RELIGIONS CAN BE a powerful force to inculcate environmental ethics in society because of the absolute convictions which they imbibe in their followers. The attitudes of world religions towards the environment are indeed as varied and chromatic as the religions themselves. However, during the past few decades it has been suggested in numerous writings that the major oriental religious philosophies, such as Taoism, Buddhism, Hinduism and Shintoism are 'eco-friendly', whereas the occidental religions are not. On account of its theological lineage, Islam tends to be lumped together in the latter category with Christianity and Judaism. However, Islam has a history of environmental consciousness which tends to get eclipsed by such broad generalizations. The problem often lies in considering the conduct of ostensibly 'Muslim' societies as 'Islamic' behaviour, which may not always be the case. The same is true of any society. Contemporary writings on oriental religions, such as Benjamin Hoff's celebrated works, *The Tao of Pooh* and *The Te of Piglet* depict Chinese Taoism as being inherently ecological, though writers such as Yi Fu Tuan remind us of the abandonment of these philosophies by Chinese rulers and the populace. The fault is certainly not with the philosophy but rather with the ignorance or hypocrisy of those who are supposed to be its adherents. It is important to make this point clear because Islam has so often been misrepresented in the West simply because of the caricatured image of Islamic doctrines offered by a small minority of extremists.

There is nevertheless an important distinction between the approach of the monotheistic Abrahamic religions and those of the oriental pantheistic religions towards nature. In the pantheistic religions nature is experienced from within, whereas in Islam, Christianity and Judaism nature is experienced from without. Muslims, Christians and Jews consider nature as a manifestation of the Creator's power. An appreciation of nature is thus important as a means to an end—the end being the worship and admiration of the Creator's prowess. In pantheistic religions nature may be an end in itself. This subtle distinction, if interpreted properly, may lead all theologies towards similar codes of environmental ethics but it may also cause divisions based on interpretation.

The interpretive differences vis-à-vis environmental ethics are more pronounced in Judaism and Christianity than they are in Islam. This is partly due to the relative recency of Islamic revelation and the numerous historic examples from Islamic societies that show the importance of nature. It is also due to the epistemology and teleology of Islam which is articulated in more unequivocal terms than it is for the other two Abrahamic religions.

The holy scripture of Islam, The Qur'an, does not have an analogue in Christianity or Judaism. Often there is an erroneous comparison between the Bible and the Qur'an but this is not appropriate because, unlike the Bible,
The actual purpose of creation remains an enigma but it is made abundantly clear that creation was not merely random, nor was it specifically intended for humankind.

**ISLAMIC TELEOLOGY AND CONSERVATION ETHICS**

The purpose of creation and the place of humanity with respect to the cosmos and all its wonders is an important consideration when attempting to formulate ecological values in a religious framework. It is important to appreciate that Islamic doctrines are premised on a firm belief that there is indeed a 'purpose of creation' which is exemplified by the following verse from the Qur'ān:

Know that We did not create the heavens and the earth, and all that is between them, in frivolous play. Had We wished to indulge in a pastime, We would have found the means at hand—as if We would ever be indulging in that kind of amusement. (11:16-17)

There have, however, been dissenting points of view on the place of humanity in this divine purpose of creation, and different verses from the Qur'ān are used to back up each point of view. In contemporary times a majority of Muslim scholars are inclined towards an anthropocentric interpretation of the scripture. There is a general perception in Muslim soci-

eties that humans are *Asraff al-Makhliqat*, meaning 'the best of creation'. Indeed, the Qur'ān does say that Humankind has been made 'in the best of forms' but that is simply because of our mental abilities and does not imply inherent superiority nor a right to subjugate nature. In fact there is a subsequent reminder in the same Sūra that is intended to make humans aware of their condition: 'We created man in the finest of forms and then reduced him to the lowest of the low, except for those who believe and perform honourable deeds—their earnings shall never be withheld from them' (95:4-6).

The Qur'ān even goes further to state that all creatures have been created as 'nations' and the human beings should in no way consider the natural environment as a means for man's sustenance. The cosmos and all it has to offer are manifestations of God and must therefore be revered accordingly:

Seest thou not that unto God pay adoration all things that are in the heavens and on earth—the sun, the moon, the stars, the mountains, the trees, the animals and a large number of humans. However, there are many humans who do not and they deserve chastisement. (22:18)

This verse reveals another implicit belief in Islam that the natural environment and its creatures are pure and only certain iniquitous humans are culpable and deserve chastisement. The actual purpose of creation remains an enigma but it is made abundantly clear that creation was not merely random, nor was it specifically intended for humankind.

Nevertheless, human beings have an integral role to play in God's grand scheme for the universe. From the time of Adam's creation this role has been clear and has found its way even into the political structure of Islam. The Arabic word used to describe this role is *khalifa*, which may be literally translated as 'successor' but its more accurate contextual connotation is translated as 'vicegerent'. Each human individual is a vicegerent in his or her own personal capacity, and then at the national level, Muslim societies are supposed to be governed by a *khalifa*. The etymology of the English word 'Caliph' can be traced to the same root. The Qur'ānic verse which talks about the creation of Adam and the role of humanity also predicts human plundering of the Earth: 'And when thy Lord said to the angels 'I am setting man in the best of forms' but that is simply because of our mental abilities and does not imply inherent superiority nor a right to subjugate nature. In fact there is a subsequent reminder in the same Sūra that is intended to make humans aware of their condition: 'We created man in the finest of forms and then reduced him to the lowest of the low, except for those who believe and perform honourable deeds—their earnings shall never be withheld from them' (95:4-6).

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Muslims believe that this world is a test or a trial and it may be argued that verses such as the one above show that God has placed the responsibility of ‘vicegerency’ to test man’s ability to resist temptations and the propensity to plunder, which are alluded to above and in the following verse: ‘Then We appoint you viceroy in the earth after them, that we might see how ye behave’ (10:14).

Muslims are supposed to fervently believe in an afterlife where there will be recompense for virtuous deeds and castigation for sins. Islamic eschatology thus needs to be better understood in order to appreciate the place of nature in Muslim society. The ephemeral nature of this life leads some Muslims to become apathetic to the world’s non-human resources, both animate and inanimate. This attitude is contrary to the teachings of Islam. A healthy balance between realism and pragmatism for this life and respect and anticipation for the afterlife is essential and is exemplified by a saying of the Prophet ﷺ:

Live in this world as if you were going to live forever; prepare for the next world as if you were going to die tomorrow. 

Balance and harmony, which are often catchwords in ecological arguments, are a salient feature of Islamic discourse, particularly with regard to nature, as the Qur’an states:

We created man and gave him the faculty of speech. The sun and the moon rotate in ordered orbits, the stars and the trees, too, are obedient. The firmament—He raised it high, and set the balance of everything, so that you (humanity) may not upset the balance. Keep the balance with equity and fall not short in it. (55:3-9)

Another interesting observation is the repeated usage of natural imagery in the Qur’an. Seyyed Hossein Nasr, one of the leading scholars of Islam, aptly calls nature ‘the primordial creation of God’ and hence a touchstone for divine testimony. The word aya, which is used to describe a Qur’anic verse, has the literal meaning of ‘a natural sign’. The rewards in heaven are almost always described in terms of gardens and rivers and untamed natural beauty. There are numerous lyrical verses, specially towards the end of the Qur’an, in which God calls upon nonhuman creation, such as plants, animals and the stars, to bear witness to his covenant. Nasr goes on to say that one of the Arabic attributes of God is Muht, which means ‘all-encompassing’ and the same word used to describe the environment. He concludes that, ‘the present environmental crisis may in fact be said to have been caused by man’s refusal to see God as the real “environment” which surrounds man and nourishes his life. The destruction of the environment is the result of modern man’s attempt to view the natural environment as an ontologically independent order of reality, divorced from the Divine Environment without whose liberating grace it becomes stifled and dies.’

No wonder even Islam’s symbolic colour is green, which is to be found on the flags of most Muslim countries.

**ATTITUDES TOWARDS RESOURCE EXPLOITATION IN ISLAM**

The most fascinating feature of the study of Islam and ecology is the organized means by which Islam and early Islamic societies managed natural resources. Efficiency and waste reduction are seminal in the Qur’an and hadiths and are also the most fundamental tenets of all ecologically sound management principles in this day and age. Some of the verses which generally disparage wastage are:

Eat and drink, but waste not by indulging in excesses; surely God does not approve of the intemperate. (7:31)

And be not wasters, for God loves not the prodigal. (6:141)

Islamic tradition also contain injunctions on the management of particular kinds of resources, which are individually described as follows:

**Land**

Islamic societies were among the first to have an organized zoning procedure for land management which even included protected areas. Land is extremely important for Muslims because it is the primary medium from which food is derived. Food is considered the most fundamental gift from God, referred to in Arabic as Rizq, which means a form of physical and spiritual sustenance. Therefore the Qur’an when describing an evil individual says: ‘His aim is to go everywhere, spreading discord through the earth, and destroying crops and cattle. God does not love discord...Hell awaits him, an evil resting place.’ (2:204-6)

According to Islamic law, land is to be divided into three main categories: developed land or amir; undeveloped land or mauvät; and protected land or harim. The etymology of harim is important for it is derived from the...
Islam's commitment to the environment even finds its way into the relatively technical realm of civil engineering.

Developed land is defined as any place where there is human settlement in terms of urban dwellings, agricultural or industrial establishments. Undeveloped land is defined as open areas that do not have any ownership. This may acquire ownership by anyone who 'brings it to life'. There are different opinions on what would be categorized as 'bringing land to life', but the most widely used justifications in early Islam were: digging of a well, tilling, planting crops and erecting a building. Desert reclamation is an important branch of Islamic law which has received considerable attention owing to the physical environment in which the first Islamic society evolved. However, the government has jurisdiction to classify this land as "protected", so long as injustice is not done (the decision is not deemed 'a taking'). Those who own land may also decide to gift it for public use or conservation. This charitable endowment is known as waqf.

Harim lands are those areas which are almost always adjacent to developed land and are owned (usually as a commune). For example, in pastures or forested areas surrounding an oasis, there may be certain regions that are set aside as wind-breaks or 'green belts' to prevent over-crowding.

Perhaps the most important zoning division prescribed by Islamic law is a sub-category within mawāt or unprotected land, that is referred to as himās or the Himā system. This practice was adopted and refined by Prophet Muhammad, from a fallow rule that was used in the Arabian peninsula even before the advent of Islam. However, Islam institutionalized the process and delineated several situations under which it was advisable. The Himā system is the oldest known range conservation system. Prophet Muhammad himself demarcated several areas around the city of Madīna as himā. Inter alia protection measures within himā include restricted grazing, forest reserves (particularly near mosques) or setting aside land for bee-keeping. 'Umar ibn al-Khaṭṭāb, the second of the Pious Caliphs, is reported to have been extremely strict about himā land. There is also supposed to be an authority within the government, known as hisba, to monitor protected land and other issues of agronomic importance. The person in charge of the hisba, the muhtasib, holds a pivotal position in traditional Islamic bureaucracy. The government has played an active role in designating land as himā and I will have more to say on the applicability of himā in contemporary times towards the end of this paper.

Urban Systems

Environmentally conscious urban planning was also a major achievement of Islam. Gulzar Haider, one of the most renowned Muslim architects in the United States, has outlined three main considerations which have permeated Islamic urban planning throughout history: i) environmental sensibility; ii) morphological clarity; and iii) symbolic clarity. Within the category of environmental sensibility he has chosen several examples of Muslim settlements which exemplify specific ecological themes in their design:

- Of plains, mountains and rivers: Alhambra, Granada, Spain and Rumeli Hisar, Turkey
- Of seasons, sun and air: Baghdad, Iraq and Sanaa, Yemen
- Of gardens flowers and pools: Narangestan-e-Qawam, Shiraz, Iran and Jag Niwas Palace, Udaipur, India

Islam's commitment to the environment even finds its way into the relatively technical realm of civil engineering. S. Waqar Husaini, an eminent Muslim scholar, has compiled a book dealing with Islamic Environmental Systems Engineering, in which he uses the works of great Muslim jurists such as Ibn Rushd and Ibn Khaldūn to formulate a comprehensive code of conduct vis-à-vis environmental engineering.

Forests

For the early Muslims who were predominantly desert-dwellers, greenery and forests in particular were specially important. Oases were rare in the harsh environment of the Arabian desert and were considered a blessing from God to be cherished and preserved. The Prophet Muhammad in numerous sayings exhorted Muslims to have paramount respect for plants and forests. Some of the most famous hadiths in this regard are:

- The world is green and beautiful and God has appointed you as His stewards over it. He sees how you acquit yourselves.
- Whoever plants a tree and looks after it with care, until it matures and becomes productive, will be rewarded in the hereafter.
- If anyone plants a tree or sows a field and men, beasts or birds eat from it, he should consider it charity on his part.

In the aftermath of war, victorious Muslims were strictly instructed not to destroy trees and other natural resources on enemy territory, as...
was the custom in Pre-Islamic Arabia. The great Muslim historian Tabari records that Abū Bakr (r.a.), the first Caliph, ordered his military generals specifically not to cut down trees nor kill animals except for food. Forests can also be given protection under the himā system of land management described earlier.¹⁵

**Water**

The preaching of Islam began in the Arabian peninsula, where potable water is a rare and precious commodity. Water was therefore given tremendous importance in Islamic scripture and in subsequent laws. The Qurʾān acknowledges with surprising scientific veracity that human beings and most other creatures are predominantly composed of water:

> It's He (God) who has given the free flow to two kinds of water—the one thirst-quenching and sweet, and the other salty and bitter. Yet He has set an insuperable barrier between their intrinsic qualities which cannot be changed. It is He who created man out of water. (25:53–4)

Natural waters are generally considered public property because the Prophet is reported to have said: ‘All communities are equal partners in water, fire and pastures.’¹⁶ However, there are special stipulations for scarce water resources that are divided into three broad categories: rivers, wells and springs.

Riparian rights are derived from a ruling by the Prophet regarding the flood channels of Mazhur and Medhaynib in Madīna. It was decided that those upstream had initial rights to the water and could retain the water until it was ankle-deep but then must release it for downstream uses. Obviously the details of the arrangement are not applicable everywhere but the principle is one of equitable water resource usage. Similar injunctions are also found for wells and springs. Water pollution is alluded to in the Qurʾān and humans are given the blame for what is considered reprehensible by God:

> Corruption has appeared over land and water on account of what man’s hands have wrought. That God may give them a taste of some of their deeds: in order that they may turn back (from evil). So travel through the earth and see what was the end of those before you. (30:41–2)

**Minerals**

There are no clear injunctions on mining and its environmental repercussions in Islamic law. This is rather ironic since the land where Islam has its roots is now the largest oil extraction area in the world. Generally, mineral deposits that are concealed or ḥājin may be regarded by miners as a usufruct, where they have rights to mine but not complete ownership. There is some disagreement in this regard but independent reasoning, or ijtihād, is encouraged to determine the resource level under specific conditions and hence determine government control on mining.

**ANIMAL RIGHTS AND BIODIVERSITY**

Most Muslims today are oblivious of the importance that their religion has given to animal rights and to the preservation of organismal diversity on the planet. A cursory glance at Muslim countries shows horrendous animal rights records. This may be blamed partly on the erroneous belief that animals have been created for man’s service and subjugation, based on a misinterpretation of the verses mentioned earlier (see ft.7). Indeed the Qurʾān has given remarkable importance to the animal kingdom: ‘There is not an animal on earth nor a flying creature flying on two wings, but they are nations like you. We have neglected nothing in the Book (of our decrees). Then unto their Lord will they be gathered.’ (6:38)

There are often arguments in Muslim societies on whether animals have souls or not, which I consider to be irrelevant because God has clearly declared in the Qurʾān that we need to respect them as communities regardless of any other spiritual qualities. In fact certain Islamic philosophers such as Ṣadr al-Dīn Shirāzī even speak of the resurrection of animals and plants, which may be inferred from Qurʾānic verses and hadiths.¹⁷ Al-Jāḥiz, a Muslim scientist, studied animal behaviour and how it changes with environmental influences as early as the eighth century, when his classic treatise, *The Book of Animals*, was pub-
There is also a verse in the Qur'an which directly refers to plants and may even be heralded as a call for maintaining biodiversity.

From the second hadith we can infer that killing even those animals that may cause momentary harm is not allowed, but is only permissible when one's own life is in danger. The last hadith is specially important because it puts animals and humans on an equal level with regard to victimization. Needless to say, there is the glaring disparity of allowing animals for food, whereas cannibalism is prohibited. However, eating animals for food is a part of the natural order, arguably for carnivorous mammals, but that too must not be done in a brutal way. Slaughtering of animals in traditional Islamic times was to be done with a sharp knife to avoid pain and suffering of the animal.19

Animal rights activists are often at odds with Muslims who refuse to use modern methods of animal killing such as electrocution, that are less painful. Islamic dietary laws, which are similar to Jewish dietary laws, say that the blood of an animal that is to be eaten must be drained completely. This is not possible when the animal is electrocuted to death and the blood begins to clot in the tissue. However, there are now methods by which animals may be drained of blood even with less painful execution methods. It is, nevertheless, difficult to convince most Islamic jurists (and rabbis for that matter) of adopting any way other than the traditional slaughtering regime. The important fact to remember is that the reduction of pain and suffering for the animals is given immense importance in Islam.

Though plants may not have the same palatable sense as animals, they too are give importance in Islam. Muslim 'ethnobotanists' such as Abu'l-'Abbās al-Nabātī spent their lives collecting plants, studying their structure and trying to derive medicinal value from them.20 There is also a verse in the Qur'ān which directly refers to plants and may even be heralded as a call for maintaining biodiversity. It is important to note that anthropocentric interpreters would once again be tempted to use the clause identifying plants 'for you' to justify exploitation. However, if interpreted in the broader context and spirit of Qur'ānic revelation (quoted in many earlier verses), this clause may refer to the prudent usage of plants for food and medicinal value:

My Lord is He who spread out for you the earth like a carpet; and made plants therein for you, and sent down water from the clouds. Then thereby, We have produced diverse pairs of plants, each distinct from the other. (20:53)

LEARNING FROM THE PAST AND PROSPECTS FOR THE FUTURE

In this paper I have endeavoured to provide a theological basis for environmental conservation in Islam, basing my arguments primarily on the Qur'ān and hadith as they were used in early Islamic societies. However, the spectrum of environmental concerns has broadened greatly since the time of the Prophet (seventh century). By using the spirited message of the Qur'ān and the hadiths we now need to contextualize some of the teachings of Islam to cater for the needs of contemporary Islamic societies. Indeed, one of the greatest strengths of Islam is that it allows for evolution of thought, as long as the primary injunctions of God in the Qur'ān are not directly contradicted. Unfortunately, this allowance of flexible religious interpretation has not been used in Islamic societies for centuries. The concept of 'ijtihād, or independent reasoning, which was mentioned earlier, needs to be resurrected to deal with some of the environmental problems of this age.

Population control is probably the most contentious issue that causes much acrimony between environmentalists and theologians. This was exemplified by the U.N. Population Conference in September, 1994, which was ironically held in Egypt, a highly populated Muslim country. There was a marriage of
convenience between the Catholic clergy and Muslim scholars against the agenda of the conference. Unfortunately, family planning became tantamount to the proliferation of abortions and promiscuity in the eyes of the Catholic Church and a majority of Muslim participants. This was certainly not the intention of the United Nations Population Fund (UNFPA).

The executive director of UNFPA is a Muslim woman herself and therefore the sensitivities of Muslims towards the issue of population control were given much attention. It is important. There is immense ignorance in the Muslim world about the actual position of family-planning in Islamic scriptures. Indigenous cultural factors, alien to Islam itself, tend to subsume the discourse in this regard. It is important for Muslims to realize that methods of family-planning were known and practiced even during the time of the Prophet ﷺ, who never forbade their use.

Another major issue which needs attention is the contextual interpretation of the allowance given by some hadiths for 'common usage' of natural resources. The saying of the Prophet ﷺ mentioned earlier in which he said that 'all people have equal rights over pasture, fire and water', has been misused by some people to mean that there should be a free-for-all 'commons' situation. Indeed, in the light of all the other hadiths and Qur’anic injunctions a system reminiscent more of the 'public trust doctrine' has been advised and access to commons must be regulated. A failure to understand this vital injunction and an inadvertent denial of the hima system led to major land degradation in Saudi Arabia during the fifties and sixties. Since 1980, however, Saudi Arabia has reevaluated its environmental policy. There are now national parks and preserves, most notably Asir National Park near Abha. Even at the village level, the hima system is being resurrected, for example, in the northern village of al-Foqa.

Needless to say, economics must play a vital role in environmental conservation initiatives and Islam has its own economic system as well, which is generally quite conducive to the development of 'ecological economics'. Islam believes in interest-free banking and in general the concept of a 'discount rate' is not used in Islamic economics. This gives environmental conservation undiminished 'value' through time. The complexities of Islamic economics are beyond the scope of this paper but there are numerous centres that are currently involved in this work which may be contacted for further information.

Finally, the most important factor to consider is the lack of education and awareness about Islamic environmental injunctions that exist in the sacred texts and traditions. There is an information void in Muslim countries and communities in this regard which needs to be filled. Fortunately, organizations such as the London-based 'Muslim Association for Animals and Nature' are beginning to appear which are a beacon of hope for the future. Once Muslims are made aware of the importance which their religion has given to the environment, there could be a major revolution towards more ecologically salubrious practices. Ecumenical dialogue to promote environmental awareness is also gathering momentum. In August 1993, 'The Parliament of World Religions' met in Chicago and included the environment on its agenda. Representatives from many Muslim communities were also present at this gathering.

The dauntless zeal and commitment which Muslims derive from their Faith, if used to combat environmental decay, could indeed prove to be immensely beneficial to the world at large, while providing spiritual sustenance within the Muslim community.

REFERENCES

1 This point is articulated among others by the great historian Arnold Toynbee (1972), who says that if the earth's resources are to be given importance, then the monotheistic religions should be entirely abandoned and a move made towards pantheism. Sufism, the mystical dimension of Islam, has occasionally been regarded as pantheistic. Yet despite imagery from nature such to be found in Fariduddin 'Aqbar's thirteenth-century classic, The Conference of the Birds, there is no central theme of nature's supremacy in Sufi doctrines. For a more detailed discussion see Annemarie Schimmel, Deciphering the Signs of God: A Phenomenological Approach to Islam, State University of New York Press, Albany, 1994; and Sachiko Murata, The Tao of Islam, State University of New York Press, Albany, 1993.

2 Quoted in Iqti达尔 Zaidi, 'On the Ethics of Man's Interpretation with the Environment', in Eugene C. Hargrove (ed), Religion and Environmental Crisis, University of Georgia Press, Athens, Georgia, 1986.

3 For an excellent eclectic discussion of religions and environmental values, see Parvez Manzoor, 'Environment and Values: The Islamic
There are six traditional texts of hadiths (singular form is hadith) which are considered most authentic: Bukhārī, Muslim, Abū Dāwūd, Ibn Māja, Ṣaḥīḥ and Tirmidhi.

There are mainly two sects of Islam: the Sunnis and the Shi'ites (constituting about 80% and 15% respectively, of the total global Muslim population of about 1 billion). The Sunnis have four major school of jurisprudence within Sunni Islam: the Mālikis, Shāfī'is, Hanbals and the Hanafis. For a detailed discussion see, John Esposito, Islam the Straight Path, Oxford University Press, New York, 1992; and Akbar S. Ahmed, Discovering Islam, Routledge, London, 1988.

Recently this anthropocentric view has been presented by Martin Forward and Mohammad Alam in Holm and Bowker (eds), Attitudes to Nature, Pinter Publishers, London, 1994.

Some other verses that are used to propagate the anthropocentric argument are 45:12-13; 31:20; 14:32-33. Nasr comments on the misinterpretation with great eloquence. See Seyyed Hossein Nasr, The Need for a Sacred Science, State University of New York, Albany, 1993.

Up until the First World War, Islam was technically governed by a Caliph, who at that time resided in Istanbul, Turkey. However, the true Islamic caliphate, which was supposed to be democratic and not dynastic, lost its lustre after the first four caliphs. The first four, Abū Bakr, 'Umar, Uthmān and 'Ali are known as the al-Khulafār-Rāshīdīn (the Rightly-Guided caliphs).


See Othman Llewelyn, 'Desert Reclamation and Islamic Law', Muslim Scientist, vol.11, 1982, 9-29; and also his article in Khalid and O'Brien, Islam and Ecology.

An excellent discussion of the hema system is provided by Omar Drāz in Jeffrey McNeely and David Pitt (eds), Culture and Conservation: The Human Dimension in Environmental Planning, Croom Helm, London, 1985.


Quoted in Khalid and O'Brien, Islam and Ecology. The texts from which they are derived are Sahih Muslim, Bukhārī and the Musnad of Imām Ahmad ibn Ḥanbal, respectively.

In the small Muslim state of Brunei there has been a concerted effort to save tropical rainforests. See Tor Eigeland, 'The Academy of the Rainforest', Aramco World, Nov/Dec, 1992.


Shirāzī was an Iranian Shi'i scholar of the sixteenth century. His most important works are al-Asfār al-Ārba'a and Risāla fi'l-hashr, quoted in Nasr, Need for a Sacred Science.

Quoted in Khalid and O'Brien, Islam and Ecology. Narrated from Shu'ab al-Imām, Sahih Muslim, and Mishkāt al-Maṣābīh, respectively.

A saying of the Prophet & narrated in Sahih Muslim, states: 'slaughter animals with consideration. Make sure your knife is sharp and let your animal die comfortably.'


I attended a mosque gathering in Boston, where a booklet condemning the conference was being distributed. Radical economists such as L. Laroche were quoted and a shocking array of cornucopian arguments presented in a way to catch the eye of the Muslim. It contained even preposterous tales of a conspiracy by the West to reduce the increase in population of Muslims.

Munawwar Ahmed Anees has given a detailed account of various contraceptive methods and the opinion of Islam concerning each. See Munawwar Ahmed Anees, 'Islamic Values and Western Science: A Case Study from Reproductive Biology', in Sardar (ed), The Touch of Midas. In 1992, UNFPA has published a comprehensive compendium of Islamic views on Family Planning.

The Public Trust Doctrine can be traced back to the Institutes of Justinian, a Roman text written back several centuries before the advent of Islam.

One of the most prominent research centres for Islamic economics is at the King Abdul Aziz University in Jeddah, Saudi Arabia, and the Islamic Foundation in Markfield, UK. Another centre with similar interests is at the Qaid-e-Azam University in Islamabad, Pakistan.