food-Production, Preparation, Handling and Storage General Guidelines (Second Revision)</td>
</tr>
</tbody>
</table>

**CONCLUSION**

The implementation of IHAS is important for multinational, medium and small size food manufactures who want to get the halal certification in Malaysia. For the category of food premises, there are elements that need to be controlled by the executive halal food premises. Although, JAKIM has issued guidelines for IHAS, these guidelines are too general and they are not suitable for food operators who wish to apply for halal certificate. Therefore, this study focuses on the identification of the elements that need to be controlled at the food premises based on the requirements of IHAS. These elements are described in detail based on the analysis of the halal certification reference standard, manual procedures and food control act and have been confirmed by several experts in halal certification in Malaysia. The provision of a detailed information of the controlled elements helps to ease the process of implementation of the IHAS by the executives of halal food premises.

**ACKNOWLEDGEMENTS**

Researchers would like to thank the Ministry of Higher Education, Malaysia for funding the research under research grant RAGS/2012/PBPI/SSI03/1 B00019 and the Centre for Languages and Human Development, Universiti Teknikal Malaysia Melaka for partly funding the publication of this study.

**REFERENCES**


Harian Metro, 2013. RM33 billion of exported Halal products. Harian Metro, Malaysia, April 4, 2013, pp. 3.


