


# Halal-Tayyiban and Sustainable Development Goals: A SWOT Analysis

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## ABSTRACT

The purpose of this SWOT analysis study is to identify the strengths, weaknesses, opportunities, and threats in incorporating the concept of Halal-Tayyiban alongside the Sustainable Development Goals (SDGs). Food and agricultural systems are a common thread linking all the 17 SDGs; hence, this study will focus on the global food industry. The concept of Halal-Tayyiban (clean and pure) takes into account protection of health, food safety, animal rights, the environment, social justice and welfare in the food production, fair business practices, and ethics. It is seen as a more comprehensive system that aims to accomplish international standards compliance, making it universally acceptable. Tayyiban, therefore, can be a selling point for businesses giving the Halal industry a long-term strategic advantage. This study also seeks to recommend strategies to leverage on the strengths and opportunities and resolve the weaknesses as well as overcoming the threats.

## KEYWORDS

Food Security, Halal, Sustainable Development Goals, SWOT Analysis, Tayyiban, Toyibban

## INTRODUCTION

Leaders around the globe are placing special emphasis and focus on 2030 Agenda for Sustainable Development. Attaining and successfully realising these Social Development Goals (SDG) will be no mean feat. With competing and an overabundance of commitments, policymakers should look to fixing global food systems as a portal for endless opportunities. According to Koehring (2019) Development Goals (DG) focusing on areas such as hunger, health and climate seem to be the obvious beneficiaries of a shift towards sustainable food systems. However, he further added, there are critical linkages between food systems and perhaps less obvious SDGs too—such as those on poverty (SDG 1), gender equality (SDG 5), and sustainable cities and communities (SDG 11)—thus demonstrating once again that food is a common thread linking all 17 SDGs. The earlier policymakers realise that reforming food systems will provide a powerful lever for sustainable development the closer we get to meeting the SDGs (Koehring, 2019).

In a recent a study by Secinaro and Calandra (2020), where the authors reviews and critiques the halal food literature, they noted that scholars should consider stressing the links among halal food and sustainability, innovation and technology. From the consumer's perspective, Rezai et al., (2015)

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found the majority of consumers reported that Halal food production can be an effective vehicle to promote sustainable farming and agriculture. They added the food safety, environmentally friendly, fair trade, and animal welfare are the most likely determinants associated with Halal principles and production to support sustainable agriculture. Ali and Suleiman (2016) study provides evidence that compliance with environmental standards can go hand in hand with the meeting of other sets of production standards. The Islamic Organization for Food Security (IOFS) is a specialized institution affiliated with the Organization of Islamic Cooperation, founded in 2013. Since technology and science are closely related to food safety and development, and halal food has become one of the standards and features of healthy food. The IOFS program for food safety and halal food development came under the slogan “from genes to fork”, meaning that the halal food chain does not concern only a specific part of the food access chain. Nonetheless, starting from genes and the significance of their safety and benefit to human health, to reach the reduction of food waste and waste. IOFS claims the program aims to work closely with food manufacturers to prevent or reduce food risks and provide expertise on food chain production, organization and storage of food using non-genetically modified methods, in addition to Adopting food safety and quality standards, promoting halal food standards, and developing halal product export. Though these previous studies and scholarly reviews accentuate the progress in the field but it also highlights the missing points that need to be addressed, which in this case looks into the linkage between sustainable practices by integrating Tayyiban code of practices.

## HALAL AND SUSTAINABILITY DEVELOPMENT GOALS

### Halal and Tayyiban or Tayyiban Code of Practices

Sustainability is a growing concern in the food industry. While most papers on food sustainability focuses more on the environmental aspect (R. Abdullah et al., 2018; Alzeer et al., 2020; Ketelsen et al., 2020; Salmani, 2017) this paper aims to explore how the Halal food industry can incorporate more sustainable practices by integrating Tayyiban code of practices which encompasses not only the environment but also the economic and social aspect.

In Arabic, the word ‘Halal’ literally means ‘permissible’ or ‘lawful’ and in relation to food in particular it signifies ‘purity’ and is protected by certain Islamic practices (Riaz & Chaudry, 2003). In recent years, Halal is no longer viewed as mere religious obligation or observance for Muslims, but is considered as the standard of choice for Muslims as well as non-Muslims worldwide (Quantaniah et al., 2013).

Tayyiban is mentioned in the Quran several times particularly regarding the selection of Halal food. In a study done by Arif and Sidek (2015), the word Tayyiban has four main elements. First and foremost, the source of the food is Halal; secondly, the food is clean and does not have any kind of impurities; third, the food does not cause any harm to those who consumes it; and lastly the food is nutritious and beneficial to those who consumes it (Arif & Sidek, 2015). Therefore, the concept of Halal Tayyiban identifies Halal food as those that are of high quality, hygienic and safe to be consumed. In keeping with the Halal Tayyiban concept, the food needs to encompass all aspects of Halal, quality and ethics across the value chain, from raw materials and ingredients, processing, packaging, transportation, distribution and the end product for consumers (Arif & Sidek, 2015). Throughout the process, it is important to ensure that the food does not contain any illegal substances or contamination of harmful products which may endanger the consumers’ health.

There is now an emerging trend to incorporate *Tayyiban* which can be translated as “good, clean, and wholesome” into all stages of Halal production and assurance. Expectation to Halal credence quality and its perception has extended to include the principle of *Tayyiban* in lieu of the global concerns of sustainable issues (Ur Raheema, 2018). The Halal-Tayyiban concept is seen as a more comprehensive system that aims to accomplish international standards compliance, making it universally acceptable. This is reflected in the recent academic work especially on Halal integrity

and Islamic economy reports suggesting *Tayyiban* to be a new trend and a value adding factor in marketing Halal products (Ur Raheema, 2018). Implementation of *Tayyiban* (clean and pure) in food industries takes into account protection of health, food safety, animal rights, the environment, social justice and welfare in the food production. While there is a growing interest in strengthening the aspects of *Tayyiban* (sustainable practices) in the whole process of production, processing and distribution of Halal products, there is also a call to redefine the Halal brand to include the value of *Tayyiban* (A. Abdullah, 2018). Incorporating sustainable practices in Halal supply chain provides an opportunity to improve the many aspects of Halal production, thus contributing towards a more sustainable and secure food future (Wazir, 2018). Halal is no longer simply an expression of contested forms of production and consumption. It is part of a rapidly expanding, globalized market that is starting to bring the concerns of Muslim and non-Muslim consumers closer together (A. Abdullah, 2018; Kurokawa, 2011; Wazir, 2018).

### Sustaining Halal and Tayyiban Practices

Food may act as a potential vehicle for disease transmission, hence, if the process is not clean, and has potential cross contamination or contains toxic ingredients, the end products cannot be Halal certified. Therefore, the issue of food safety is emphasized strongly in the concept of *Tayyiban*. Any food contaminated with pathogenic microbes or with potentially toxic ingredients that may pose a risk to human health is considered non-*Tayyiban*, ultimately non-Halal and cannot be used for eating purposes (Kurniadi & Frediansyah, 2017). The *Tayyiban* concept is clear not only in promoting clean and pure food production from farm to fork, but also in ensuring ethical behaviour and intentions in the process, as rooted in the basic principles of Islamic teaching. This is clearly evident in the chapter in the Quran and sayings of the Prophet:

*“Allah’s Messenger (Prophet Muhammad) cursed ten people in connection with (alcoholic) wine: the wine presser, the one who has it pressed, the one who drinks it, the one who conveys it, the one to whom it is conveyed, the one who serves it, the one who sells it, the one who benefits from the price paid for it, the one who buys it, and the one for whom it is bought.” (Tirmidhi)*

Whilst Islam prohibits the drinking of alcohol for recreational purposes, the *hadith* emphasizes that the involvement in, encouragement and consumption of this commodity is also forbidden. Therefore, this argument is made to treat *Tayyiban* concept as processes where the behaviour and intentions of those involved also fall under scrutiny (Wilson & Liu, 2010). As such, *Tayyiban* is seen to uphold sustainable practices in Halal food production such as economic and social justice (diversity, empowerment, transparency), equity to stakeholders (fair wages for employees, fair trade globally), and a sense of responsibility to the environment, consumers, and society at large (Sharaai et al., 2012). This is echoed by Mohammad Faisal Ahmad Fadzil, managing director of Malaysia based Halal brand *Tanamera* who believes that Halal *Tayyiban* is more than just using permitted ingredients but also include having the right intentions and incorporate everything from fair-trade, eco-friendly, sustainable practices and environmentally friendly practices (Lim, 2020). Rezai et al., (2015) further argue that the core values of Halal *Tayyiban* confirms with promoting sustainable practices and alleviating sustainable issues, as depicted in the Quran and *hadith*.

In particular, the Quran and tradition reveals teachings of kindness and concern for animals’ welfare and against animal cruelty (Abdul Rahman, 2017). One *Hadith* quotes Prophet Muhammad (PBUH) as saying:

*“A good deed done to an animal is as meritorious as a good deed done to a human being, while an act of cruelty to an animal is as bad as an act of cruelty to a human being.”*

Islam promotes a humane slaughter of animals, one that ensures the least pain and the most hygienic of all the methods of killing animals. This is because the immediate severance of both the blood and oxygen supply to the brain causes the animal to quickly lose consciousness and all sensation. It has been proven that approximately three times more blood is pumped out of the Halal-slaughtered animal (ritual) than from an animal that is slaughtered in the non-Halal way, resulting in healthier meat (Bonne & Verbeke, 2008). It is further asserted that animals' meat that has been subjected to cruelty in transport and slaughter is considered by Islam as impure and unlawful to eat (*Makrooh*). Even if these animals have been slaughtered in the strictest Islamic manner, the flesh is still forbidden for consumption (*Haram*) if cruelties were otherwise inflicted on them (Abdul Rahman, 2017).

The principles of Halal Tayyiban also cover the issues of fair trade and trade justice. Business and trade can be fair when it aims to help producers and promote sustainability. This principle is directly expressed in Islam in the payment of a "fair price" to producers that covers not only their costs of production but also enables production that is socially just and environmentally sound (Khan & Thaut, 2008). They further argued that since the fair-trade movement in sustainability is concerned primarily with fairness, equity, and justice, it seems that the principles of fair trade and the teachings of Islam are entirely congruent. This is reflected in the Quran on several occasions states unequivocally:

*"Deal not unjustly, and you shall not be dealt with unjustly" (2:279).*

*"God loves those who are fair and just." (49:9)*

*"Eat not up each other's property by unfair and dishonest means." (4:29)*

There is also an environmentally friendly approach at the core of Halal Tayyiban that respects Mother Nature and also protects and cares for the environment. Rooted in the Islamic teaching, it is clearly noted that corruption of all kinds, including environmental corruption, which includes industrial pollution, environmental damage, and reckless exploitation and mismanagement of natural resources are disliked by Allah (SubhanahuWaTa'ala) (Salman, S. 2019; Idris, 2021).

Allah (s.w.t) says in the Holy Quran:

*"And do no mischief on the earth after it has been set in order: that will be best for you, if ye have Faith" (Surat Al A'raf, 'the Heights', verse 85)*

The current systems of food production, distribution, and consumption have significant impact on environmental degradation, causing depletion of natural resources and deterioration of ecosystems. Food industry is one of the major contributors to environmental problems, large amount of waste is generated from the food industry. According to the Food and Agriculture Organization (2019), global food production must increase by 60 per cent by 2050 in order to meet the demands of the growing world population in order to reduce world hunger, while there is a need to observe resource capacity and to reduce food waste at the same time. Promoting the concept of Tayyiban by ensuring food is produced according to sustainable practices can help reduce the environmental damage. To move towards a more efficient Halal and Tayyiban practices in Halal food sector, these sustainable practices should be demanded, implemented, maintained and controlled by the whole Halal food sector, instead of just relying on the existence of food safety certification.

### **Halal Food Security: Integrating Tayyiban in the Halal Supply Chain (Industry and Businesses)**

The ultimate goals of food security are about eradicating poverty (SDG1) and ensuring zero hunger (SDG2). However, the current challenge of environmental factors (climate change, insufficient water supply, etc) and agriculture development policy may impact the ecosystem of the sustainable food supply chain; thus, affecting availability and accessibility of quality and safe products (M. Noor,

2020). Sustainable development goals hinged upon effective implementation of food security system which is fundamentally based on uninterrupted food supply chain; from farm to table. M. Noor (2020) pointed out that the current definition of food security does not sufficiently address issues related to halal. The halal status of the raw materials input and processes are not specifically stated, although deemed safer for human consumption in terms of nutritional content and free from harmful contaminants (M. Noor, 2020). It is believed that incorporating the concept of Halal and tayyiban in food supply chain which upholds food safety, environmentally friendly practices, fair trade, and animal welfare provides a conducive environment for food security which in turn facilitates the achievement of sustainable development goals.

The supply chain of Halal food products includes agriculture, manufacturing, packaging, distribution, use and disposal. In order for the food industry to become more sustainable, food producers need to implement sustainability initiatives within their companies as well as upstream and downstream of the companies. Some of the compliance measures of the Halal Tayyiban concept are like natural resource conservation i.e., animal welfare, elimination of cruelty; safe handling, housing, slaughter and transport and sustainable agriculture practices i.e., reducing fertilizer and pesticides, elimination of contaminant and pollutant agents. It can also encompass the health and safety feature of the food product i.e., food safety, food security, traceability and transparency.

Agricultural production generally is the largest contributor to the life cycle impact of food, typically greater than 50 percent of the environmental footprint. Alzeer et al., (2020) have recommended to use Good Agricultural Practices (GAP) to comply with sustainable practices and Halal standard for agricultural production. GAP is used globally as a general principle to ensure that agricultural products meet legal prerequisites for safety and quality. In the context of poultry, the aspects of animal welfare and halal animal feed are taken in to account in the Tayyiban concept. Apart from the animal welfare, the Halal Tayyiban concept is comprehensive covering nutrition, quality, cleanliness, and safety. The examples above shows how Tayyiban is integrated in the supply chain and it would bring about improvement in the standard of Halal as a symbol of good practice, safe and health not only for consumers but also to the environment and the economy as a whole.

The Halal Tayyiban concept is also seen to uphold sustainable practices in Halal food production such as economic and social justice (diversity, empowerment, transparency), equity to stakeholders (fair wages for employees, fair trade globally), and a sense of responsibility to the environment, consumers, and society at large (Sharaai et al., 2012).

It is clear that incorporating halal and tayyiban standards and practices in the global food security agenda provides a conducive development framework for social entrepreneurship through various opportunities created by the halal food security system. These opportunities may contribute to poverty eradication and other sustainable development goals such as decent work for all (SDG 8) and promote responsible consumption and production for all (SDG 12) The opportunities may create various sizes of business ventures related to food which will grow with the system.

## **METHODOLOGY**

### **Step 1: Document Analysis**

This study uses a systematic literature review approach to search for articles on the data needed. Firstly, journal articles sourced from Emerald Insights, Science Direct, Wiley, SAGE, JSTOR, Google Scholar, and the Brunei Darussalam university library of electronic journal database were compiled. The articles were searched using the keywords 'Halal', 'Tayyiban', 'Toyib', 'SDG', 'Challenges', 'Benefit' and 'Sustainability'. The list of keywords was not exhaustive, it is thought that they would capture most of the relevant articles. Secondly, the relevant articles compiled were filtered to articles published from the year 2008 to 2020. Lastly, the articles were further allocated to fit different themes namely 'Strengths', 'Weaknesses', 'Threats' and 'Opportunities'. This first step is critical to aid the

next level of analysis chosen. After the first analytical step is completed, the documents are further analysed using the next analytical step – the SWOT analysis.

## Step 2: SWOT Analysis

This study uses a SWOT analysis to identify the strengths, weaknesses, opportunities and threats in incorporating the concept of Tayyiban in the Halal food Industry in achieving SDG. The SWOT analysis entails categorizing strengths and weaknesses present internally in the organization, together with the opportunities and threats that the organization faces externally (Lynch, 2012). The strengths and weaknesses are generated from the internal environment of operation concerning image, structure, availability of tangible and intangible resources, capability and productivity. On the other hand, opportunities and threats are external factors, relating to political scenarios, economic volatility, social and technological changes, and environmental concerns.

SWOT analysis is a form of strategic planning tool and has been used extensively to formulate strategies for firms, industries, governments and countries alike. As indicated by Proctor (1992), SWOT analysis is suitable for countries, industries or organizations to follow as it identifies the environmental relationship between internal and external environment. The use of SWOT analysis provides a foundation to identify the desired future position, identifying issues and it better informs leaders and policy makers on how to resolve the weaknesses and take advantage of the opportunities available.

In addition, the study seeks to recommend policies to leverage on the strengths and opportunities and resolve the weaknesses as well as overcoming the threats. The implementation of Tayyiban (clean and pure) in food industries takes into account protection of health, food safety, animal rights, the environment, social justice and welfare in the food production, fair business practices and ethics. Hence, the Halal-Tayyiban concept is seen as a more comprehensive system that aims to accomplish international standards compliance, making it universally acceptable. Tayyiban therefore can be a selling point for businesses giving the Halal industry a long-term strategic advantage.

The SWOT Analysis is performed by conducting a comprehensive review on past and relevant literatures on Halal-Tayyiban in food industry and its relationship to sustainability and the SDGs. Sustainability is a worldwide concern embedded in every sphere of human life including economic, environmental, and as well as social aspects. From step 1, the articles and reports were carefully chosen to meet the relevance of the topic and 25 articles were used for the purpose of this paper. The final filtering and analysing of articles are shown in [Table 1](#), the 25 articles were further categorized in i) Environmental Aspect of Halal-Tayyiban ii) Economic Aspect of Halal-Tayyiban and iii) Social Aspect of Halal-Tayyiban.

Figure 1 shows the result of the SWOT Analysis of the literatures on Halal-Tayyiban and the food industry.

## FINDINGS AND DISCUSSION

### Strengths

#### *Vast Global Market*

The global Halal Industry is estimated to be about US\$2.41 trillion and is rapidly growing at an estimated annual rate of 20 percent. The Muslim population is expected to increase from 1.6 billion to 2.2 billion by 2030, coupled with the rise in disposable income to utilize these products, the opportunities are vast (Pew Research Centre, 2011). It is estimated that by the year 2025, the global Halal food industry is expected to be worth USD2.1 trillion (Pew Research Center, 2011). The Halal food sector contributes about USD1.37 trillion, the Halal cosmetics sector to USD46 billion and the sector Halal pharmaceuticals worth USD72 billion. Therefore, there are great opportunities and some

Table 1.

Environment Aspect of Halal Tayyiban	Economic Aspect of Halal Tayyiban	Social Aspect of Halal-Tayyiban
<p>Ketelsen, M., Janssen, M., &amp; Hamm, U. (2020). Consumers' response to environmentally-friendly food packaging - A systematic review. In <i>Journal of Cleaner Production</i>.</p> <p>Alzeer, J., Rieder, U., &amp; Hadeed, K. A. (2020). Good agricultural practices and its compatibility with Halal standards. In <i>Trends in Food Science and Technology</i>.</p> <p>M. Noor, M. A. (2020, January 28). <i>Sustainable Halal Food Security - IOFS</i>. Islamic Organization for Food Security. <a href="https://www.iofs.org/kz/post/125">https://www.iofs.org/kz/post/125</a></p> <p>Rasul, N. (2019, November 4). <i>Sustainable Halal Meat is Making Inroads in Muslim Communities   Civil Eats</i>. <a href="https://civileats.com/2019/11/04/sustainable-halal-meat-is-making-inroads-in-muslim-communities/">https://civileats.com/2019/11/04/sustainable-halal-meat-is-making-inroads-in-muslim-communities/</a></p> <p>Miranda-de la Lama, G. C., Estévez-Moreno, L. X., Villarroel, M., Rayas-Amor, A. A., María, G. A., &amp; Sepúlveda, W. S. (2019). Consumer Attitudes toward Animal Welfare-Friendly Products and Willingness to Pay: Exploration of Mexican Market Segments. <i>Journal of Applied Animal Welfare Science</i>.</p> <p>Zerbini, C., Vergura, D. T., &amp; Latusi, S. (2019). A new model to predict consumers' willingness to buy fair-trade products. <i>Food Research International</i>.</p> <p>Abdullah, R., Sabar, R. and Mustafar, M. (2018). Green halal supply chain in Malaysian Halal food companies: a conceptual framework. <i>International Journal of Supply Chain Management</i>, 7(5):502-510.</p> <p>Salmani, S. (2017, June 17). <i>Introducing the Green Muslims - Why Halal is Not Enough   Mvslim</i>. MVSLIM.COM. <a href="https://mvslim.com/introducing-the-green-muslims-why-halal-is-not-enough/">https://mvslim.com/introducing-the-green-muslims-why-halal-is-not-enough/</a></p>	<p>MIHAS. (2019). MIHAS 2020 to promote the values of sustainability among halal-based businesses   Salaam Gateway - Global Islamic Economy Gateway. Malaysia International Halal Showcase. <a href="https://www.salaamgateway.com/story/mihas-2020-to-promote-the-values-of-sustainability-among-halal-based-businesses">https://www.salaamgateway.com/story/mihas-2020-to-promote-the-values-of-sustainability-among-halal-based-businesses</a></p> <p>Quantaniah, N. A., Noreina, &amp; Nurul, S. (2013). Selecting Halal Food: A Comparative Study Of The Muslim And Non Muslim Malaysian Student Consumer. <i>2nd International Conference on Technology Management , Business and Entrepreneurship</i></p> <p>All, M. Y. (2012). Halal Branding: A Study of Muslim Consumers Perspective. In <i>The 2nd Global Islamic Marketing Conference- Abu Dhabi (UAE)</i>.</p> <p>Pew Research Center. (2011). The future of the global Muslim population. Projections for 2010-2030. <i>Population Space and Place</i>.</p> <p>Bhaskaran, S., Polonsky, M., Cary, J., &amp; Fernandez, S. (2006). Environmentally sustainable food production and marketing: Opportunity or hype? In <i>British Food Journal</i> (Vol. 108, Issue 8, pp. 677-690). Emerald Group Publishing Limited</p> <p>Laroche, M., Bergeron, J., &amp; Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. <i>Journal of Consumer Marketing</i>.</p>	<p>Ruslan, A. A. A., Kamarulzaman, N. H., &amp; Sanny, M. (2018). Muslim consumers' awareness and perception of Halal food fraud. <i>International Food Research Journal</i>.</p> <p>Abu, A., Anshad, R., Abdullah, C., Bakar, A., &amp; Ramli, Z. (2018). Capturing the Halal Food Market: Limitations of Halal integrity within the Supply Chain, the Malaysian Experience. <i>American Journal of Economics</i>.</p> <p>Man, S., &amp; Pauzi, N. (2017). The Implication of Differences in Halal Standard of Malaysia, Indonesia, Brunei and Singapore. <i>The Journal of Muamalat and Islamic Finance Research</i>.</p> <p>Damit, D. H. D. A., Harun, A., &amp; Martin, D. (2017). Key Challenges and Issues Consumer Face in Consuming Halal Product. <i>International Journal of Academic Research in Business and Social Sciences</i>.</p> <p>Muñoz-Colmenero, M., Martínez, J. L., Roca, A., &amp; Garcia-Vazquez, E. (2016). Detection of Different DNA Animal Species in Commercial Candy Products. <i>Journal of Food Science</i>.</p> <p>Rezal, G., Mohamed, Z., &amp; Shamsudin, M. N. (2015). Can Halal Be Sustainable? Study on Malaysian Consumers' Perspective. <i>Journal of Food Products Marketing</i>.</p> <p>Shafiq, A., Haque, A. K. M., &amp; Omar, A. (2015). Multiple halal logos and Malays' beliefs: A case of mixed signals. <i>International Food Research Journal</i>.</p> <p>Bottaro, M., Marchetti, P., Mottola, A., Shehu, F., &amp; Pinto, A. Di. (2014). Detection of mislabeling in packaged chicken sausages by PCR. <i>Albanian Journal of Agricultural Sciences</i>.</p> <p>Muttaqin, F. (2014). <i>The Politics of Halal Food Certification and Consumption in Indonesia: A Political Ecological Analysis</i>.</p> <p>Ireland, J., &amp; Rajabzadeh, S. A. (2011). UAE consumer concerns about halal products. <i>Journal of Islamic Marketing</i>.</p> <p>Mariam, A. L. (2008). Halal Industry and International Market. <i>CCMB Seminar on Halal Awareness, 16th September 2008, MATRADE</i>.</p> <p>Abas, H. S., Yusoff, H. N., Yusra, F. N., &amp; Idris, P. S. (2021). Effects of Training and Motivation Practices on Performance and Task Efficiency: The Case of Brunei Meat Slaughterhouses. <i>International Journal of Asian Business and Information Management (IJABIM)</i>, 12(4), 59-74. <a href="http://doi.org/10.4018/IJABIM.20211001.0a5">http://doi.org/10.4018/IJABIM.20211001.0a5</a></p>

Figure 1. SWOT Analysis of the literatures on Halal-Tayyiban and the food industry

<p><b>Strengths</b></p> <p>Vast global market (Economic)</p> <p>Food-waste efficiency (Environment)</p>	<p><b>Weaknesses</b></p> <p>Lack of awareness and knowledge of Halal-Tayyiban concept among producers and consumers (Social)</p> <p>Higher cost of producing and marketing Halal Tayyiban products (Economic)</p>
<p><b>Opportunities</b></p> <p>Long term strategic advantage (Economic)</p> <p>Growing demand for Tayyiban food (Economic)</p>	<p><b>Threats</b></p> <p>Trust Issues (Social)</p> <p>Lack of international Halal certification bodies (HCBs) (Social)</p>

manufacturers would naturally consider their products to be Halal certified, while some may try to get the higher premiums abiding to the Halal Tayyiban status.

The global Halal food market has witnessed a rampant rise in demand for Halal-certified food products over the years. In response, a growing number of multinationals have successfully created Halal brands to cater to the *Halal* needs of this market. For instance, Nestle, a pioneer in processing

*Halal* food has become the largest food manufacturer in the *Halal* sector with over 100 Shariah-compliant product lines manufactured in 75 out of 481 factories worldwide (Ali, 2012) and lead the market with more than \$5.2 billion annual sales in Islamic countries in 2008 (WARC, 2010). *Halal* has been a brand identifier for Muslims but is now rapidly moving into the mainstream market. In recent years, *Halal* is no longer viewed as a mere religious obligation or observance for Muslims, but is considered as the standard of choice for Muslims as well as non-Muslims worldwide (Quantaniah et al., 2013).

### *Food-Waste Efficiency*

Studies have shown that the food industry is one of the main industries that has a significant environmental impact (Abdullah et al, 2018). For instance, the food supply is responsible for about 20-30 percent of total greenhouse gas emissions and more than 40 percent of total liquid and solid wastes every year (FAO, 2013). The concept of *halal* and *Tayyiban* prohibit wastage and the use of harmful procedures including processing aids. Achieving zero waste in both upstream and downstream activities including the processing of agriculture products significantly contributes toward achieving green circular economy goals which among other emphasise on recycle and reusable wastes or by-products of industrial processing (M. Noor, 2020). Current practices using mostly chemical as processing aid may contribute toward the accumulation of hazardous wastes impacting the environment if not properly handled or treated before discharging into the ecosystem; thus, disrupting the ecological balance and affecting the sustainable environment and healthy living.

Preserving and conserving a healthy environment are social responsibility as embedded in the *halal* concept and are the key element of *halal* value system to ensure an uninterrupted food supply chain destined to needy humankind. Overexploitation of green resources will soon become very eminent with profit-driven as a primary objective unless a fair and equitable policy based on *halal* and *Tayyiban* are genuinely incorporated and implemented. *Halal* itself is inherently justifiable and readily embedded in a circular green economy, which is propelled by green technology. Applying innovative green technology fundamentally based on *halal* and *Tayyiban* provides a sustainable solution towards ensuring *halal* integrity for quality and safer *halal* food with minimum wastes (Alzeer, et al., 2017). The *halal* food supply chain originated from the wholesome *halal* raw material process by environmentally friendly technology, generating minimum recyclable and reusable wastes. The wastes generated notably free from harmful components but may still contain valuable nutrients utilisable for human consumption through further processing and nutrients enrichment or fortification. The “wastes” itself; depending on the composition are utilisable as a substrate or functional components for bioconversion into value-added products thus fulfilling the wastes minimisation and zero wastes strategies as clearly emphasized by the concept of *halal* and *Tayyiban* and embedded in circular economy.

## **WEAKNESSES**

### *Lack of Awareness and Knowledge of Halal-Tayyiban Concept Among Producers and Consumers*

According to Wahab (2004), lack of knowledge, awareness and understanding of the *Halal Tayyiban* concept among manufacturers of *Halal* products may cause the loss of appreciation to *Halal* thus limits the implementation of sustainable practices. Although the concept of *Halal Tayyiban* stretches beyond the view of religious obligations for Muslims to include sustainable practices, the term *Halal* has somehow become synonymous with food and is almost universally associated with the ritual slaughter (or *Zabiah*) of animals and not in terms of sustainability issues (Elasrag, 2016; Rezai et al., 2015). This has inevitably narrowed the discourse around *Halal*, limiting the focus of many organisations and contributing to misunderstandings and reputational issues (Fleishman, 2011).



Findings from studies in Malaysia, for instance, indicated the adoption of sustainable practices in Malaysia is still at the level of unfavourable (A. Abdullah, 2018). The challenge lies in convincing the Halal food industry to play a role in adopting sustainable and Tayyiban practices. Therefore, any relevant studies are crucial to increase awareness and develop understanding of sustainable practices and how it can be implemented.

It is also found that many Muslims consumers' understanding of the Halal concept is not comprehensive as they do not consider the ecological and environmental issues in making a decision about the Halal status of the product (Mariam, 2008). This is despite the Quranic clear message of the need to harmonize Halal and Tayyiban in food production and consumption which promotes that a product should not only be lawful/permissible but also good for human health, environment and animals (Muttaqin, 2014).

### **Higher Cost of Producing and Marketing Halal Tayyiban Products**

Adhering to the Halal Tayyiban concept encourages the decommodification of Halal concepts in favour of treating them as processes where the behaviour of those involved in the value chain are taken into consideration. This would push parties in the value chain towards approaches of sustainable practices (Wilson & Liu, 2010). Products which profess such levels of ethical practice tend to incur higher cost. Bhaskaran et al., (2006) argued that implementing sustainable production and marketing regimes, would require a channel-wide commitment and the capability of channel members to control and monitor the protocols or standards used by other intermediaries in the value chain. Adopting sustainable standards across the entire value chain requires collaboration and commitment of all parties involved which can be very expensive and difficult to sustain in the long term. These cost requirements may increase the price of Tayyiban products compared to competing products which may affect demand for these products. It is found that customers will only pay premium prices when they believe that the benefits of purchasing sustainable products outweigh the costs of such purchases (Laroche et al., 2001).

## **OPPORTUNITIES**

### **Long Term Strategic Advantage**

The main opportunity is the ability for businesses to create a long-term strategic advantage when promoting sustainable practices. Integrating Tayyiban in the production process promotes sustainability practices and makes businesses more responsible towards the environment and social welfare (MIHAS, 2019). This is in line with United Nations' Sustainable Development Goals (SDG). For example, Halal gives guidelines on the production, processing and handling of products with a strong emphasis on being environmentally friendly, well-being of the living, fair and just business practices. Halal and sustainability would support businesses to strengthen their value proposition when selling to the world giving the Halal industry a long-term strategic advantage when integrating Tayyiban.

### **Growing Demand for Tayyiban Food**

Consumers are increasingly concerned about farm animal welfare, transport, packaging and waste management, and many are demanding nutritious and quality food options that allow them to lead a healthier lifestyle. Consumers are starting to look for cleaner, more pure and ethical alternatives. Consuming natural, nutritious, organic and Halal foods can be a great reward for Muslims and non-Muslims alike. An economic study done by the State of Global Islamic Economy (2015) showed rising demand for organic food that also meets Halal standards not only in the global West but also in economies across the globe like Indonesia, Saudi Arabia, Malaysia, Bulgaria, Turkey, and Kyrgyzstan. There is also a growing trend of Green millennial Muslims that demands for Tayyiban products that are backed up by ethical supply chains (Salmani, 2017). In response to this trend, organisations like Green Muslims and Green Ramadan in the US have promoted environmental stewardship using

Tayyiban to promote a new Halal conception that endorses mindful eating practices, green farming, composting, recycling, and awareness of one's carbon footprint (Rasul, 2019). Past studies have also shown consumers' positive attitudes towards sustainable food production practices, for example, fair trade products (Zerbini et al., 2019), environmentally friendly products (Ketelsen et al., 2020) and animal friendly products (Miranda-de la Lama et al., 2019) in their consumption. These findings therefore strengthen the positive demand for Tayyiban food.

## THREATS

### Trust Issues

Gaining Halal certification is becoming an essential global trademark underpinning the quality assurance and credence of the Halal trade (Abu et al., 2018). Halal is a product attribute that cannot be verified by an individual consumer even after consuming the goods. As such, consumers rely heavily on the Halal label or logo on the product package as it communicates important cues of the Halal-ness of the product and increases consumer confidence in their purchasing decision (Damit et al., 2017). Despite the presence of Halal logo or label on food packaging, consumers have expressed concerns over the trustworthiness of the Halal products (Ireland & Rajabzadeh, 2011). This is primarily fuelled by the lack of international Halal certification body which uses a unified Halal standard and a single logo (Shafiq et al., 2015).

Apart from that, the frequent mass media reports of food fraud scandal cases along the food supply chain have raised trust issues among Muslim consumers on Halal food products. Halal food fraud is seen as irresponsibility of producers or manufacturers who use non-Halal ingredients in food products, fake Halal logos, physical contamination of Halal food, and non-Halal logistics services that do not adhere to the Syariah law (Ruslan et al., 2018). Examples of such scandals include the mislabelled of Packaged chicken sausage in EU (Bottaro et al., 2014), misconduct of Halal slaughter house in the slaughtering process in UK (Press Association, 2015), the detection of porcine DNA in commercial candy products (Muñoz-Colmenero et al., 2016). This therefore poses a challenge for marketers in instilling trust among consumers in their Halal products and can potentially have further adverse effect on the promotion of Tayyiban in their product offerings.

### Lack of International Halal Certification Bodies (HCBs)

The absence of any viable international schemes to accredit Halal certification bodies (HCBs) has long been a problem for the Halal industry (Elasrag, 2016). So far, there are about 200 certification bodies all over the world that issue Halal certificates and logos in their countries based on their respective Halal standards which differ from one another (Man & Pauzi, 2017). For example, Halal certifying organisations in Malaysia including JAKIM make use of different logos to certify products and organisations delivering Halal products and services (Shafiq et al., 2015). Man and Pauzi (2017) further stated that there are also differences in *Halal* standards for Malaysia, Indonesia, Singapore and Brunei which further contribute to ambiguity and mistrust amongst consumers. Integrating and implementing sustainable practices in food production would require uniform standards and protocols to ensure ease of control and monitor of members in the supply chain (Bhaskaran et al., 2006). This problem, if left unchecked, will inhibit further efforts in integrating Tayyiban in the Halal supply chain.

## STRATEGIES AND WAY FORWARD

Sustaining halal food security ecosystem generally necessitates a harmonious and collaborative effort by relevant stakeholders, which include government as a regulator, farmers, and producers (M. Noor, 2020). Policies and actions governing the halal food security ecosystem need to be formulated by

incorporating elements of halal and Tayyiban for products and processes. This represents key elements for development and implementation of halal food security ecosystem.

### **Responsible and Ethical Knowledge Outlets**

Both farmers and producers need to effectively communicate on their roles to sustain halal integrity by adhering and conforming to various halal standards and practices in their processing technology and distribution (M. Noor, 2020). M. Noor (2020) further added that sustaining halal food security requires effective interfacing with other sectors of the economy which include media for effective communication and dissemination of relevant information. It is necessary and critical that stakeholders and the general public be fed with reliable information interactively. Incorporating Halal Tayyiban in food products requires a need to broaden consumers' perspectives on Halal food products. Consumers need to learn that Halal food products is not a matter of confirming to the Islamic ritual of slaughtering only but also promotes food safety, environmental quality, animal rights, and social equity issues. This requires a brand repositioning strategy, which involves altering the position of a brand or product in the minds of the customer relative to the offerings of the competitive product. To successfully reposition a product, the company of the brand has to change the target customers' understanding of the brand or product. Media support serves as a platform and conduit to educate the community on the strategic importance of halal food security in relation to the global sustainable development agenda. Moreover, marketers need to make greater efforts to study consumers' understanding of the Halal Tayyiban concept and its affect in their consumption behaviour. With this, marketers are in a better position to create new interest in their products. Marketers may develop their communications more suitably to the Halal Tayyiban concept. This Halal Tayyiban concept therefore creates a huge opportunity to tap in both Muslim and non-Muslim community.

### **Ongoing and Consistent Support of Financial Institutions**

Financial support and assurance are important for halal related enterprises to develop as a spin-off from halal food supply chain. Sustainable halal food supply chain serves as an integrated backbone for halal food security in which various forms and sizes of entrepreneurs are developed and nurtured (M. Noor, 2020). In Malaysia for example, the most notable effort is about establishing sharia-compliant micro-credit financing facilities to assist the small-scale enterprises to grow their businesses. This noble effort will contribute towards poverty eradication, as envisaged as one of the objectives in sustainable development goals shared globally.

### **Skilled and Knowledgeable Human Capital**

Jais (2014) asserts the critical role of Halal education in preparing potential human resources. Potential human resources in the Halal industry must have the skill and knowledge to Halal food and understanding of its application. He further added the subjects on Halal concepts are not emphasized enough from primary and secondary education. This matter should be addressed earlier on in order to lay a foundation of the Halal concept among the potential workforce. With the increase in demand for the Halal competent workforce, Halal should be put on prominence in the mainstream education. Opportunity for a Halal related career has also increased with the introduction of new laws and regulation. Skilled and knowledgeable human capital serves as a driving force to sustain halal food security ecosystem. Training of competent and knowledgeable human capital in matters related to halal standards and practices will contribute significantly towards sustaining halal food security ecosystem (M. Noor, 2020; Abas et al., 2021). Instinctively, stakeholders' and regulators' participation in this talent development is crucial for a successful human capital development program for sustainable halal food security (M. Noor, 2020).

## Careful Formulation and Execution of Halal Food Security Policies

As cited by Othman et al., (2016), each ASEAN country has basic implementation on Halal. Therefore, an effort needs to be developed especially on the development of human resources. Through the Malaysian Technical Cooperation Programme (MTCP) ASEAN2015 in line with Malaysia as the chairman of ASEAN 2015, it is the starting point to equip global industry practitioners, policy makers, entrepreneurial development agencies and even governments with technical knowledge for developing infrastructure needed for standards and conformance (Salama, 2015). Food security, in general, remains a global agenda but of different magnitude and scale (M. Noor, 2020). Climate changes and development policies are critically impacting the global food security agenda including halal food security. Development policies embedded with elements of sustainable food security should be formulated and implemented diligently. Technological advancement in both upstream and downstream agriculture development may not necessarily exert positive impact on sustainable food security and more often create problems that may require substantial effort and resources to overcome. The technology developed must be inclusive addressing issues related to a sustainable environment and non-exploitative. Halal, as a values system may provide a sustainable solution and input for sustainable food security developmental frameworks.

## CONCLUSION

This study sets out to discuss and uncover the various strengths, weaknesses, opportunities and threats in incorporating the concept of Tayyiban in the Halal food Industry in achieving SDG. The outcome of the analysis highlighted the vast global market and food waste efficiency as the main strengths. On the other hand, the lack of awareness and knowledge of the Halal Tayibban concept and higher cost of producing and marketing Halal Tayibban products are seen as apparent weaknesses. Moreover, the long-term strategic advantage and the growing demand for Tayibban food present excellent opportunities for incorporating Tayibban in the Halal food Industry. However, such efforts may be inhibited by the existing trust issues and the lack of international Halal certification bodies in the Halal food industry.

The findings for this research suggest that the sustainable development goals are driven and rooted into the halal ecosystem. However, in order to capitalise on this symbiotic relationship, it is important for policy makers and the general public address the strengths, weaknesses, opportunities and threats associated with benefiting from the interlink between halal Tayyiban and sustainable development goals. Only by addressing and tackling these SWOT elements will the halal ecosystem serve as a platform for achieving both sustainable development goals; namely ensuring quality and healthy living, and a sustainable lifestyle. An operative and effective halal food supply chain will serve as a core element for sustainable halal food security.

Despite the significant insights, the study is not without its limitation. The study uses SWOT analysis which is based on a review of relevant papers in the literature. Due to the changing nature of the industry, the analysis should be treated as guideline as the findings of the analysis may change over time. Therefore, to obtain more insights, future research should conduct empirical studies to explore the perspectives of the various parties involved in the Halal supply chain and industry as a whole. Further works are also needed to fully uncover other relevant strengths, weaknesses, opportunities, and threats surrounding the issue of incorporating the concept of Tayibban in the halal food industry.

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