

THE IMPLEMENTATION OF ASEAN GAqP IN OVERCOMING AL-JALLALAH RELATED ISSUES; WITH THE FOCUS ON SHARIAH-COMPLIANT AND SUSTAINABILITY ELEMENTS

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ABSTRACT: *Al-Jallalah* is an Arabic term referring to animals that are consuming something filthy, such as feces and carcasses, thus creating a foul smell and bad taste to the animal's meat. In aquaculture practice, there are a series of cases reported by the media regarding improper feeding practices by some aquaculture farmers who use pig offal and carcass as feeding for the fish. This has raised concern among Muslims because from Shariah's point of view, consuming the meat of al-Jallalah animals is prohibited due to its filthiness which can be detrimental to human health. This paper discusses the elements of Asean Good Aquaculture Practice (GAqP) which will be used to overcome the al-Jallalah-related issues. Four elements namely food safety, animal health and welfare, environmental integrity, and socio-economic aspect are discussed with the integration of the Shariah perspective. The methodology used is the library research from various reliable sources, such as databases and search engines that cover selected journals and information regarding the subject matters, including references from local or international fisheries authorities: Department of Fisheries Malaysia, Asean GAqP, Food, and Agriculture Organization of The United Nation, World Fish Center and Agriculture, Fisheries and Conservation Department of Hong Kong. The synthesized findings from this paper will provide a clear view of how GAqP can overcome the problems regarding al-Jallalah in aquaculture practice. Since GAqP is a voluntary scheme, for future undertaking the authorities are emphasized to start the action to litigate this scheme to become compulsory to resolve this issue completely.

Index Terms: Al-Jallalah, Sustainability Aquaculture, Shariah Compliant, Asean GAqP

INTRODUCTION

Aquaculture is one of the potential sectors that can contribute to the stability of a nation's economy. Statistically, in 2017 annual production of aquaculture yield was about 426.8 thousand tons [1] and yet still needs to be increased to 790 thousand tons to fulfill the projected demand by 2020 [2]. According to [3] this sector is not limited to serving national food security, but it also serves as the potential solution for alleviating hunger and reducing poverty, especially in countries that run this industry. Despite its potential of contribution in terms of socio-economic development, aquaculture still faces some challenges and issues that need to be dealt with and this has drawn the attention of many researchers around the world to conduct a series of research to find the best solutions to resolve those issues completely.

One of the issues in the aquaculture sector is the non-compliance towards halal aquaculture as stated by [4]. The main issue is regarding the contamination of fish livestock that has been fed with something filthy, such as pig offal, carcass, and waste by some aquaculture farmers. According to *I'anat al-Talibin* by Sayyid al-Bakri, animals that consume such impurities are known as 'Jallalah', which means contaminated animals due to their habit of consuming 'Jalla', contaminant or impurity [5]. This improper feeding practice has caused an epidemic and has raised concern among Muslims because in Islam, consuming al-Jallalah is prohibited haram due to its depreciation of quality attributes, such as foul odour and bad taste, which can be one of the reasons for its prohibition.

Below is a list of cases regarding al-Jallalah reported by local media that took from different years:

- *Harian Metro* in January 2006 reported the issue of "*Patin Babi Rebus*" and that there were some owners of freshwater catfish ponds, especially in Perak use boiled pig intestines and other internal organs to feed their livestock [5].
- *Berita Harian* in January 2006 reported on Tilapia fed with pig waste. The report is based on operations carried out by the Perak Islamic Department at the fish farms in Tronoh, Papan, and Batu Gajah. Farmers claim that the action to feed their fish with pig waste is to accelerate the growth of fish and can be marketed in the last three months compared with a year if not given such food [5].
- *Kosmo* in May 2009 revealed that some of the fish farmers were using cultivated fish to purify the wastewater of the swine farm [6].
- The *New Straits Times* in April 2010 reported that there were allegations that catfish feeding in Agrotech Park Smart Jaya, Kuala Selangor were fed with the stomach, waste, carcasses, and internal organs of pigs [5].
- *Selangorku* in November 2013 reported that a farmer was convicted of feeding cultivated Patin with pig intestines [7].
- *Sinar Harian* in July 2014 revealed that animal skulls and bones were spotted at the base of the fish pond due to a broken sewer line [8].³

- *Sinar Harian* on August 2014 stated that collected animal skulls and bones analyzed were positive for swine DNA [9].
- *Sinar Harian* in August 2014 reported that some of the restaurant's owners in the state decided to stop serving a Patin-based meal, as a preventive measure from serving non-halal food to the Muslim consumers [10].
- *Sinar Harian* in December 2014 reported another similar case in Perak whereby whole pig carcass was used as the nutrition for cultivated Tilapia [11].

This reported news was those that had been extensively exposed by the media because of reports and observations made by the public. What if there are still aquaculture farmers who keep practicing such unethical feeding yet hidden from public disclosure? According to the Department of Fisheries (DOF), surprisingly most of the unethical feeding farms are not legally registered under DOF but they are permitted to sell at the local market. Based on these scenarios, authorities should take firm action in law litigation related to aquaculture farming practices such as converting the current voluntary scheme to become mandatory. This article will discuss the elements in ASEAN Good Aquaculture Practice (GAqP), namely food safety, animal health and welfare, environmental integrity, and socio-economic with the integration of sustainability and Shariah concepts to establish improvised aquaculture practice that is free from contamination of impurities, thus solving the issue of al-Jallalah.

THE CONCEPT OF SHARIAH-COMPLIANT AQUACULTURE

Shariah is an Arabic term that refers to Islamic law or the Law of Allah (swt). It is considered divine as it is prescribed solely by Allah without interference from His creatures. This Islamic law is immutable, which means it can be neither changed nor replaced over time. Muslims are governed by this law. In short, Shariah guides Muslims to the right path that they should follow to seek blessings from Allah for their well-being in this world and their ultimate success in the hereafter. Generally, the concept of Shariah compliance revolves around halal (permissible) and haram (prohibited) matters as well as the prohibitions stated by Allah as revealed in the Qur'an and Hadith, in which those prohibitions such as consuming alcohol and pig and its derivatives, approaching Zina (fornication), riba (usury), Gharar (gambling) and others which lead to the destruction of creatures. Shariah is aimed to protect five elements of necessities from any difficulties. These five elements are religion, life, lineage, intellect, and property. These necessities are being preserved according to three different levels of interest, Daruriyat (necessity), Hajiyat (needs), and Tahsiniyat (luxuries) from two different perspectives, the individual and the collective ones. The individual perspective will fulfill the personal needs of that individual based on what has been obliged by the Shariah and according to their inner faith. Meanwhile, the state or the collective perspective will satisfy the needs of all individuals based on the priority levels and their abilities.

Previously, the "Shariah-compliant" term was widely used in banking and finance products and services. However, Shariah-

compliant products and services recently have captured the attention of industry from different backgrounds, not limited to the banking and finance sectors only, but also in other sectors such as tourism, hospitality, infrastructure, fashion, manufacturing as well as agriculture. This increasing demand is due to the rapid growth of the Muslim population and the rising awareness and preference for using products and services that adhere to Shariah compliance. According to [12], the worldwide Muslim population is projected to grow on average 35 percent for the next 20 years, by which the amount will increase from 1.6 billion in 2010 to 2.2 billion by 2030, in short representing about 26.4 percent from 8.3 billion of the world's total projected population. By 2050, the Muslim population is expected to grow to 2.6 billion, which is over 30 percent of the global population.

Since Shariah-compliant business is becoming a trend, well-established companies do not hesitate to take a proactive step by revising and implementing their company's policy and management from conventional to Shariah-compliant. Apart from that, many entrepreneurs, regardless of their religious background are actively seeking business opportunities that adhere to Shariah-compliance to the extent that this trend becomes a phenomenon. Therefore, when there is arising issue related to uncertainty that can cause depreciation of halal status, it will raise public awareness of that particular issue and at the same time, the authorities need to revise the whole management system of that particular sector. The best solution for this issue is to implement the concept of Shariah compliance. This is what happens to our current aquaculture sector. The arising of the al-Jallalah issue has drawn the attention of many parties, including the public as a consumer, fisheries authorities, aquaculturists, religious authorities as well and researchers.

Mahat (2019) stated that for aquaculture to adhere to Islamic law, so-called Shariah-compliant, it must start from the good breeding technique of the fish livestock in the water system to its delivery to the consumer, especially the Muslim consumers. She added that the water system such as ponds must be inspected regularly to ensure the environment is always clean and free from any kind of waste. In terms of feeding practice, fodder used must be made from clean and wholesome ingredients and prepared hygienically. Based on this statement, it can be concluded that Shariah-compliant aquaculture partly consists of sustainability elements, which have been discussed and covered in detail in Good Pond Fish Culture Practice and Good Aquaculture Practice (GAqP).

THE CONCEPT OF SUSTAINABLE AQUACULTURE

In the Cambridge English Dictionary, sustainable can be defined into two definitions. Adjectively sustainable means "able to continue over some time", whereas, in terms of the environmental aspect, it means "causing little or no damage to the environment and therefore able to continue for a long time". In terms of aquaculture practice, sustainability may have different interpretations depending on each authority body or aquaculture farmer itself.

According to the Food, and Agriculture Organization of the United Nations (FAO), the term sustainability related to the agriculture, forestry, and fisheries guidelines is adopted from the following definition: "Sustainable development is the management and conservation of the natural resource base

and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations. Such sustainable development (in the agriculture, forestry and fisheries sectors) conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable" [15].

FAO also highlighted six prerequisites that are required in establishing a sustainable aquaculture. Firstly, farmers should earn equitable profit from farming yield. Secondly, both costs and profits must be fairly distributed. Next, sustainable aquaculture must be able to create job opportunities. It also must be able to provide food access for the nation. In the environmental aspect, natural resources must be managed properly for the usage of future generations. Lastly, aquaculture development must be managed orderly with the participation of well-organized authorities and industry. The aspiration to establish sustainable aquaculture aims to create prosperous and healthier communities, more job opportunities provided for poor people to improve their livelihood as well as empower farmers and women [16].

Based on The World Bank's point of view, an aquaculture system is considered sustainable only if it possesses these three elements, namely environmental sustainability, economic sustainability, and social and community sustainability [17]. Environmental sustainability means the aquaculture system should not cause any significant disturbance to the environment as well as harm the biodiversity or lead to adverse pollution impact. Next is economic sustainability, which focuses more on viable business opportunities with good long-term prospects that can be created through aquaculture activity. Lastly, for social and community sustainability, aquaculture must fulfill social responsibility and be able to contribute to the development of community well-being.

In contrast to the Worldfish Centre's point of view, they interpret sustainability by focusing on establishing sustainable aquaculture production growth in non-developed countries whereby aquaculture activity is still in the early phase and dependency on fish for food is high. As an international non-profit research organization, their aim is nothing but to ensure the poor farmer communities will get benefits in term of nutritional and economic stability, or in short reducing poverty and hunger issues. As an effort to achieve this goal, Worldfish centre currently active in conducting research that covers field related to fish breeds and genetics, fish health, nutrition and feeds as well as aquaculture system [18].

Briefly, it can be deduced that sustainability is basically encompassed to the matters related to the natural resource's management, economic stability and social well-being development. Whereas Shariah compliance is focusing more on food safety precaution steps and guidelines, such as ways to avoid contamination and maintaining good code of conduct in aquaculture activities to produce halal, wholesome and hygiene fish livestock for food.

ASEAN GOOD AQUACULTURE PRACTICE (GAQP)

A. Introduction and Background

Aquaculture especially for the purpose of food fish production for local consumption and international trade, is becoming a

crucial sector that able to contribute for the economic stability in most of the South East Asia countries. Some of these countries such as Indonesia, Malaysia, Myanmar, the Philippines, Thailand and Viet Nam are among the top 25 countries that produce highest aquaculture volume and some of these countries have become leading nations in exporting the aquaculture products to other countries in the region as well as for international markets. Therefore, with the greater income generated and large number of job opportunities created, most of the ASEAN Member States (AMS) depend on this sector as their main platform that can contribute to national and regional social and economic development. Besides, aquaculture in the South East Asian countries is not only important because of its contribution to the economic stability, but it also serves as the best solution for food security and hunger issues.

The ASEAN Member States (AMS) have a few similarities in common including farming system and facilities, climate pattern and common commodities, thus implementing the Asean GAQP able to improvise the harmonization of GAQP scheme within the Asean region. This is because some of the AMS countries have their own National Good Aquaculture Practices (GAQP) program, but it varies from one country to others as some countries already well-established scheme and were certified by their government systems, meanwhile, others were still in the initial phase started with focusing only on awareness programs for farmers. As ASEAN aims to strive for a single market and production base as aspired by The AEC Blueprint in which to transform the Asean into a highly competitive economic region, a region of equitable economic development, and a region fully integrated into the global economy. Therefore, it is important to come up with an agreed uniform guidelines and standards to be introduced to all the ASEAN member States (AMS).

ASEAN Good Aquaculture Practice, GAQP (Food fish) is a complete guideline scheme that can be applied in the development and application of fisheries quality management systems that ensure food safety and support the competitive position of ASEAN fisheries products on world market. This scheme was developed by the ASEAN Member States representatives, including Brunei Darussalam, Cambodia, Indonesia, Lao PDR (Laos), Malaysia, Myanmar, Singapore, Philippine, Thailand and Vietnam.

The GAQP that was developed by the team of experts from ASEAN member States was only focusing on the food fish production guideline, and this guideline emphasizes on four elements, namely food safety, animal health and welfare, environmental integrity and socio-economic aspects including the facilitation of gender.

B. Elements of Asian GAQP

Element 1: Food Safety

The principle states that aquaculture activities should follow the food safety guidelines outlined by the authority bodies responsible in national or international food safety standards and regulations, such as Food and Agriculture Organization of the Food Nation (FAO) or World Health Organization (WHO) Codex Alimentarius.

Element 2: Animal Health and Welfare

All phases of the production cycle in aquaculture activities should be carried out in a way that the health and welfare of

farmed aquatic animals is properly managed and monitored. This can be done by minimizing stress to optimize health, reducing risks of disease for aquatic animal and keep the culture environment clean and healthy at all time.

Element 3: Environmental Integrity

Aquaculture activities should follow the appropriate rules and regulations issued by both national and international relevant authorities. It must be planned and conducted in an environmentally friendly manner by addressing the environmental impacts of planning, development and operational practices for aquaculture in order to ensure the environmental integrity is achieved.

Element 4: Socio- Economic Aspect

Aquaculture activities should not threaten the livelihood of aquaculture workers and local communities and must be conducted based on national rules and regulations, having regard to the ILO-convention on labor rights. Socio-economic issues should be considered starting from the phase of aquaculture planning, followed by the development phase and up to the operation phase. Since aquaculture contributes to rural development and economic fabrication, promotes food security, as well as alleviates poverty, it is important to recognize the corporate social responsibility of aquaculture to local communities.

However, before this guideline was produced and agreed upon by the ASEAN Member States, there were a few issues that needed to be considered and addressed, such as the area that would be covered by this guideline, the extent that this area on concern been covered, types of aquaculture products covered by this guideline and how AMS was going to use this guideline. From the series of workshops conducted by the ASEAN secretariat, the working group agreed upon this matter;

“Focus on the food fish, considering the guidance from the ASEAN Economic Community (AEC) Blueprint, the ASEAN cooperation in fisheries and aquaculture will focus its efforts on the promotion of intra-ASEAN and external trade, improving competitiveness, quality assurance and ensuring safety of fisheries products. Separate GAQP guidelines produced in three parts, according to aquaculture groups, namely (i) Food Fish, (ii) Ornamental Fish and (iii) Aquatic Plants, the latter two to be produced in the next phase of the project.” Cited from [19]

INTEGRATION OF ASEAN GAQP ELEMENTS WITH THE REGARDS TO SHARIAH-COMPLIANT AND SUSTAINABILITY CONCEPTS

Mahat (2019) highlighted two critical factors in order for aquaculture activity to adhere to the Islamic compliance concept. The two factors are the water environment system and fodder used to feed the fish livestock. The water environment must be clean and free from any kind of waste, whereas the fodder used to feed the fish must be made from clean and wholesome ingredients. Negligence of these critical factors will create a problem, such as the issue of al-Jallalah in aquaculture, especially for food fish.

In Islam, consuming halal food is a kind of devotion to Allah and it will bring tranquility to one's life, oppositely syubhah (uncertainty) and haram (prohibited) food will cause harm, confusion, and disruption. In the Quran and Hadith, there are a few verses that state explicitly about prohibitions, one of

them is as stated in surah al-Baqarah verses 172 to 173: *“O You who believe! Eat of the good things that We have provided for you and be thankful to Allah if it is He alone whom you worship. Indeed, what He has forbidden to you is the flesh of dead animals and blood and the flesh of swine, and that which has been sacrificed to anyone other than Allah. But if one is compelled to anyone by necessity, neither craving (it) nor transgressing, there is no sin on him; indeed, Allah is Forgiving, Merciful.”*

As in Hadith, Prophet Muhammad SAW said: *“What Allah has made lawful in His Book is Halal and what He has forbidden is haram, and that concerning which He is silent is allowed as His favor. So, accept from Allah His favor, for Allah is not forgetful of anything. He then recited “And thy Lord is not forgetful...”* (reported by Al Hakim, 2/375 and classified as hasan/ good hadith by Al Albani in Ghayat al Maram, p.14) cited from [5].

Regarding the al-Jallalah issue, it is prohibited to be consumed by Muslims based on the hadith narrated by Ibn 'Umar, 'The Messenger of Allah (SAW) forbade the meat (of) al-Jallalah and (drinking) its milk'. (Imam Abu Dawud, Hadith no 3785) cited from [5]. Different Schools of Thought (Madhaib) have different rulings due to the different interpretations of this prohibition. However, the gazette here is the latest fatwa issued regarding the purity status of fish fed with unlawful food by the Fatwa Committee National Council of Islamic Religious Affairs Malaysia during the 73rd Muzakarah (conference) held on 4th – 6th April 2006. From this discussion, the committee deduced that fish reared in ponds that were purposely bred in impure water and fed with unlawful food such as pig, carcass, and alike are unlawful to be consumed [5].

As for the four elements in ASEAN GAQP, the critical factors in order the aquaculture activity to adhere to the Shariah compliance has been stated in the first element, which is the food safety element at point number three and six respectively. Point number three stated that; "aquaculture operations should use feeds and feed ingredients which do not contain unsafe levels of biological, chemical and physical contaminants and/or other adulterated substances. All ingredients which are used in feed manufactured or prepared on farm must be free from prohibited substances." Meanwhile point number six stated that; "water used for aquaculture should be of a quality suitable for the production of fish which is safe for human consumption." [19].

Although the guidelines regarding this matter have been issued, but the 'prohibited substances' at point number three are not clearly defined. Therefore, in order to implement the Shariah-compliant concept, the prohibited substances should include pig and their derivatives as well as other kinds of impurities and filthy substances such as carcasses, faeces, and blood which make the animals be categorized as al-Jallalah when consuming them.

CONCLUSION

Al-Jallalah's issue in aquaculture activities especially for food fish has raised awareness among the public in general and to the Muslim community specifically. The role of mass media in exposing this unethical activity should be acknowledged because, without formal exposure thru the media, the public

will never know this unethical feeding activity being practiced by irresponsible farmers. In Islam, consuming halal food is mandatory, the same goes for avoiding uncertainty and unlawful things. It is suggested that in a country whose major population is Muslims, Shariah Compliant industries, especially those aquaculture sectors be taken into serious account, knowing the fact that some entrepreneurs who are aware of this issue are still reluctant to implement it, due to the high cost that they need to bear. Some of the reasons for the reluctance to practice the right fish farming are the cost and time. The feeding of fish livestock with pig offal and the carcass is said to be able to speed up the fish growth in just three months compared to the common feeding practice that takes about a year for the fish fit to be sold, those substances are also cheaper and easier to obtain. This problem should be identified, and a solution should be provided. The introduction and implementation of ASEAN Good Aquaculture Practice is seen as one of the initiative steps to tackle any future arising issues in the aquaculture sector. With the proposed integration of the ASEAN GAqP with the Shariah-compliant concept, it is believed that the issues of al-Jallalah can be overcome, with the condition that this guideline scheme must be converted from voluntary scheme to mandatory for all aquaculture farmers. It is also recommended that a halal element checklist in accordance with Shariah Law should be introduced in the ASEAN GAqP for complete guidelines to be referred by the related authorities as well as aquaculture farmers. If this aspiration can be realized, aquaculture sectors will benefit the huge world market nowadays for both Muslim and Non-Muslims consumers alike, by promoting halal, clean, wholesome, and healthy food security.

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REFERENCES

1. "Selected Agricultural Indicators, Malaysia, 2018," *Department of Statistic Malaysia*, 2018. [Online]. Available: https://dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=72&bul_id=UjYxeDNkZ0xOUjhFeHpna20wUUJOUT09&menu_id=Z0VTZGU1UHBUT1VJMF1paXRRR0xpdz09. [Accessed: 01-May-2019].
2. A. Yusoff, "Status of Resources Management and Aquaculture in Malaysia," in *International Workshop on Resources Enhancement and Sustainable Aquaculture Practices in Southeast Asia 2014*, 2014, pp. 53–65.
3. Allison H Edward, "Aquaculture, Fisheries, Poverty and Food Security," Penang, Malaysia, 2011.
4. S. Fathi, A. Nahar Harun, S. Rambat, and N. A. Tukiran, *Current Issues in Aquaculture: Lessons from Malaysia*, vol. 24. 2018.
5. * Muflih, N. S. Ahmad, and M. A. And Nordin, "The concept and component of contaminated animals (Al-Jallalah Animals)," 2017.
6. K. Sabapatty, "Kita hanya jual di luar Perak- Ternak ikan keli untuk 'membersihkan' air kumbahan dari ladang babi," *Kosmo*, 20-May-2009.
7. N. Ibrahim, "Usus babi jadi makanan ikan sebelum dijual," *Selangorku*, 15-Nov-2014.
8. S. Ahmad and M. A. Tajuddin, "Lambakan tulang babi jadi topik hangat," *Sinar Harian*, 09-Jul-2014.
9. R. Rosli, "Sampel tulang di kolam ikan patin sah bangkai babi," *Sinar Harian*, 15-Aug-2014.
10. "Peniaga henti beli, saji 'patin babi,'" *Sinar Harian*, 17-Aug 2014.
11. S. Ahmad and N. M. Hamdan, "Penemuan ikan tilapia diberi makan babi," *Sinar Harian*, 2014.
12. "The Next Billion | The Market Opportunity of the Muslim World," 2013.
13. F. Mahat, "Businesses Find It Difficult To Become Shariah-Compliant," *Bernama.com*, 10-Feb-2019.
14. "SUSTAINABLE | meaning in the Cambridge English Dictionary." [Online]. Available: <https://dictionary.cambridge.org/dictionary/english/sustainable>. [Accessed: 01-May-2019].
15. D. Fezzardi *et al.*, "Indicators for Sustainable Aquaculture in Mediterranean and Black Sea Countries," Rome, 2013.
16. "Aquaculture," *Food and Agriculture Organization of the United Nations*, 2019. [Online]. Available: <http://www.fao.org/aquaculture/en/>. [Accessed: 02-May-2019].
17. "Sustainable Aquaculture," 2014. [Online]. Available: <http://www.worldbank.org/en/topic/environment/brief/sustainable-aquaculture>. [Accessed: 01-May-2019].
18. "Sustainable Aquaculture | WorldFish Research Areas," 2015. [Online]. Available: <https://www.worldfishcenter.org/content/sustainable-aquaculture>. [Accessed: 01-May-2019].
19. "Guidelines on ASEAN Good Aquaculture Practices (ASEAN GAqP) for Food Fish," 2014.