



# A critical analysis of the legal framework on animal feed in Malaysia: with special reference to the Feed Act 2009

Nurulaina Saidin<sup>1\*</sup>, Fadilah Abd Rahman<sup>1,2</sup>, Noriham Abdullah<sup>2,3</sup>

<sup>1</sup>Academy of Contemporary Islamic Studies, Universiti Teknologi MARA

<sup>2</sup>Malaysia Institute of Transport (MITRANS) Universiti Teknologi MARA

<sup>3</sup>Faculty of Applied Sciences, Universiti Teknologi MARA

\*Corresponding author E-mail: [assofi\\_smile@yahoo.com](mailto:assofi_smile@yahoo.com)

## Abstract

In the halal food supply chain, animal feed is an essential element which has direct implication for the safety, quality and halal integrity of animal-based food products. Comprehensive monitoring and control in the preparation, production, storage, and distribution of the animal feed are needed to ensure acceptable quality standard. Matters related to the importation, manufacture, sale and uses of feed and feed additive in Malaysia is regulated under the Feed Act 2009 and its regulations. This Act is introduced to ensure the quality and safety of feed by controlling the importation, manufacture, sale, and uses of feed and feed additive. In the context of animal feed in Malaysia, this paper seeks to highlight and examine its legal framework, focusing on the analysis of the Feed Act 2009. This study utilises qualitative approach using library research. The findings of the study demonstrate that, despite the existence of a specific law governing the animal feed activities, there is no provision addresses the issue of halal in the ingredients, preparation, production, storage, and distribution of animal feed. It is therefore suggested that a halal standard for animal feed preparation, production, storage, and distribution is further be developed to enhance the production of halal and safe animal feed in Malaysia.

**Keywords:** Animal Feed, Feed Act 2009, Legal Framework, Malaysia

## 1. Introduction

Animal feed and feeding are among the essential elements in the process of producing halal food products. In the Halal Food Supply Chain, animal feed is considered as the first Critical Control Point (CCP) in ensuring the halal integrity of animal-based food products along the supply chain [1]. The uncertainties in the quality, safety and halal aspect of the animal feed may consequently affect the halal and toyyiban status of the halal food products.

The safety and quality standard and regulation for animal feed should be equally stringent similar to the food for human consumption. Animal feed should be appropriately formulated to ensure that animals are only be given food that is nutritionally acceptable and safe from hazardous materials. The repetitive episodes of improper feeding practices reported by the media [2, 3, 4, 5], and the detection of antibiotic resistance bacteria strains from food products [6, 7, 8, 9] shows that there are still few gaps in the existing legal framework that make this framework ineffective in ensuring the quality and safety of animal feed in the country.

This paper will focus mainly on the Feed Act 2009 and the Feed Regulations 2012 as the primary legislation that controls all activities related to the production, importation, sale, and use of animal feed in Malaysia. This study attempts to examine the legal and regulatory framework of feed in Malaysia, and, importantly, the gaps and loopholes in the legal framework associated with relevant elements and requirements for the production, importation, manufacture, sale, and use of the animal feed. In an attempts to answer these questions, this study is carried out using the legal research methodology using a qualitative approach. This method

is chosen due to the need of in-depth research about the policies related to animal feed and feeding activities in the country [10].

## 2. Definition of feed

Codex Alimentarius Commission Code of Practice on Good Animal Feeding defines feed as “animal feedstuffs, ingredients, additives and supplements given to the animals” [11]. According to Section 2 of the Feed Act 2009 (Act 698), the term ‘animal feed’ implies to any single or multiple materials whether processed, semi-processed or raw, which is intended to be fed to the animals. Similarly, a somewhat similar definition is given by Clause 3 of the Malaysian Standard, MS 2208:2009 Animal Feeding Stuffs – Code of Practice. In this standard, animal feed is defined as “any single or multiple materials whether processed, semi-processed or raw, which is intended to be fed to animals” [12]. Section 2 of the Feed Act 2009 (Act 698) interpret the word Animals as follow:

“(a) any mammal other than human;  
(b) any aquatic animal and includes fish, mollusc and crustacea;  
(c) any amphibian;  
(d) any reptile;  
(e) any bird and includes chicken, duck, quail and ostrich; and  
(f) any insect,  
kept in captivity or under control for any purpose of human usage”

### 3. Animal feed legislation in Malaysia

In order to ensure the safety of food, all aspects of the food production chain must be considered, from and including the primary production and the production of animal feed up to and including sale or supply of food to the consumer. This approach involves the development of legislative and other actions to assure effective control systems, evaluate compliance to the Malaysian and international standards in the food chain and in meeting the exports requirements to other countries.

In Malaysia, several laws were passed by the Parliament to regulate feed quality by controlling the production, importation, sale and use of feed and feed additives. These legislations include the primary and secondary legislation and other feed-related legislations which are governed by departments such as the Department of Veterinary Services (DVS) as the leader, the Food Quality and Safety Division of the Ministry of Health, the Department of Standards Malaysia, local authorities and other departments. The regulatory activities pertaining to animal feed in the country are supported by legal infrastructure through several statutes such as the Feed Act 2009 and Feed Regulations 2012, Animal Welfare Act 2015, Plant Quarantine Act 1976, the Local Government Act 1976 and other related legislation.

#### 3.1. Feed Act 2009

The Feed Act 2009 is the primary legislation which regulates the quality of feed by means of “controlling the importation, manufacture, sale and uses of feed and feed additive”, in order to guarantee that feed produced and imported into the country achieve optimum nutritional quality, conformance to the specification and free from contaminants, for the safety of the animals while ensuring the safe consumption of animals and animal products as food for human [13]. The Ministry that had been mandated to govern this Act is the Ministry of Agriculture and Agro-Based Industry.

The Feed Act 2009 was published in the Gazette in September 2009 and enforced in 2013. The introduction of this Act serves as a statutory requirement for all animal feed industry players, including importers, sellers, manufacturers and farmers to ensure safe and quality production and use of animal feed in the country. However, in terms of its application, the Act shall only be applicable in Peninsular Malaysia and Federal Territory of Labuan.

Generally, this Act is divided into seven parts, with 54 sections. Part I is the Preliminary part which covers the short title, application, and commencement of the Act and interpretations of terms. The establishment of the Feed Board, its functions, powers and other matters related to the Feed Board are dealt with under Part II of the law, in Section 3 – 8. The prime task of the Feed Board is, in fact, to administer, enforce and ensure the effective implementation of the law, besides advising the minister on the development of specific regulations under this Act. The Feed Board also acts as the main authority which regulates the distribution, utilisation and importation of feed and feed additives, to ensure the safety and quality of animal feed in the country.

##### 3.1.1. Licencing for feed importation and trading

Licensing of those parties associated with animal feed importation and trading is addressed in Section 9 – 16 of Part III of this Act. These include the process of application and issuance, renewal, suspension or revocation of license and appeal procedure to the Minister to renew the suspended license. Section 9 (1) states: “No person shall import any feed or feed additive unless he possesses a valid license under this Act” while Section 9 (3) of the Act states:

“Any person who imports any feed or feed additive without a license or in contravention of an order by the Minister under subsection (2) commits an offense and shall, on conviction, be liable to a fine not exceeding one hundred thousand Ringgit or to imprisonment for a term not exceeding two years or to both and for a second or subsequent offense, to a fine not exceeding two

hundred thousand Ringgit or to imprisonment for a term not exceeding four years or to both”.

A licensee could also be directed as disqualified from holding a license by the court for a period not exceeding five years if convicted of a second or subsequent offence under this Act [Section 16 (2)].

Besides the afore-mentioned requirement, there is a provision in the Feed (License to Import of Feed or Feed Additives) Regulation (2012) [14] that emphasised on the safety aspects of animal feed. Regulation 7 of the Regulation provides that the Animal Feed Board shall not issue a license to import feed or feed additive if—

- (a) the country of origin from which the feed or feed additive is to be imported is unknown;
- (b) the specification for the feed or feed additive is not provided or does not comply with the prescribed specifications;
- (c) the Board has reasonable grounds to believe that the feed or feed additive to be imported is contaminated or is likely to convey diseases and cause ill-health to animals or humans; or
- (d) any other license or certificate necessary for importation as required under any other written law has not been obtained.

The above specifications indicate that all feed to be imported into the country should comply with the specified labelling requirements stated in the Feed (Labelling of Feed or Feed Additive) Regulations 2012 [15] and that any feed consignment that does not achieve acceptable standards of good quality and safety shall not be imported into the country.

##### 3.1.2. Specification for feed storage, labelling and transport

Part IV of the Act dealt with feed specifications and conditions for proper keeping, storing, labelling and transporting of the animal feed and animal feed additives. The importers and traders of feed and feed additives should comply with the specific conditions stated in the regulation for feed storage, packaging, labelling and transporting as mentioned in Section 18(1) of the Act. The sentence prescribed for those imported, manufactured, distributed, possessed, sold or utilised animal feed that does not comply with the prescribed specification is a fine not exceeding fifty thousand Ringgit or imprisonment not exceeding one year or to both, if convicted. The subsequent offence carries higher punishment which is a fine not exceeding one hundred thousand Ringgit or to imprisonment for a term not exceeding two years or to both [Section 18 (2)].

##### 3.1.3. Control and use of antibiotic, hormones and other chemicals

In animal production, antibiotics have been used for therapeutic purpose against infectious disease, prophylactic use for prevention of infectious animal diseases, and also subtherapeutic use as feed additives for animal production and improvement of feed utilization [16, 17]. Antibiotics are commonly administered to the animals in their feed or water by the farmers due to its practicality [18]. The use of antibiotics has led to increased growth rates and improves feed efficiency. Nevertheless, these also resulted in antibiotic resistance and probability of pollution problems through excreted manures.

Studies have shown that the uncontrolled use of antibiotics onto poultry as growth boosters [19] and disease prevention [20] may cause the development of antimicrobial resistance (AMR) bacteria. AMR bacteria such as *Salmonella* or *Listeria monocytogenes*, are among the well-known AMR bacteria grown on corn poultry feed and can spread from animals to human via the food chain.

In October 2015, Federation of Malaysian Consumer Association (FOMCA), an independent, non-profit organization once expressed their concern towards the uncontrolled utilisation of antibiotics in poultry. They urge the government to monitor the poultry industry as the uncontrolled utilisation of antibiotics may cause the development of antimicrobial resistance (AMR) bacteria [21].

With regard to this, Section 18 – 20 of Part V describes the control and use of antibiotic, hormones and other chemicals in the production and use of animal feed. Section 19 of the Act stated that the inclusion of these three substances should be in accordance with the prescribed manner and level. Section 19 (3) of the Act provides that: “any antibiotic, hormone or other chemicals may be incorporated into feed or introduced directly or through medium into animals, at a level higher than the prescribed level if prescribed as such by a veterinary surgeon in writing and only for the purpose of treatment, control or eradication of disease” [13].

According to Section 19 (2) of the Act, any person who intentionally incorporates any antibiotics, hormones or other chemicals into the feed or introduces these three substances directly into the animals not according to the prescribed manner and level is committing an offence and shall, on conviction, be liable to a fine not exceeding one hundred thousand ringgit or to imprisonment for a term not exceeding two years or to both, and for a second or subsequent offence, to a fine not exceeding two hundred thousand ringgit or to imprisonment for a term not exceeding four years or to both” [19 (2)]. In the meantime, Ministry of Health through the National Pharmaceutical Control Bureau and the Pharmacy Enforcement Division works closely with the Department of Veterinary Services, to control the use of antibiotics in animal feed in ensuring the safety of the Malaysian.

Even so, it is worth noting that the Feed Act 2009 is silence on the aspect of specific procedures and withdrawal periods that should be followed by the farmers before slaughtering and milking process to ensure no residues of antibiotics and other chemicals in the meat and milk of the treated animals. The Feed (Prohibited antibiotics, hormones, and other chemicals) Regulation 2012 only provides the citation for the regulation, the interpretation for “food-producing animals” and the prohibited use of antibiotics, hormones and chemicals as prescribed in the schedule. Specific regulations pertaining to this procedure should be included in the Act or regulation to ensure that antibiotic and other chemicals are sufficiently free from the animal’s body before the meat and milk enter the food supply chain.

### 3.1.4. Feed specification

In a review paper by Sapkota, Lefferts, McKenzie, & Walker [22], it was emphasized that the ingredients used in animal feed are fundamentally important in term of both the quality of the resulting food products and for the potential human health impacts associated with the animal-based food production chain.

According to Cheli, Gallo, Battaglia, & Dell’Orto [23], undesirable substances in animal feed livestock production is an important topic for the community and satisfactory results in term of public and animal health, animal welfare, environment and livestock producers’ finances depend to a large extent on the use of appropriate good quality feeding stuffs. As such, comprehensive regulations on undesirable substances must be set up in order to guarantee good quality and safety of feeding stuffs at farm level, if they are not commercially produced, or at a commercial level. As it is impossible to fully eliminate the presence of undesirable substances, it is important to fix maximum limits, considering the substances’ acute and chronic toxicity, bioaccumulation and degradability, in order to prevent undesirable and harmful effects.

In this regard, analysis of the provisions of the Feed Act 2009 shows that the Act is regulatory in nature, but lack of provisions which provide for the control of the halal aspect of animal feed in term of its ingredients, processing, production, sale and use. There are few ambiguities in this Act. For instance, Section 17 which provides for feed specification does not comprehensively explain the specific requirements of the specification. According to Section 17: “All feeds imported, manufactured, distributed, possessed, sold or utilised for the feeding of animals shall comply with the prescribed feed specifications.” There is no further explanation on specific feed specification that should be followed in order

to comply with the requirement set by this Act. Moreover, until to date, regulations made under this Act do not specify on feed specifications and standards which are the main concern in ensuring that animal feed ingredients are free from hazards, contaminations, and non-halal elements.

Regulations established until now specifically control the labelling of feed or feed additive [P.U. (A) 252], methods of analysis of feed and the form of a certificate of analysis [P.U. (A) 254], license to import feed or feed additive [P.U. (A) 256], the use of antibiotics, hormones and other chemicals [P.U. (A) 272] and manufacture and sale of feed or feed additive [P.U. (A) 312]. There are standards such as the MS 2208:2009 and MS 2538:2013 established by the Malaysian Standard which provides guidelines for feed ingredients and specifications. These standards, however, are not compulsory and only voluntary basis.

### 3.1.5. Labelling of feed or feed additive

Labelling is another critical aspect of feed and feed additive. Under the Feed (Labelling of Feed or Feed Additive) Regulations 2012, there are specific requirements outlined for labelling purpose in avoiding the probability of using non-halal feed or specifically the use of animal feed that contained pork-derived materials. This is stated in Regulation 2 (1) (f):

Where the feed contains porks, or its derivatives, or lard, a statement as to the presence in that feed of such pork, or its derivatives, or lard, in the form “CONTAINS (state whether pork, or its derivatives, or lard as the case may be)” or in words to this effect.

Regulation 3 of the Feed Regulation further provides the amount of the penalty imposed for those who contravenes with the provision in Section 2. Those convicted shall be liable to a fine not exceeding fifty thousand ringgit or imprisonment for a term not exceeding one year or both, and for a second or subsequent offence, to a fine not exceeding one hundred thousand ringgit or imprisonment for a term not exceeding two years or both. Perhaps, the increased amount of fine and longer duration of imprisonment imposed on the offender for the subsequent offence act as a deterrence to the doer and other people from committing similar offences.

### 3.1.6. Sample takings and analysis

Animal feed sample takings and analysis is the critical step in obtaining reliable results regarding feed composition, and evaluation of the presence of undesirable substances. A sampling plan may be defined as a test procedure combined with specific analytical procedures, and, in the case of undesirable substances, combined with a sample acceptance limit.

As far as sample takings are concerned, Section 32 – 35 of this Act specifically dealt with sample takings and analysis, designation of laboratories, the appointment of analysts and certificate of analysis. Procedure and amount of seized feed sample sufficient for each examination are also described in Section 36 of this Act.

### 3.1.7. Manufacture and sale of feed and feed additive

It is also noteworthy to mention that the Feed (Manufacture and Sale of Feed or Feed Additive) Regulation 2012 [24] is ambiguous in term of its clarification on the manufacture and sell aspects. The Regulation does not describe any exemption to the act of manufacture and sell of animal feed in the country. Based on Regulation 3 (1), only registered person will be given the permission for feed manufacture and sell, under the Feed Act 2009. The definition of “manufacture” according to Section 2 of the Feed Act 2009, when used in relation to feed means;

To formulate, prepare, compound, mix, make, pack, label or to treat the feed with a view to its sale or for own use but does not include a bona fide research or experiment relating to feed and any action forming part of or incidental to such research or experiment;

Based on this interpretation, it could be understood that every single activity as listed in this explanation may be regarded as feed manufacturing. That being so, questions arise on the position of many small farmers in the country, whom for years, had been producing animal feed for their own farm-animals' consumption. Will these farmers be charged with offences under the Feed Act 2009? Should there be any exemption included in the Act and Regulation to exclude these small-scale farmers from being convicted? Hence, detailed analysis of the related provisions and relevant reforms to the Act and regulations shall be conducted to ensure that the interest of this small-scale farmers is also being given priority.

### 3.1.8. Enforcement

Enforcement activities are addressed in Part VI of the law, in Section 21 – 40. Section 21 (1) of the Act provides that the Minister shall appoint public officers as authorised officers for the implementation of the Act. The officers have the right to arrest without warrant those who commit or attempt to commit any offence under this law. As provided in Section 23 (2) of this Act, those arrested for having committed an offence under this act shall be dealt with as provided by the Criminal Procedure Code [Act 593]. Other sections in this Part handle offences relating to the search and seizure with warrant (Section 24) or without warrant (Section 25) of the feed, feed additives, receptacle, package, conveyance, contrivance, book, document or other thing that is reasonably believed to furnish evidence of the commission of such offence. The authorised officers may also have the power to stop, search and seize conveyance in accordance with the regulations provided under this Act. Section 30 (1) of this Act stated the legal power required by authorised officers to conduct investigations of any offences under this Act and its regulations.

### 3.1.9. General provision

The final part of this Act, Part VII is devoted to General Provision which addresses the offences convicted by parties involved in animal feed production, trading, and importation. Section 44 in this Part prohibited disclosure of information and informer by a witness in any civil or criminal proceeding. Section 45 provides protection for members of the Board, analysts and any authorised officer against legal proceedings. Important provisions associated with the protection include that no action or prosecution shall be brought, instituted or maintained in any court against -

- (a) any member of the Board, analyst or any authorised officer for or on account of or in respect of any act ordered or done for the purpose of carrying into effect of this Act; and
- (b) any other person for or an account of or in respect of any act done or Minister, the Board or any officer duly authorised under this Act,

If the act was done in good faith and in a reasonable belief that it was necessary for the purpose intended to be served by it.

After the implementation of the Feed Act 2009, there were few changes took place in the administration of the matters related to animal feed regulations. For example, medicated animal feed and premixes were previously regulated by the National Pharmaceutical Control Bureau under Ministry of Health Malaysia through the Poison Act 1952. However, started from 1<sup>st</sup> January 2015, Medicated Feed is controlled by DVS under Feed Act 2009 while the regulation of Premixes (antibiotics for prevention and growth promotion) was hand over to DVS effective on July 1, 2015 [25]. In addition, there were also few changes in the importation regulation for animal feed which come into effect on January 1, 2015. For instance, those who wish to import corn for feed production were not only required to apply for an import license from the Department of Agriculture and the Department of Veterinary Services but also need to have a Phytosanitary certificate from the exporting country [26]. Thus, the importation of crops for feed preparation is also subjected to other legislation such as the Agri-

culture Quarantine Act, besides the Animal Feed Act as the primary legislation.

### 3.1.10. Limited application of the act

In addition, the application of this Act which is limited only to Peninsular Malaysia and the Federal Territory of Labuan may give rise to ambiguity as to the status of regulations and control of animal feed in Sabah and Sarawak. For instance, animal feed trading and use between Sabah and Labuan will be difficult to be monitored due to the differences in the legal and regulatory framework that controlled animal feed activities in both regions. This may lead to the inconsistencies in term of quality and safety of animal feed, besides the difficulty in the aspect of enforcement.

## 4. Conclusion

Generally, the enforcement of this Act had given the Animal Feed Board the legal powers as the authoritative body in regulating matters pertaining to animal feed importation, manufacture, sale and use of animal feed and animal feed additive in the country. The implementation of this Act is also important in controlling the abuse use of antibiotics, hormones and other chemicals in animal feed production through implementation of systematic quality and safety assurance programs for animal feed. Nevertheless, for the production of halal animal feed, specific provision should be included to regulate the preparation, production, storage and distribution of halal animal feed. Due to the rising concern of the safety of animal feed, a halal standard related to halal animal feed should be developed at the national level to strengthen the implementation of the Animal Feed Act 2009 towards regulating safe and halal feeding practices.

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