

ARTICLES

ISLAMIC PERSPECTIVES ON REDUCING MEAT CONSUMPTION TO PROMOTE EARTH'S SUSTAINABILITY

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Abstract: Livestock farming and meat consumption, especially red meat, both have a severe impact on the Earth's environment and sustainability, causing forest destruction, wildlife extinctions, excessive greenhouse gas emissions, and global climate change. Currently, as a protein source for the world's rapidly expanding middle class populations, increased meat consumption will likely put excessive strain on Earth's well-being, exceeding planetary boundaries of safety. Although God Almighty provided livestock for human benefit, today considerations of protecting the higher objectives (*maqasid*) of Islamic shariah, the *fiqh* principle (*qawa'id*) of reducing harm, and also promoting social equity and physical health, require Muslims to reduce meat consumption and live more simply, like the Prophet (pbuh) and his Companions, who were 'semi-vegetarians'.

The review of animal sacrifice in Islam, particularly during the annual Eid ul-'adha celebration, confirms that Islam strongly promotes these practices. However, the alternative to sacrificing (fasting for *Tamattu'* and *Qiran* pilgrims) should be availed upon wherever possible, not just during Eid ul-'adha. Mujtahids should investigate in which situations, such as following large-scale human calamities or cases of severe environmental harm, Islam may permit the giving of *sadaqah* or other aid instead of the traditional sacrifice.

Keywords: *Aqiqah*, Environment, *Hady*, Hajj, Livestock, Meat, Pets, Shariah, Sustainability, *Udhiyyah*, Vegetarianism.

Introductory Remarks

This article reports on research into improving Earth's sustainability by curbing meat consumption. Islam traditionally encourages animal sacrifice at the time of the Hajj pilgrimage. The sacrificial meat is consumed. Awareness about the severity of widespread human-induced environmental degradation, however, encourages us to re-evaluate livestock farming and meat consumption. Is it

time to reappraise Islam's position on animal sacrifice, given that it desires to promote the public good (*maslahah*) and prevent harm?¹

This research acknowledges that one driver behind reduced meat consumption is the need to reduce the unacceptable cruelty that results from the raising and handling of livestock, as sometimes witnessed in the media. Such practices have no place in producing *halal at-tayyibah* meat for human consumption. It is hoped that practices will be upgraded to avoid or minimise harm to animals in strict accordance with Islamic ethics. Lujayn Hawari's 2017 study, entitled "The Vegetarian and Vegan Diets: An Islamic Perspective," has stimulated thought in this area and provides useful background for the current research, albeit from a vegan's perspective.²

Islamic Teachings on Human Benefits from Livestock

Many Qur'anic verses instruct us that cattle have been created to provide humans with numerous benefits: meat, milk, a form of transport, to make ploughing easier, as a source of clothing and habitation materials, articles of convenience, and also for religious sacrifices to God Almighty. The following verse sketches the multifold uses of cattle, stating that Allah created them especially for human use:

It is God Who made cattle *for you* [emphasis added], that you may use some for riding and some for food; and there are (other) advantages in them for you (besides); that you may through them attain to any need (there may be) in your hearts; and on them and on ships you are carried. (Ghafir 40:79-80)

Although in the developing world all of these benefits may still be relevant, in technically advanced countries there is no longer demand for cattle to serve as transport, to be used for ploughing, or for habitation materials. The main contemporary uses for these animals are as a source of food (meat), beverage (milk), clothing articles (coats, belts, hats and shoes) and religious sacrifice. After many sacrifices, the animal is also distributed as meat for consumption.

The Environmental Impact of Raising Livestock and Meat Consumption

Greater public awareness is needed to address the fact that raising livestock for meat consumption has severe negative consequences on global environmental well-being and sustainability. The domestication of cattle resulted in the

expansion of grassland areas favourable for cattle rearing, often through forest destruction. Since mature forests are typically ten times as effective as perennial grasslands at storing carbon,³ forest clearing promotes global warming. Further, frequent belching of the potent greenhouse gas, methane,⁴ by ruminants⁵ (mostly cattle) accounts for 44 per cent of total greenhouse gas emissions (GHG) from the livestock industry.⁶

Based on a global meta-analysis of life cycle assessment studies, domestically-raised ruminant meat has a much higher carbon equivalent footprint when producing protein than other meats, while being especially greater than vegetarian sources.⁷ Ripple et al. have shown that ruminant animal production is the largest source of anthropogenic methane emissions and occurs more than any other land use, covering 26 per cent of Earth's terrestrial surface.⁸ Twenty-five million additional domestic ruminants have appeared annually over the past 50 years, vastly outnumbering their wild counterparts. According to the UN Global Livestock Emissions Assessment Model (GLEAM 2.0), average emissions (kg CO₂-equivalent per kg protein produced) due to beef cattle (295) are much greater than from small ruminants (sheep and goats) for meat (201) or milk (148), cattle for milk (87), pork (55), and chickens for meat (35) or eggs (31).⁹ Studies showed that "to produce 1 kg of protein from kidney beans required approximately 18 times less land, ten times less water, nine times less fuel, twelve times less fertilizer and ten times less pesticide compared to producing 1 kg of protein from beef."¹⁰ Significantly, large livestock that is not slaughtered and consumed as meat can provide milk and products such as butter, cheese and yoghurt, thereby providing greater life-long food yields.¹¹

Overall, the livestock sector is responsible for 14.5 per cent of all anthropogenic greenhouse gas emissions,¹² a greater amount than those produced by road vehicles, trains, ships and airplanes combined.¹³ Emissions derive from belching methane, manure, feed production, land use changes, and fossil fuel and fertiliser use. Livestock also accounts for 70 per cent of global agricultural land use.

The UN Environment Programme estimates that nearly half of the world's grains are fed to animals.¹⁴ Feeding crops to livestock competes directly with both human consumption and climate mitigation (that is, for bioenergy production and carbon sequestration). Livestock farming is also socially inequitable since feeding grain to livestock rather than people increases global demand, thus driving up grain prices for the poor. As wealthy people pay higher prices for red meat (beef, veal, pork, lamb and mutton), livestock farmers are able to pay more for grains than the poor can afford.

From 2010 to 2015, up to 8.8 million hectares of precious natural forest was lost annually,¹⁵ largely due to agricultural expansion. Such environmental

destruction severely impacts on indigenous peoples and local communities, 1.6 billion of whom – or one fifth of humanity – depend on forests for their livelihoods.¹⁶ Forests contain 80 per cent of the world’s terrestrial biodiversity,¹⁷ which is declining rapidly. Over the past 40 years, world wildlife populations have declined by 58 per cent,¹⁸ while 20 per cent of all species now face extinction.¹⁹ But livestock farming not only negatively impacts on biodiversity; it is also detrimental to water quality and availability, causing land degradation, while greenhouse gases acidify seas, causing coral reef degeneration. As biodiversity provides essential ecological life support for humans, deteriorating biodiversity affects human well-being in terms of material welfare, community security, local economic resilience, group relations, and human health. Biodiversity is considered by many to have intrinsic value.²⁰

Research on intensive agriculture just published in *Nature* confirms that reducing meat consumption is one of the leading challenges of this second millennium: “Between 2010 and 2050, as a result of expected [increases] in population and income levels, the environmental effects of the food system could increase by 50–90 per cent in the absence of technological changes and dedicated mitigation measures, *reaching levels that are beyond the planetary boundaries that define a safe operating space for humanity* [emphasis added].”²¹ The research shows that the Western world needs to cut its meat consumption by 90 per cent in order to avoid reducing Earth’s ability to sustain a forecasted 10 billion people by 2050. Scientists have therefore called for a “global shift” towards plant-based diets.²²

Animal Sacrifice in Islam

Udhiyyah refers to the livestock sacrifice offered by non-pilgrim Muslims during Eid ul-‘adha, while *hady* refers to the sacrifice offered by Hajj pilgrims as a gift to Allah’s House. Rulings from previous revelations often become accepted and incorporated within the shariah of Islam; *udhiyyah* is such an example, with the Prophet Muhammad (pbuh) instructing, “Give sacrifice, for it is the tradition of your ancestor, Abraham (pbuh).”²³ Wael Shehab highlighted that the main purpose of *udhiyyah* is “to show gratitude and thankfulness to Allah for his countless blessings and favors.” It also helps feed the poor, the needy, and one’s family and relatives. So, it has many religious, social, and economic benefits.²⁴

Islamic scholars differ concerning whether *udhiyyah* is obligatory or sunnah. The majority believe it is strongly recommended sunnah (*sunnah mu’akkadah*), as discussed by Mufti Mas’ud Sabri from the Awqaf Ministry, Kuwait.²⁵ The

sunnah view is held by Shafiiites, while also being the dominant opinion amongst Malikites and Hanbalites. It is also the opinion of Abu Bakr, Umar, Bilal, and Abu Maşud al-Badri. They cite as supporting evidence the hadith, “When the ten days [of Dhul-Hijjah] start and one of you intends to offer a sacrifice, then let him not remove any of his hair or nails.”²⁶ The Prophet (pbuh) here made the *udhiyyah* offering dependent on one’s will to do so. Furthermore, Abu Bakar and Umar abstained from offering *udhiyyah* lest people might deem it an obligatory practice. Sabri believes this constitutes conclusive proof that it is not obligatory, since the practice of these leading Companions is unanimously agreed upon as proof for the majority of scholars.

The second opinion, as held by Abu Hanifah and his companions, is that offering *udhiyyah* is obligatory. Supporting this, they quote the Qur’anic verse, “So, pray to your Lord and sacrifice (*anhar*)” (al-Kawthar 108:2). They believe the command given here denotes obligation; *anhar* derives from *nhr*, the many meanings of which in classical Arabic all go back to *nahr* (upper part of the chest or throat). In the context of the given verse, the meaning of *anhar* cannot be other than “to cut the throat (slaughter) of a sacrificial animal”.²⁷ Hanifites also quote the prophetic statement, “Whoever is able to offer the *Udhiyyah* sacrifice but has not offered it should not come near our place of prayer.”²⁸ This warning denotes the obligation of offering the *udhiyyah* sacrifice.

As Sabri summarised, the preponderant opinion is that *udhiyyah* is a strongly recommended sunnah so that “whoever can afford it and does not do so would have acted against the prophetic guidance, even though it is not obligatory.” This is similar to Imam Malik’s statement, “I prefer that anyone who has the price of the animal should not abandon [*udhiyyah*].”²⁹

Hady sacrifice, on the other hand, is obligatory for those performing *hajj tamattu’* (combining ‘*umrah* and *hajj*, exiting the state of *ihram* in between) and *hajj qiran* (not exiting *ihram* after finishing ‘*umrah* but continuing to perform *hajj*). It is sunnah, however, for those performing *hajj ifrad*. The obligation for *hajj tamattu’* and *hajj qiran* is stipulated in the following statement:

And when you are in peaceful conditions, if anyone wishes to continue the ‘*umrah* on to the *hajj*, he must make an offering (*hady*), such as he can afford, but if he cannot afford it, he should fast three days during the *hajj* and seven days on his return, making ten days in all. (al-Baqarah 2: 196)

Allah provides an option here for certain *hajj tamattu’* and *hajj qiran* pilgrims to fast for ten days instead of sacrificing an animal. To protect the environment, this would seem to be a better option. However, it should be noted that the Prophet (pbuh) considered *hady* to be the noblest possible act on the Day of

Sacrifice: “A human does no action from the actions on the day of *Nahr* more beloved to Allah than spilling blood. On the Day of Judgement, it will appear with its horns, and hair, and hooves, and indeed the blood will be accepted by Allah from where it is received before it even falls upon earth, so let your heart delight in it.”³⁰ The Prophet (pbuh) himself is reported to have sacrificed 63 camels when he performed Hajj.

Other animal sacrifices in Islam include a sacrificial penalty for hunting in the holy precincts (al-Ma’idah 5:95), *wajib* sacrifice (fasting or alms-giving) for the ill pilgrim (al-Baqarah 2:196), and compensation for a hindrance (*ihsar*) that caused incompleteness in the hajj rites (al-Baqarah 2:196). In all cases, you should offer such a sacrifice “as you can afford”. Other obligatory sacrifices relate to the issues of ‘*ahd* (pledge), *nadh*r (vow), and *yamin* (oath).³¹

Aqiqah is another form of animal sacrifice, made by parents after the birth of a child. It is also a legacy of Prophet Ibrahim (pbuh) adopted by Prophet Muhammad (pbuh). The word *aqiqah* comes from the Arabic ‘*aq*, meaning ‘to cut’ and refers to either ‘having the child’s first haircut’ or ‘slaughtering an animal.’ *Aqiqah* involves sacrificing a lamb or goat on the child’s behalf in appreciation of God’s gift of the child. Its meat is distributed to the poor or used for a celebratory feast. The Prophet (pbuh) said, “Every new-born is mortgaged by his/her *aqiqah*, so slaughter for him/her on the seventh day, and shave his/her head, and name him/her.”³² According to the vast majority of Islamic scholars, *aqiqah* is a highly recommended sunnah practice. A small minority of scholars, however, including Hasan al-Basri, consider it obligatory.³³

Eating the Meat of the Sacrificial Animal

Allah commands Muslims to eat of slaughtered animals: “eat thereof and feed such as live in contentment and such as beg with due humility” (al-Hajj 22:36). Nevertheless, Sayid Sabiq comments on a diversity of Sunni scholarly views on this subject: “Apparently this commandment applies to both the obligatory and supererogatory sacrifice. There is some disagreement among the jurists on this subject. Abu Hanifah and Ahmad [bin Hanbal] are of the opinion that one may eat of the sacrifice made for Hajj Tamattu’ or Hajj Qiran or one that is offered voluntarily, but one may not eat of any other sacrifice...Ash-Shafi’i holds that one is not permitted to eat of an obligatory sacrifice, e.g. an obligatory sacrifice offered in penalty, or a sacrifice made for killing a game, or one that is offered for spoiling one’s Hajj, or one offered for Hajj Tamattu’ or Hajj Qiran, and likewise that which one has vowed. In case of a voluntary sacrifice, however, one may eat thereof himself as well as give it to others.”³⁴

Sabiq's conclusion is that one may consume or give away in charity any amount of meat one may wish. A vegetarian sacrificing an animal as a religious obligation would not necessarily need to eat any of the sacrificial meat. This view supports blogger Mohamed Ghilan's position, "For those of us who follow a vegetarian/vegan diet, but want to fulfil God's command and participate in this major Sunnah of sacrificing on Eid al-Adha, we can look for Muslim-led agencies where we can direct our funds to have an animal sacrificed and its meat distributed among those who rarely get access to this luxury food item."³⁵

Islamic Teachings on Discouraging Meat Consumption

It is well-known that the Prophet (pbuh) infrequently ate meat and, when he did, that he generally favoured lamb. Some today rightly call him a 'semi-vegetarian'. Meat, then, was considered a 'luxury food' generally too expensive for the poor—although under Islam they could still benefit periodically as recipients of *udhiyyah* during Eid ul-'adha.

Two statements by 'Umar ibn al-Khattab recorded in Imam Malik's *Muwatta* (Chapter 49.11) warn against excessive meat consumption. In one case, 'Umar saw a man who had bought meat in the market and asked him why he did so. He responded that he "desired" meat. 'Umar replied, "Does one of you want to fill his belly to the exclusion of his neighbour or nephew? How can you overlook the [Qur'anic] ayah 'You squandered your good things in the life of this world'? [al-Ahqaf 46:20]." 'Umar was concerned that the man would become like those who lose their good deeds by taking too many *na'eem* (gifts) in this world. Traditionalist Hamzah Yusuf elaborated in a talk that 'Umar, during his *khilafah*, even prohibited the eating of meat two days in a row.³⁶ The other hadith reports that 'Umar said, "Beware of meat. It has addictiveness like the addictiveness of wine."

In these accounts, 'Umar advised that we either avoid eating meat, or do so only infrequently, since it has the potential to develop into a behavioural addiction while diverting concern for the welfare of our poor neighbours due to its considerable expense. 'Umar's advice here carries weight when it is considered that the Prophet (pbuh) once said that, should there be a prophet after him, it would be 'Umar.

It is uncanny that these statements made 1,400 years ago remain so apt today when we know that raising livestock involves feeding them grain that either diverts food from the poor or raises the price of their staple food. Further, modern medicine informs that consuming considerable amounts of red meat is deleterious to health, while beef farming requires a huge eco-footprint

that negatively impacts upon the environment. Hamza Yusuf highlights that traditionally Muslims were not cow-eaters, but ate mutton or lamb.³⁷ The Sunnah and ‘Umar’s advice together suggest avoiding or otherwise returning to a low level of meat consumption, preferably that of small livestock.

Health Benefits from Reducing or Avoiding Meat Consumption

From the human health perspective, evidence from large cohort studies and meta-analyses of epidemiological studies indicate that the long-term consumption of sizeable amounts of red meat, particularly processed meat, is associated with an increased risk of death, cardiovascular disease, colorectal cancer and Type 2 diabetes.³⁸ Alicja Wolk summarised from her recent investigation that daily consumption of unprocessed red meat to an amount of just 100g results in increased risk of stroke (11 per cent), breast cancer, cardiovascular mortality (15 per cent), colorectal cancer (17 per cent) and advanced prostate cancer (19 per cent).³⁹

Currently, the average individual daily meat intake in high-income countries is 200-250g, far higher than the UN-recommended 80-90g. Oxford Martin School researchers found that switching to either the recommended intake or a vegetarian diet could prevent 5.1 or 7.3 million deaths yearly worldwide respectively by 2050, leading to annual healthcare-related savings and avoiding climate change damages of \$1.5 trillion.⁴⁰ Approximately half of the avoided deaths would be due to reduction in red meat consumption.

Could *Udhiyyah* be replaced with *Sadaqah*?

The late Anila Muhammad, formerly of Muslims for Progressive Values Toronto, in a controversial *Huffington Post* article, criticised traditional sacrifice in line with an earlier article by Shahid ‘Ali Muttaqi,⁴¹ arguing that “the livestock industry is the leading contributor towards land, air and water pollution and degradation of our ecosystem. Consider that, the very act of involving ourselves in the ritual animal sacrifice places our earth at jeopardy. As Muslims, on Eid, and the rest of the year, should we not be mindful of whether continuing such a tradition is compatible with our Islamic responsibility to be care-takers of this earth.”⁴² The above discussion, however, has demonstrated that performing *udhiyyah* is a recommended sunnah for those who can afford it, but is not required by the poorer person who is unable to.

Anila Muhammad further argued, “If we are concerned with social justice and creating meaningful, long term change then we Muslims must reconsider

funnelling our money from this sacrifice and make other investments in our communities to help the disadvantaged.” However, classical scholar Ibn al-Qayyim wrote: “Offering a sacrifice when it is prescribed is better than giving its price in charity even if one gives more than the price, like sacrifices offered during Hajj and at Eid al-Adha, because the aim is to carry out the actual act of slaughter and shedding the blood, because this is an act of worship which is mentioned alongside prayer.”⁴³

In responding to the question, “Is it better to offer the sacrifice of *Udhiyyah* or to donate money [*Sadaqah*] to disaster-stricken areas in the Muslim lands?” Mas’ud Sabri stated cogently that if a food shortage exists in disaster-stricken regions it is better to combine both objectives by making the *udhiyyah* sacrifice in order to feed needy victims.⁴⁴ “However, if the disaster-stricken areas are in need for things other than food, then there is no harm in giving them the cash price of the sacrificial animal acting upon the opinion that sacrifice is not obligatory and is rather a strongly recommended Sunnah...and upon the ruling that alleviating harm and fulfilling the needs of the disaster-stricken areas can at times be obligatory.”⁴⁵ This is also in accordance with the Qur’anic verse:

It is not righteousness that you turn your faces towards the east and the west, but righteous is the one who believes in Allah and the Last day, and the angels and the Book and the prophets and gives away wealth out of love for Him (God) to the near of kin and orphans and the needy and the wayfarer and to those who ask. (al-Baqarah 2:177)

This is additionally supported by the juristic maxim (*al-qa’ada al-fiqhiyyah*) that “Dire exigency renders lawful the unlawful.” In cases where the Muslim Ummah faces dire need, such an approach allows an equivalent cash amount for an *udhiyyah* sacrifice to be used to alleviate other types of need (for example, serious environmental harm).

Conclusions

Livestock farming is a leading cause of environmental destruction worldwide, being the prime culprit for land clearance and deforestation, thereby causing wildlife extinctions. Richard Eckard of the University of Melbourne has concluded that reducing red meat consumption is “the smallest change with the biggest impact of anything people can do” to mitigate GHG emissions.⁴⁶ Multiple benefits would result from reducing ruminant numbers and meat consumption, including improved global food security, human health, and environmental conservation.⁴⁷ The Oxford Martin study found that adopting either UN Food and Agriculture Organization (FAO) global dietary guidelines or vegetarian diets would sizeably

cut food-related GHG emissions by 29 per cent and 63 per cent respectively.⁴⁸ However, while global meat production today stands at 263 million tonnes, it is expected to nearly double by 2050 if ‘business as usual’ prevails.⁴⁹

The current topic is usefully examined via two overarching perspectives: the *maqasid al-shari‘ah* (higher objectives of the shariah) and *al-qawa‘id al-fiqhiyyah* (legal maxims of Islamic law). The first approach was extensively developed by Abu Hamid al-Ghazzali (d.1111) and Abu Ishaq al-Shatibi (d.1388), amongst others, as a means of identifying the Law-maker’s primary objectives in Islamic rulings, which according to al-Shatibi should achieve public good (*maslahah*). These higher objective are essentially five: preservation of religion, life, intellect, progeny (or lineage) and wealth. Al-Qarafi proposed a sixth: protection of the environment. The above discussion has highlighted that, although meat (especially red meat) provides protein and nutrients beneficial for humankind, it also creates great harm, especially when consumed frequently. It impacts negatively upon Earth’s climate, human health, the livelihoods of the poor, and indigenous communities dependent on forests and clean water. It also negatively impacts upon creatures of the natural environment (animals and plants). Meat consumption is therefore not in line with the higher objectives of shariah in the fields of protecting religion, life, wealth and the environment.

An action that causes harm or suffering without good justification can be considered morally wrong. Key Islamic legal maxims are that “harm must be eliminated (*al-darar yuzaal*),” or that “harm must be repelled as far as possible.” Both *maqasid al-shari‘ah* and *al-qawa‘id al-fiqhiyyah* are in agreement that excessively eating meat, especially red meat, is unacceptable Islamically. Eating meat is generally not essential for human well-being, since better alternative protein and nutrient sources exist, and so meat consumption should either be eliminated (vegetarianism) or drastically reduced. It is one of the easiest things Muslims can do to live more ethically and restore the environment.

Policy Recommendations

As outcomes of the current research, the following actions are recommended:

- There is an urgent need to take global action to disseminate key information persuading consumers against overconsumption of ruminant meat, especially red meat. Encouragement (not criticism) should be provided to Muslims who wish to become vegetarian, which is closer to the lifestyle example of the Prophet (pbuh) and the early Muslims, who all ate meat rarely.

- Action is essential now to persuade rapidly expanding global middle class populations (expected to exceed 5 billion by 2030)⁵⁰ against adopting wholesale Western appetites for red meat consumption. Not all regions, however, can eliminate livestock farming: one-third of the world's land is arid or semi-arid and can only support animal agriculture. For example, in the African Sahel, located south of the Sahara and north of the equator, human existence would likely become impossible without livestock.⁵¹
- Governments could consider measures to make meat more expensive and fresh vegetables cheaper, so as to encourage people to become healthier and make environmentally-friendly dietary decisions, as suggested by Springmann.⁵² The French Toulouse School of Economics found that a relatively steep tax based on GHG emissions would raise retail beef prices by about 40 per cent, causing a corresponding drop in consumption.⁵³
- Research is needed by qualified *mujtahids* to determine whether reducing red meat consumption to FAO healthy dietary guideline levels could be made legally recommended (*mandub*) for Muslims. Further, it should be investigated whether an equivalent cash amount of what is spent on *udhiyyah* sacrifice could be diverted to disaster-stricken communities or areas suffering severe environmental harm (such as rising sea levels caused by global warming).

Notes

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