

## ***Animal Feed; Analytical Study of Pakistan Standard in the Light of Shariah***

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### ***Abstract***

*This research paper explores the standards governing animal feed in Pakistan, analyzing them through the lens of Shariah compliance. Since the demand for animal products is growing day-by-day and on the other side, feed formulations also getting complex, it becomes essential to ensure that the ingredients used align with Islamic dietary laws. The study is aimed to investigate different components of animal feed, including additives, preservatives, and nutritional supplements, and then evaluate their permissibility in the light of principles of Shariah. And to highlight areas of conformity and non-conformity with Islamic teachings by examining the existing regulations and industry practices. It also provides recommendations for harmonizing Pakistan's animal feed standards with Shariah guidelines. The findings are intended to inform policymakers, industry stakeholders, and scholars about the critical intersection of food security, animal health, and religious compliance in the context of Pakistan's agricultural sector.*

**Keywords:** *Animal Feed, Additives, Pakistan Standards,*

### **Introduction:**

In the economy of Pakistan, the livestock sector plays a crucial role. As it contributes significantly to the agricultural output and provides livelihoods to millions of people. With the increasing demand for high-quality animal products, the importance of animal feed (both in terms of its nutritional value and its compliance with Islamic dietary laws) has become prominent. According to the Islamic guidelines, consumption of permissible (halal) food is a fundamental principle, and this extends to animal feed that directly influences the quality of the animal products consumed by the humans. This research paper aims to conduct an analytical study of the current standards of animal feed in Pakistan, examining how these standards align with Shariah principles. By addressing the complexities of feed formulations and their implications for both animal welfare and human health, this study seeks to contribute to a deeper understanding of the necessity for Shariah compliance in the production of animal feed within the context of Pakistan's regulatory framework.

### **Animals feed:**

Feed or food is a material that after getting ingested by animals, is capable of being digested, absorbed and utilized. In simple words, the term 'food' is used to describe edible material. In case of animals, grass and hay, for example, are described as foods.<sup>1</sup>

According to Encyclopedia Britannica, feed is the food grown or developed for livestock and poultry.<sup>2</sup> It can be explained as any substance containing organic or mineral nutrients that the

<sup>1</sup> C. A. Morgan, J. F. D. Greenhalgh, L. A. Sinclair, and R. G. Wilkinson, *Animal Nutrition*, 7th ed. (Pearson, 2010), 3.

<sup>2</sup> Holden, Palmer J., and John K. Loosli. "Feed." *Encyclopedia Britannica*, 10 July 2023. <https://www.britannica.com/topic/feed-agriculture>. Accessed 25 August 2024.

animal's body can benefit from, serving the function of satiety, and having no adverse effects on the animal's health when given in appropriate quantities."<sup>3</sup> Good nutrition plays a fundamental role in the health, activity, and disease prevention of animals. Consequently, it directly impacts the quality of animal products reaching consumers. In this context, attention has been directed towards the quality of the feed used to nourish animals, ensuring it contains the necessary nutrients and is free from harmful substances.

Animal nutritive needs may be fulfilled by great number of feeds, and their choice depends on animal species and category, level of production, health, environment conditions and others. In a study conducted in 2009, it was claimed by the researcher that it is generally accepted that more than 2000 various feedstuffs are used in the world.<sup>4</sup> Nutritive values of various feeds can be very different for their different nutrient composition or the method of processing or conservation or some other factors. The possibilities for reciprocal substitution or supplementation of their nutritive value have great significance for profitability in animal production, and for fulfilment of various needs of modern farmers. In addition to usual feedstuffs, various additives have great significance for intensive animal production. Based on nutritive, prophylactic, conserving or some other role, additives stimulate better utilization of diets of concentrate mixtures.<sup>5</sup> These various types of animal feeds include:

- High-value concentrates
- Green forage
- Roughage feeds
- Secondary products

#### **High-value concentrates:**

Concentrates are considered among the best types of animal feed worldwide, providing animals with significant energy or protein, contributing to their overall health and productivity. They are named concentrates because they have a high concentration of a specific substance, such as protein, starch, fat, or sugar. However, the fiber content in these concentrates is low, not exceeding 16%. Concentrates are divided into two types: energy and protein concentrates. Energy concentrates provide animals with substantial energy so are widely consumed like barley, corn, and by-products of grains like wheat or rice bran. Molasses, such as sugarcane molasses etc. Protein concentrates, differing from energy concentrates, are protein-focused, delivering a concentrated number of proteins to animals, such as soybean meal, sesame meal, or animal products like fishmeal, meat, or dried milk.

#### **Green Forage:**

Green forage, primarily derived from plant sources, contains a significant amount of necessary nutrients for animal health and disease prevention, serving as a fundamental component in livestock nutrition. Green forage is categorized into several types: winter green forage being available abundantly in the winter season, includes Egyptian clover, ryegrass, fodder beet. Summer green forage is widespread around the world, including leguminous greens, grass greens

<sup>3</sup> Muhammad Farid, Dr., *Usūs al-Taqsīm wa al-Tasnīf al-Ghidha' i li Mawād al-'Alaf* (Damascus: al-Markaz al-'Arabi li Dirāsāt al-Manātiq al-Jāfah, Jāmi'at al-Duwal al-'Arabiyyah), 5.

<sup>4</sup> Đorđević, N., G. Grubić, B. Dinić, J. Lević, B. Stojanović, and A. Božičković, *Animal Feed Quality—Past and Present*, in *Biotechnology in Animal Husbandry*, XII International Symposium on Forage Crops of Republika of Serbia – Forage Crops Basis of the Sustainable Animal Husbandry Development, vol. 26 (special issue). 2010, 249-260.

<sup>5</sup> Ibid.

etc. Perennial green forage is found in specific areas and can be available at any time of the year. For example, elephant grass, Hijazi clover etc.

### **Roughage feeds:**

Roughage is characterized by its large volume and a significant amount of crude fiber, but it is relatively low in energy content. Given its widespread availability compared to other types, it is one of the most consumed types of animal feed globally. Roughage is also divided into two main categories: dry and succulent roughage. The first one contains a high percentage of fiber and a low moisture content. It includes materials like bagasse, chaff, chaffed grains and husks etc.. On the contrary, succulent roughage has moisture content exceeding 70% and lower fiber content. Examples include tubers, roots, silage (green fodder preserved in a moist form for fermentation, commonly used during the absence of other types).

### **Secondary products:**

A significant portion of animal feeds worldwide includes by-products in their composition, often derived from the processing of materials intended for human consumption. Among the well-known secondary products are wheat bran and wheat germ flour, bakery waste and bread residues, various pastry leftovers, pineapple pulp or peels, as well as residues fruits and vegetables in general. Additionally, leftovers from slaughterhouses and poultry waste are considered secondary products in the realm of animal feeds.<sup>6</sup>

Among all these types of animal feeds, secondary products need to be evaluated as leftovers from slaughterhouses and poultry waste are impure, and the jurists have a great discussion in this matter and the opinion of impermissibility of such feed is preferred. It will be reviewed in upcoming discussion in detail.

### **Additives in Animal Feed:**

Bird and animal farming have spread significantly in modern era, aiming to meet the increasing demand for meat, dairy products, eggs, and various other animal-derived foods. Large companies have emerged to produce massive quantities of these products to serve the crucial demands of people.

These companies often add additives to their products, including animal feed, to enhance the product's quality, shelf life, and for various reasons. In the context of "bird and animal farming," the incorporation of additives serves purposes such as improving the nutritional content of the feed, promoting animal growth, and preventing diseases among the livestock. While these additives aim to optimize production efficiency and meet the increasing demands for animal-derived products, their usage raises concerns about potential health risks and the adherence to Islamic dietary guidelines.

Therefore, it becomes essential to evaluate the incorporation of these additives within the context of halal principles. This involves examining potential health concerns and ensuring compliance with Islamic dietary guidelines in the practices of animal farming and the resultant quality of the consumed products. So first we shall explore the important types of substances added to animal feeds and an explanation of their dangers, then shariah ruling on these additives will be discussed.

Some companies and farms race unethically, to maximize profits, often at the expense of the quality and suitability of the food for human consumption. They have utilized all available

<sup>6</sup> Alaa Ali, *Anwa' al-A'laf al-Hayawaniyah Hawl al-'Alam*, published by 'Al-Montaj,' May 12, 2023, available at <https://almontag.com/العالم-حول-الحيوانية-الأعلاف-أنواع/>, accessed November 20, 2023, 10:28 PM.

resources in the primary production stages, manufacturing, preservation, distribution, and beyond.

Environmental scientists point out that the danger or harm in these products during their production stages lies in the method of feeding animals and poultry. Among the most critical types of additives in animal feeds, environmental scientists mention the potential harm of the following:

**Firstly: Harmful substances in animal feeds:**

In the feeds of farmed animals containing crops or grains, additional substances, such as protein, vitamins, salts, poultry manure, dried blood, or fish powders are added to enhance their nutritional content. Since these feeds are stored in such environmental conditions that encourage the growth of insects, bacteria, and fungi, they consistently contain concentrations of health-hazardous substances.<sup>7</sup> Notable examples include:

- 1) Through the analysis of many samples of various types of animal feed or poultry feed, it has been found that most of these samples contained residues of dangerous pesticides.
- 2) Analysis of many samples of poultry or animal feed revealed high levels of heavy metals. Although animals can utilize the needed heavy elements from their food and eliminate the rest, the presence of these elements in the contaminated water they drink can lead to the accumulation of these elements in the animals' meat, indirectly reaching humans.
- 3) Some animal breeders are observed to reuse waste from certain animals to feed others. For example, poultry manure is currently used to feed cattle after mixing it with a quantity of feed. While it usually contains a high percentage of urea that the organisms in the rumen of ruminant animals can benefit from, samples taken from the meat of the animals showed an elevated urea concentration. The danger of urea in humans is well known.<sup>8</sup>
- 4) Additionally, some poultry companies feed their chickens on leftover moldy bread. This bread typically contains significant amounts of toxic substances produced by the mold, which can, in turn, be transmitted to humans.<sup>9</sup>

**Secondly: Adding hormones to animal feed:**

Many companies have resorted to using hormones after their successful widespread use in vegetable and fruit production. As birds are warm-blooded animals and are considered close relatives to humans, scientific studies have clarified that certain hormones affect the overall growth of birds. This has led some poultry breeders to use hormones in poultry production, causing a significant increase in the weight of chickens (approximately 14%) in a short period, around 48 days. And usually, these hormones transfer to the blood and meat of the birds, directly affecting humans during consumption, causing some risks such as imbalances in the physiological equilibrium in the human body and causing damage to the breasts and reproductive system

<sup>7</sup> Ahmed Abdel Wahab Abdel Jawad, Prof. Dr. *Talawwuth al-Mawad al-Ghidhaiyah* (Dar al-‘Arabiyah lil-Nashr wa al-Tawzi’, Cairo, Egypt, 1995), 127. *Al-Manhaj al-Islami li ‘Ilaj Talawwuth al-Bi’ah* (Dar al-‘Arabiyah lil-Nashr wa al-Tawzi’, Cairo, Egypt, 1991), 66.

<sup>8</sup> Ahmed Abdel Wahab Abdel Jawad, Prof. Dr. *Talawwuth al-Mawad al-Ghidhaiyah*, 127-129

<sup>9</sup> Ahmed Abdel Wahab Abdel Jawad, Prof. Dr. *Al-Manhaj al-Islami li ‘Ilaj Talawwuth al-Bi’ah*, 67.

This contamination has spread to cattle breeders, where it has been found that some cattle breeders abroad use similar hormones to increase the quantity of meat produced from cattle.<sup>10</sup> Similarly, some fish farms add certain male hormones to the aquatic environment to achieve general male characteristics, characterized by larger size. This has the same previous impact on human health.

Environmental scientists note that one of the most significant causes of chemical pollution in food is the use of hormones to accelerate the growth of animals. This phenomenon is prevalent in both developing and developed countries.<sup>11</sup> Advanced nations have become aware of this issue and prohibited the use of such hormones after confirming that they disrupt the hormonal system in the human body.<sup>12</sup>

#### **Thirdly: Adding tranquilizers to animal feed:**

Experts differ on the impact of tranquilizers, that are used in animal production, especially in intensive farming in confined spaces. Breeders have turned to using many tranquilizers to reduce psychological stress due to overcrowding, which can make animals aggressive and hinder their proper feeding. For example, the feed efficiency ratio was 3.6:1 kilogram of feed to meat in animals that did not receive tranquilizers. This ratio decreased to 2.6:1 kilogram of feed to meat when tranquilizers were administered. Meat producers accept the use of these tranquilizers to minimize feed quantity and increase meat production in animals.

Scientists note that the impact and danger of these tranquilizers on human health may extend over several years due to the accumulation of these effects and the resulting serious chronic diseases.<sup>13</sup>

#### **Fourthly: Adding medications and antibiotics to animal feed:**

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#### **Contemporary Animal Feed:**

In contemporary times, to meet the food requirements of farmed animals, the preparation of animal feed has become an industry. The industrialists prepare animal feed, especially the feed for poultry, pig and fish farms, using animal by-products, the waste of slaughterhouses and then mixing it in other feed components.

Syed Fazal ur Rahim, an expert of halal industry, referring to the US department of agriculture, stated that there are certain animal-based ingredients that are used in manufacturing of feed and

<sup>10</sup> Ahmed Abdel Wahab Abdel Jawad, Prof. Dr. *Al-Manhaj al-Islami li 'Ilaj Talawwuth al-Bi'ah*, 68-69.

<sup>11</sup> *Al-Bi'ah*, lil-Faqi, p 159-160

<sup>12</sup> Ahmed Abdel Wahab Abdel Jawad, Prof. Dr. *Talawwuth al-Mawad al-Ghidhayah*, 137-138.

<sup>13</sup> *Ibid*, p. 136-137

<sup>14</sup> *Ibid*.

that is legal. These are rendered protein meals and dried waste.<sup>15</sup> The rendered protein comes in various forms including meals of meat, blood, feather, eggs shells and hair of poultry, swine and ruminants. While the dried wastes of poultry, swine and ruminant are used in both dry and non-dry processed forms. Alongside these, by-products of marine industry also provide valuable feed ingredients such as fish liver oil and meals of fish, crabs and shrimps.<sup>16</sup> Dairy industry also provides some ingredients for the use in animal feed in the form of dried milk, casein, whey and cheese.<sup>17</sup>

In Europe, it has also been legalized to use animal byproducts in animal feed. According to a study, the European Union food and feed policy provides extensive legislation to safe disposal and use of animal by-products in farm animal feeding. The last changes in the legislation refer to the authorization of non-ruminant processed animal proteins in aqua feed. The approval of PAPs in the pig and poultry sectors is possible only when validated diagnostic methods to test species specific product in feed are established. According to the newest EU resource efficiency expectations the feed use of ABPs and former food stuffs is a way of optimization towards achievement of maximum nutritional potential.<sup>18</sup>

Another study analyses that animal-based ingredients are of critical emphasis due to the possibility that the materials may possibly be derived from non-halal animals (especially swine and its derivatives). As the use of blood and meat bone meal (MBM) is still prevalent in animal feed production in Malaysia. Furthermore, meat and bone meal are made from slaughterhouses wastes and dead animals.<sup>19</sup>

In summary, animal by-products are a significant part in contemporary formulation of animal feed, providing essential nutrients that support growth and health in various livestock species. As noted by the National Research Council, animal by-products such as meat and bone meal are valuable sources of protein and minerals in poultry diets.<sup>20</sup> The inclusion of animal by-products in feed formulations helps to ensure the nutritional adequacy of diets for rapidly growing animals. These ingredients, while often subject to rigorous safety standards, remain a key component in modern feed production, reflecting both their economic and nutritional benefits.

However, the use of such by-products needs to be carefully assessed from a Shariah perspective to ensure that the feed ingredients comply with Islamic dietary laws, particularly concerning the permissibility of the sources and the processes involved in their preparation. This consideration is crucial for maintaining both the religious and nutritional integrity of the food chain.

<sup>15</sup> U.S. Department of Agriculture. *The Formula Feed Manufacturing Industry*, (Washington DC,1984 (SB-785)). U.S. Department of Agriculture, *Economic Research Service*, 1988.

<sup>16</sup> Bhosale, Sukhada, Madhav Bhilave, and Sayra Nadaf. *Formulation of Fish Feed using Ingredients from Plant Sources* (Research Journal of Agricultural Sciences, 2010), 284-287.

<sup>17</sup> El-Tanboly, El-Sayed, Mahmoud El-Hofi, and Khorshid. *Recovery of Cheese Whey, a by-Product from the Dairy Industry for use as an Animal Feed* (Journal of Nutritional Health & Food Engineering, 2017), 6(5): 148–154. DOI: 10.15406/jnhfe.2017.06.00215.

<sup>18</sup> Jędrejek, D., Lević, J., Wallace, J., and Oleszek, W. *Animal by-products for feed: characteristics, European regulatory framework, and potential impacts on human and animal health and the environment* (Journal of Animal and Feed Sciences, 2016), 25(3): 189–202. <https://doi.org/10.22358/jafs/65548/2016>.

<sup>19</sup> Saidin, N., Abd Rahman, F., and Yaakob, M. A. Z. *Developing the Halal Animal Feed Standard: Analysis of Feed Supply Chain Issues* (Al-Qanatir: International Journal of Islamic Studies, 2022), 28(2): 83–91. Retrieved from <https://al-qanatir.com/aq/article/view/572>.

<sup>20</sup> National Research Council. *Nutrient Requirements of Poultry: Ninth Revised Edition* (National Academy Press, Washington, DC, 1994), 70.

### The Shariah ruling on animal feed:

After considering all the details mentioned above, it can be concluded that the main sources of animal feed are grass, crop residues and grains. If animals are fed with only this type of feed, it does not have any impurity or harmfulness, thus making no objection from shariah perspective.

However, due to various practical considerations, animal farmers may not always rely on grass, forage, and fodder for feeding purposes. Cost and availability play a significant role, as this natural feed might not be readily accessible round the year and is expensive to produce, particularly in areas with limited land or unfavorable climates. Additionally, commercial feed is specifically formulated to meet the precise nutritional needs of animals. This feed offers a balanced mix of nutrients that include proteins, vitamins, and minerals which may not be easily obtained from grass and forage alone. Farmers focused on maximizing production often choose commercial feed to promote faster growth, higher milk production, or increased egg yields. Moreover, the convenience of storing, transporting, and distributing commercial feeds, especially in large-scale operations, makes them more appealing than managing natural forage.

On the other hand, some secondary products or additives may have harmful components. Nurulaina Saidin and others, while exploring the shariah perspective on animal feed, has discussed the issue of fish cultivated on swine bone and concluded that it is banned due to this filthy feeding. They also highlighted other concerns in animal feeding, including the utilization of animal extracts for animal nutrition and the incorporation of growth hormones and antibiotics as additives.<sup>21</sup>

The issue can be discussed from various angles; initially, we explore the details into the aspect of feeding, which can be categorized as pure or impure. Pure feed is liked and preferred but seems exceedingly difficult in modern day animal farming for various reasons. However, impure feed is further divided by scholars into two types.

1) Najs (النجس filthy):

The first type is the inherently impure (najs), which cannot be purified, such as urine, feces, blood, carrion, and swine. It means the utilization of a substance, that is inherently forbidden, in the animal feed. An example is the cultivation of fish on swine bone, where swine bone is prohibited due to its impurity (najs).

2) Mutanajjis (المتنجس impure):

The second type is the contaminated (mutanajjis), which is not impure in its essence but acquires impurity from something else, so it can be purified, such as contaminated water, a soiled garment, tainted food, and impure animal feed.

The Jurists hold the opinion that both types of feed can be provided to non-edible animals, which are impermissible for human consumption. And majority of the jurists allow the provision of the second type of feed, i.e. mutanajjis (impure) to all the animals, i.e. edible and nonedible.

As it is stated in Al-Mudawwana, regarding impure honey, there is no harm in feeding it to bees.<sup>22</sup>

Qazi Sanad a commentator of Al-Mudawwana, stated that similarly, food that is kneaded or cooked with impure water can be fed to livestock and animals, whether it is edible animal or

<sup>21</sup> Saidin, Nurulaina, et al. *Animal Feed: Shariah Perspective* (International Journal of Civil Engineering and Technology, 2018; 9[13], December), 1364–1374.

<sup>22</sup> Malik ibn Anas ibn Malik ibn ‘Amir al-Asbahi al-Madani, *Al-Mudawwanah* (Beirut, Lebanon: Dar al-Kutub al-‘Ilmiyyah, 1415 AH / 1994 CE), 1: 131.

otherwise, according to the apparent statement of Al-Mudawwana. Also, impure water can be given to animals, crops, plants, and all other trees.<sup>23</sup>

Imam al-Nawawi also stated the same opinion in al-Majmu' saying that if flour is kneaded with impure water and then baked, it is impure and prohibited to eat. However, it is permissible to feed it to a sheep, camel, cow, or the like. This is the explicit statement of al-Shafi'i,<sup>24</sup> and it is narrated by al-Bayhaqi.<sup>25</sup>

Ibn Qudamah mentioned that if the dough or similar becomes impure, there is no way to purify it because it cannot be washed. Similarly, if sesame seeds or grains are soaked in impure water until they swell and become wet, they do not become pure. Imam Ahmad bin Hanbal said about (this) dough and sesame seeds that it can be given to the animals that are slaughtered for their meat, but it should not be given to animals whose meat is to be consumed soon.<sup>26</sup>

### Impure Feed:

As for feeding animals with what is inherently impure (النجس), they have differed regarding the ruling with two opinions:

Majority of the jurists from the Hanafi, Maliki, Shafi'i and Hanbali Schools prohibit feeding animals inherently impure substances such as carrion, pork, blood, and excrement.<sup>27</sup> They base this prohibition on the fact that Allah has permanently forbidden these things, making any utilization of them impermissible under any circumstances. As He says:

حُرِّمَتْ عَلَيْكُمُ الْمَيْتَةُ وَالْدَّمُ وَلَحْمُ الْخِنْزِيرِ وَمَا أُهْلَ لِغَيْرِ اللَّهِ بِهِ<sup>28</sup>

Ibn Kathir explained it as Allah informs His servants of the prohibition and warns against dealing with these forbidden things, such as carrion, which is an animal that dies naturally without being slaughtered, hunted, strangled, choked, gored, or attacked by a wild beast. This prohibition is due to the harm it carries, as it contains congealed blood, making it harmful to both religion and the body, therefore, Allah, the Almighty, has prohibited it. His statement 'وَالدَّم' refers to the spilled or

flowing blood. And His statement, "وَلَحْمِ الْخِنْزِيرِ" refers to the whole animal, including the fat.<sup>29</sup> It is also supported by the narration of Jabir bin Abdullah (may Allah be pleased with him), who reported that the Messenger of Allah (peace be upon him) said during the Year of the Conquest while he was in Mecca, "Verily, Allah and His Messenger have prohibited the sale of wine, dead animals, swine, and idols." It was asked, "O Messenger of Allah! What about the fat of dead animals, for it was used for greasing the boats and the hides, and people use it for lights?" He said, "No, it is forbidden." Then the Messenger of Allah (peace be upon him) said at

<sup>23</sup> Shams al-Din Abu 'Abdullah Muhammad ibn Muhammad ibn 'Abd al-Rahman al-Tarabulsi al-Maghribi, known as al-Hattab al-Ru'ayni al-Maliki, *Mawahib al-Jalil fi Sharh Mukhtasar Khalil* (Beirut: Dar al-Fikr, 1412 AH / 1992 CE), 1: 168.

<sup>24</sup> Al-Nawawi, *Al-Majmu' Sharh al-Muhadhdhab* (Beirut: Dar al-Fikr), 9: 29.

<sup>25</sup> Al-Bayhaqi, Abū Bakr Ahmad ibn al-Husayn al-Khurasani, *al-Sunan al-Kubrā* (Beirut, Lebanon: Dār al-Kutub al-‘Ilmiyyah, 1424 AH - 2003 CE), 1: 357, no. 1114.

<sup>26</sup> Ibn Qudamah, *Al-Mughni*, 1: 29.

<sup>27</sup> Al-'Ayni, *Al-Binayah Sharh al-Hidayah*, 12: 356; *Sharh Mukhtasar Khalil lil-Kharshi*, 1: 97; *Mawahib al-Jalil fi Sharh Mukhtasar Khalil*, 1: 120; *Kifayat al-Nabih fi Sharh al-Tanbih*, 8: 254.

<sup>28</sup> Al-Ma'idah 5:3

<sup>29</sup> Abu al-Fida' Isma'il ibn 'Umar ibn Kathir, *Tafsir al-Quran al-'Azim*, edited by Sami bin Muhammad Salamah (Riyadh: Dar Taybah lil-Nashr wa al-Tawzi', 1420 AH - 1999 CE), 3: 16.



that moment, "May Allah curse the Jews; when Allah forbade them the fat of animals, they melted it and sold it, and they utilized its price (received from its sale).<sup>30</sup>

The Prophet Muhammad (peace be upon him) has made clear that the prohibition of certain items, such as wine, dead animals, swine, and idols, extends beyond their consumption to include their sale, use, and any form of benefit. He emphasized that even if these prohibited items have practical uses, such as the fat of dead animals for greasing or lighting, they remain forbidden. He also warns against attempting to circumvent divine prohibitions for personal gain and exemplified the Jews who were cursed for selling the forbidden fat. Ibn Battal says the Muslim community unanimously agrees that it is not permissible to sell dead animals and idols because it is not allowed to benefit from them. Placing a price on them would be a waste of money, and that is forbidden by the Prophet PBUH.<sup>31</sup>

Now, some statements of the different schools of thought regarding the ruling of benefiting from dead animals are also worth to be quoted:

Al-Jassas said, "Our scholars have stated: It is not permissible to benefit from dead animals in any way, and dogs and predators should not be fed with them, as that constitutes a form of benefitting from them, while indeed, Allah has absolutely prohibited carrion, emphasizing the prohibition with a clear and unequivocal ban. And it is not allowed to benefit from any part of it unless there is specific evidence allowing it."<sup>32</sup> Some other scholars also have mentioned same opinions:

According to the statements of Hidayah "and they (jurists) mentioned reasons for not benefiting from wine: using it as medicine for congestion, providing it to animals, pouring it in drains or using it in ointments or perfumes, and similar purposes. due to the prohibition of utilizing the impurity".<sup>33</sup>

Al-Kharshi states: "As for impurities, which are inherently impure like urine and the like, it is not permissible to benefit from them."<sup>34</sup>

Ibn Qudamah said: "Imam Ahmad said: I do not see (permissible) if anyone feed his trained dog or a trained bird with carrion, as it would be encouraging it to eat flesh. However, if his dog eats from it, I do not see any objection for its owner, perhaps Ahmad disliked a trained dog that, when it catches and kills, eats from it, for owner's encouraging his dog by feeding it carrion."<sup>35</sup>

All the above-mentioned quotes of learned scholars indicate that no form of use or benefit from impure things is considered permissible.

### **The second opinion:**

On the other hand, some scholars are of the opinion that feeding animals with inherently impure things is permissible. This is the opinion of Al-Jallab (among the Malikites) and of Hanbalites in nonedible animals, while in edible animals, they do not allow when the animal is to be slaughtered or milked soon.<sup>36</sup> They obtain evidence from a hadith reported in the books of both Bukhari and Muslim. Nafi' narrated that Abdullah bin Umar, may Allah be pleased with them,

<sup>30</sup> Reported by Al-Bukhari in *Kitab al-Buyu'*, *Bab Bay' al-Maytah wa al-Asnam*, and by Muslim in *Kitab al-Buyu'*, *Bab Tahrim Bay' al-Khamr wa al-Maytah wa al-Khinzir wa al-Asnam*

<sup>31</sup> Ibn Battal, *Sharh Sahih al-Bukhari*, 6: 360.

<sup>32</sup> Al-Jassas, *Ahkam al-Quran*, 1: 130.

<sup>33</sup> See: Al-'Ayni, *Al-Binayah Sharh al-Hidayah*, 12: 356. and other commentaries on it.

<sup>34</sup> Al-Kharshi, *Sharh Mukhtasar Khalil*, 1: 97.

<sup>35</sup> Ibn Qudamah, *Al-Mughni*, 9: 429.

<sup>36</sup> Burhan al-Din, Ibrahim ibn Muhammad Ibn Muflih, *Al-Mubdi' Sharh al-Muqni'* (Beirut: Dar al-Kutub al-'Ilmiyyah, 1418 AH / 1997 CE), 8: 13.

informed him that the people dismounted with the Messenger of Allah ﷺ, to the land of Thamud, Al-Hijr. They drew water from its well and kneaded their dough with it. The Messenger of Allah ﷺ, ordered them to pour out what they had drawn from the well and to feed the camels with dough. He commanded them to draw water from the well that the camel used to come there.<sup>37</sup> This hadith suggests that if permissible thing is contaminated with what is not permissible for human consumption, then it can be fed to camels and animals. Because there is no obligation on them.<sup>38</sup>

Islamic law requires the additives used in animal feed to be in accordance with the specific guidelines to ensure that the resulting animal products remain permissible for consumption. It is important to note that additives are not the primary feed but rather a small component added to enhance the nutritional value, flavor, or shelf-life of the feed.

The use of additives in animal feed is permissible in Islam as long as they are derived from Halal sources, do not cause harm, and do not render the animal or its products Haram. Farmers and producers must ensure that any additives used comply with these Shariah guidelines to maintain the Halal integrity of the food products derived from the animals.

### **Pakistan Standard:**

The halal standards developed in Pakistan have key contributions by several institutions, with significant input from both government and private organizations. Following are some important stakeholders of the standard:

- **Pakistan Standards and Quality Control Authority (PSQCA):** The PSQCA has been established through Act-VI of 1996 to provide one window services for standardization and conformity assessment. It has formulated Pakistan's halal standards, which cover halal food production, processing, and certification requirements. These standards are aligned with international practices, covering a wide range of products to ensure compliance with Islamic principles as well as international standards.<sup>39</sup>
- **Pakistan Halal Authority (PHA):** The authority, being official halal body, was established under the Ministry of Science and Technology in 2016 to regulate and certify halal products, particularly for the food, cosmetics, and pharmaceutical industries. The authority is responsible for establishing halal standards in line with Islamic teachings and international halal standards, such as those from the Organisation of Islamic Cooperation (OIC). The PHA is further mandated to ascertain the halal status of the products, process and services maintained and monitored at all times in local market as well as products being imported/ exported. To promote trade and commerce in Halal articles and processes is also included in its mandate.<sup>40</sup>

There are various certification bodies that cater to both local and export markets and work to implement halal standards. However, there have been challenges in ensuring uniformity, which has led to different certification practices across various sectors. Some efforts are underway to standardize the certification process for products labeled as halal, which is crucial for both consumer trust and the country's growing halal export market.

<sup>37</sup> Reported by Al-Bukhari, *Kitab al-Anbiya*, Bab Qawl Allah Ta'ala {والى ثمود أخاهم صالحا} [Hud 61], 3: 1237. and Muslim ibn Hajjaj, *Kitab al-Zuhd*, Bab La Tadkhuloo Masakina Alladhina Thalamoo Anfusuhum Illa An Takoono Bakiyeen, 8: 221.

<sup>38</sup> Ibn al-Arabi, *Ahkam al-Quran* (Beirut: Dar al-Kutub al-'Ilmiyyah, 1424 AH / 2003 CE), 3: 109.

<sup>39</sup> Government of Pakistan, *Act No. VI of 1996, The Gazette of Pakistan Extra*, (Islamabad, 17 March 1996).

<sup>40</sup> Government of Pakistan, *Act No. VIII of 2016, The Gazette of Pakistan Extra*, (Islamabad, 01 March 2016).

Pakistan standard aims to position the country as a competitive player in the global halal industry. However, to align fully with global standards, continuous efforts are needed in certification, product quality, and consumer education. Although the regulatory framework exists, strict enforcement and monitoring is required. It will ensure that all halal-labeled products comply with these standards across the market, which is very challenging, largely due to resource constraints.

Pakistan's halal standards, especially under the PHA and PSQCA, have strong potential to enhance both local and international trust in halal products from Pakistan. Given the country's Islamic identity and consumer demand, the focus remains on strengthening regulatory oversight, certification quality, and international alignment.

In Pakistan standard, it is required that the animal feed must be free from porcine origin, which is absolute filth. It also suggests that the standard has not considered other things. It further requires that the feed must be suitable to the nature of animal.<sup>41</sup>

### **Conclusion:**

In conclusion, this study reveals significant complexities and challenges. This research highlights the critical importance of ensuring that animal feed not only meets nutritional requirements but also adheres to Islamic dietary laws. Through the analysis of various feed types, including high-value concentrates, roughage feeds, and contemporary feed formulations, it is identified that there is a range of additives and substances that may pose potential risks to both animal health and human consumers. The analysis of harmful substances, hormones, tranquilizers, and antibiotics stresses the necessity for stringent regulatory measures to safeguard the halal integrity of animal products. The differing opinions regarding the permissibility of certain additives and the categorization of impure feed further complicate the landscape, necessitating a nuanced understanding of Shariah rulings. This paper advocates for a holistic approach to animal feed standards in Pakistan, emphasizing the need for policies that not only enhance food security and livestock health but also ensure compliance with Shariah principles. By addressing the identified gaps and inconsistencies in current practices, stakeholders can work towards a more responsible and ethical framework for animal feed production that aligns with both modern agricultural demands and Islamic teachings. The recommendations outlined in this study aim to provide practical steps for policymakers, industry professionals, and scholars to foster a sustainable and compliant animal feed industry in Pakistan.

### **Recommendations:**

The study is ended with the following brief recommendations:

- \* The regulatory framework for animal feed must be strengthened by setting up a dedicated inspection and monitoring system to verify compliance with halal standards throughout the supply chain, from raw materials to finished products.
- \* Continuous research needs to be promoted into alternative ingredients for animal feed, such as plant-based proteins, organic minerals, and natural preservatives. The use of alternative, Shariah-compliant ingredients will improve the purity and safety of animal feed while catering to the growing demand for halal products.

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<sup>41</sup> PSQCA, Standards Development Centre, *PS OIC SMIIC 1 2019 MOD\_3733, General Requirements for Halal Food*, National Annexure, NA.2, p iii

- \* Public awareness and educational campaigns are needed for producers, retailers, and consumers to highlight the importance of halal compliance in animal feed production and the potential risks of non-compliant feed on the halal status of meat.
- \* Shariah scholars and experts should be engaged in the certification process, especially for inspecting and approving animal feed ingredients, to ensure that all aspects meet Islamic requirements.

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