

ARTICLES

ENVIRONMENTAL CARE IN ISLAMIC TEACHING

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Abstract: This article addresses the human-earth relationship from an Islamic perspective in two parts. The first part draws attention to a set of principles, beginning with that of Divine Oneness (*tawhīd*) and the vision it conveys of the common predicament of man with the rest of the created world. The author reviews the principle of vicegerency of man (*khilāfah*) on Earth - which designates humankind as trustee and custodian of its natural environment - and the principle of trust (*amānah*). The second part addresses instances of violation of these two principles. Three such instances are discussed: spreading mischief (*fasād*) on earth, extravagance and waste (*isrāf*), and infliction of harm (*ḍarār*). The focus of the discussion in this part is on the human management, or rather mismanagement, of the earth with the result that humanity itself has become the chief victim of its own failings. In his conclusion the author seeks to contextualise his observations within the civilisational renewal (*tajdīd ḥaḍāri*), arguing that the shared vision of Muslims must be inspired by common values and commitments for the ecological wellbeing of the planet Earth and that Islamic teachings can make a distinctive contribution to that vision by infusing man's management of the natural world with transcendent (revealed) values and ethics that look toward a common future for humanity and the rest of its earthly inhabitants. The article ends with recommendations for possible reforms.

Introduction

No sacred scripture has spoken about nature and earth as much as the Qur'ān – for it contains numerous guidelines about our treatment of earth and the rest of God's creation so much so that the Qur'ānic revelation intimately connects itself with the notion of sacredness of nature. A whole 'eco-theology' unfolds as a result that distinguishes Islamic spirituality with characteristics of its own. A closer look

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at Qur'ān and *Sunnah* reveals a set of principles that point to a rich reservoir of environmental ethics with far-reaching socio-economic and political consequences.

Environmental degradation affects the whole of humanity. While no country or community is immune to or entirely accountable for the damage caused, some countries and nations are clearly the biggest polluters. It is ironic also that the latter are better equipped to take preventive and remedial measures to reduce the actual or potential damage inflicted on their economies and people. Consideration of moral responsibility and care must inform our responses to the plight of the disadvantaged among us and the manner in which we address the need to protect and repair the natural environment. Modern environmental problems have not only material, but also moral and spiritual dimensions.

The lion's share of environmental damage, we are witnessing today, comes from industrial pollution, carbon emission and abusive applications of technology and science. This is exacerbated by the untrammelled expansionist policies of the great industrial powers and the earth's biggest polluters. Oil-producing countries and companies are also opposing measures to reduce fossil-fuel production, regardless of its damaging effects. The Gulf of Mexico deepwater drilling fiasco of 2010 caused an ecological crisis that spewed close to five million barrels of oil into the sea and spilled oil over 1,000 km of the shoreline. That episode brought into public scrutiny the kind of decisions big multinationals like BP make to add to their astronomical earnings! As soon as the well was capped after numerous failed attempts, the Western media started telling the public that it was not that harmful after all.¹ Then barely two weeks later, another report quoting US-scientists had it that nearly 80 per cent of the Gulf oil spill was still in the water.²

Climatic disasters, unprecedented winter freezes and summer heat waves, earthquakes, volcano eruptions and tsunamis are increasingly becoming more and more deadly and devastating. Crippling floods in Pakistan, devastating mudslides in China, raging forest fires in Russia and elsewhere testify to the growing extremities in weather, the destruction of ecosystems and the severity of killer floods.³ Blanket snowfall and winter freeze in the United Kingdom, death by heatstroke in Siberia, flooding of the Indus and Yangtze rivers and catastrophic earthquakes in seismically sensitive areas can no longer leave room for speculation that the impact and frequency of natural disasters are real, manifest and devastating.

The industrial West, as already mentioned, has been the biggest greenhouse emitter; China may now be the largest, Russia may be third, and no Muslim country has been listed so far in the big league. Yet one also notes that the green movement is stronger in the West than in the Muslim world, but it is the civil society in the West, rather than its politicians and governments, that takes the lead in environmental awareness.⁴ The rise of ecological psychology in the twentieth-century Western discourse originated essentially in the recognition that the free-market and techno-scientific

approaches have not succeeded in sustaining ecological balance. Parvez Manzoor has drawn attention to the singular absence in western environmental discourse of the Islamic tradition and its distinctive postures on the environment.⁵ The solution is to be found at a deeper level by rekindling the innate human affinity and respect for nature so persistently suppressed by consumerist industrial civilisation premised on indefinite growth and material progress. Economic wealth feeds our greed and spiritual insecurity. Is it any wonder, as Lionel Rubin and Adi Setia point out, that the age of economic progress coincides also with the age of insecurity and tension among people, the relentless drive for weapons of mass destruction that can annihilate humanity and life on earth by many folds? A new economic and moral outlook will have to be entertained, one that is premised on meeting the limited needs of man rather than fulfilling his unlimited wants.⁶

Are we facing a crisis? A crisis implies that a normal state has been disrupted in a dangerous direction and manner and that we are aware of it – otherwise it would not appear to us as a crisis. The existence of an environmental crisis is no longer a moot, for it can be observed in global warming, which is only one aspect of it, but it is so acute that it has finally caught the attention of everyone, whereas other aspects such as the extinction of many species, destruction of their habitat, deforestation, desertification and depletion of resources have often been neglected.⁷ Industrial pollution has entered into the food chain and our bodies as well as the air we breathe and the water we drink, often manifested, even if not declared, by proliferation of all kinds of cancers and new varieties of disease. Numerous places are on the verge of destruction – from the coral reefs of Australia to the Amazon forest. The fear that Seyyed Hossein Nasr voiced in 2005 has already become a reality that if China, India and the Muslim world were to become as industrialised as the United States and have the same rate of consumption “then the whole ecosystem of the world will either collapse or be radically modified.”⁸

Yet the world saw, with disillusionment, the failure of the December 2009 UN Climate Change Conference in Copenhagen (known as COP15) to curb carbon emissions to sustainable levels. The Conference became somewhat of a political circus due to high handed policies of the powerful nations. The so-called Danish Text, a document produced jointly by Denmark, United States and United Kingdom and passed around to selective governments, raised many controversies with its distribution of more power to the richer nations and its sidelining of the developing world as well as bypassing the Kyoto Protocol. What infuriated the developing countries was the unequal limit per capita of Green House Gas (or carbon) emission the draft document proposed for developed countries at nearly twice the amount of carbon emissions permitted for developing countries.⁹ Prior to COP15, the 2007 UN Climate Change Conference (COP13) held in Bali, Indonesia saw the adaptation of the Bali Road Map, a two-year process that was to lead up to a binding agreement

at COP15, which did not materialise.¹⁰ The President of the Maldives was quoted concerning the rising temperatures that anything above 1.5 degrees would mean that the Maldives and many small and low-lying islands would vanish. It is for this reason that “we tried very hard” to have 1.5 degrees in the document, but this “was blatantly obstructed by the big-emitting countries.”¹¹

The December 2010 UN Climate Conference in Cancun, Mexico was a step forward in that it created the Green Climate Fund to administer and transfer funds from wealthy nations, to the worst affected nations in a quest to protect forests, promote clean technologies and help reduce carbon emissions. The European Union, Japan and the United States pledged, contributing US\$100 billion a year to the Fund starting from 2020, along with a US\$30 billion in rapid assistance, though they have not said how these funds are to be raised. The rapid assistance fund was actually approved in Copenhagen to raise US\$30 billion between 2010 and 2012 to aid the most vulnerable countries deal with the impact of climate change.

The Cancun agreement set the goal of reducing greenhouse gas emissions from industrial countries by 25 to 40% within the next 10 years. Currently pledges amount to about 16 per cent. Moreover, a Climate Technology Centre and Network is to be set up to help distribute the technical know-how that contain and reduce emissions.¹²

The Cancun accord manifested an effort to sort out the previous year’s stalemate in Copenhagen where no agreement was reached on a realistic programme to keep climate change in check. Yet the Cancun agreement too fell short of setting specific reduction commitments on carbon emissions by major industrialised countries.

Divine Oneness (*Tawhīd*)

The Oneness of God (*tawhīd*) is an article of the Islamic faith manifested in the unity of His creation. The qur’ānic discourse typically addresses men and women and the whole of the cosmos. God’s presence in nature is vividly conveyed in the verse “Wherever you turn, there is the Face of God” (2:115), which means that He surrounds and permeates both the world of nature and the ambience of man in all places. From this perspective, the human being is part and parcel of a cosmic equilibrium that must not be disturbed, and effort must be made to strike a balance between the material and spiritual requirements of life. Nature, in a sense, participates in the qur’ānic revelation. This sense of shared destiny and common predicament with the rest of the existential world is also manifested in the nomenclature of the chapters (*sūrahs*) of the Qur’ān. The 114 *sūrahs* and the names by which they are known underline diversity and remembrance not only of God’s exalted names and attributes, messengers and prophets, but also the earth, fruits and bounties of the earth, plants and animals, trees, mountains and insects, the wider worldview of the creation and beyond.¹³

The primordial character of Qur'ānic messages visualises man and the cosmos in a state of harmony that reaffirms man's inner bond with the natural world. Certain verses of the Qur'ān address natural forms as well as human beings, while God takes non-human members of His creation, such as plants and animals, the sun and the stars to witness in certain other verses. The soul, which is nourished and sustained by the Qur'ān, does not regard the world of nature as its natural enemy to be conquered and subdued, but as an integral part of man's religious universe sharing in his earthly life, and in a sense, even ultimate destiny.

Tawhīd underlines the unicity of nature as an ecological principle and a distinctive feature of environmental science. The mineral kingdom supports the vegetable, and they in turn support the animal and there is a link of mutual dependence between them. The waste of one is made the food of the other, and an innate process of cleanliness exists in the natural world. There is an infinite chain of gradation and interdependence that point to a common destiny and ultimate unity of the existential world.¹⁴ Unity may be understood at various levels and domains of cosmic existence. Thus one may speak of the unity of the natural world, or on a grander scale, of the whole of the cosmos. One may also speak of the unity of living species and organisms on earth or of the unity of the human body - all of which are facets of His Unique Reality reflecting the various manifestations of a collective unity and interdependence.¹⁵ It is clear from the Islamic perspective that the terrestrial desolation and environmental degradation from without is in many ways reflective of man's spiritual desolation from within.

Many Muslim sages saw the cosmic and ontological contents of the Qur'ān, its verses and chapters, as well as the phenomena of nature and events within the soul of man, as *āyāt* (lit. 'signs' or 'portents') of the Author of the ontological Qur'ān (*al-Qur'ān al-takwīnī*) in juxtaposition with that of the written Qur'ān (*al-Qur'ān al-tadwīnī*).¹⁶ The Qur'ān alludes in many verses to the unmanifested and the manifested world (*'ālam al-ghayb wa 'l-shahādah*). The visible or manifest world is not an independent order of reality, but a manifestation of a vastly greater world which transcends it and from which it issues. The visible gradually recedes into the vast invisible which surrounds it and for which it is the veritable environment. It is in this way that the Divine presence, the spirit and the indefinable infinity permeates the world of nature and of normal humanity.¹⁷ All of this depicts the Islamic worldview of a spiritually motivated appreciation of nature with important ethical implications. Science and technology can expound the means that can be used to harness nature, but religion and philosophy dictate the ends.

Vicegerency (*Khalīfah*)

Meaning and Scope

The Arabic term *khalīfah* comes from the verbal root *khalafa*, meaning one who came after, inherited or succeeded another. *Khalīfah* thus implies holding a position of power, trust and responsibility that is exercised in harmony with the will of its principal party. *Khalīfah* and its plural *khalā'if* occur in nine places in the Qur'ān, and in seven of these, it is juxtaposed by the phrase *fi 'l-arḍ* – ‘on the earth’, which signifies that its application is in relationship mainly to planet earth. In each case a reference is made to the exercise of a certain authority that God entrusts in His noblest of creation, humankind. Adam, the archetypal man was appointed the first *khalīfah*, and by extension, every man and woman. Each one of us inherits power and responsibility *vis-à-vis* the planet earth and all its life forms.

Vicegerency confers on human beings, individually and collectively, the mission and responsibility to build the earth and harness its resources with moderation and care for its ecological balance (Qur'ān 2:30). Vicegerency is guided in turn by the principles of trusteeship (*amānah*), moderation (*i'tidāl*, *wasāṭiyyah*) and justice (*'adl*). Building and development (*i'mār*) with their broader physical and non-physical ramifications is another aspect of vicegerency that is informed, in turn, by the higher goals and purposes (*maqāṣid*) of Islam and its *sharī'ah*. Other aspects of *i'mār* that are highlighted in the sources include due observance of the Divinely-ordained cosmic equilibrium, greening the earth through plantation and agriculture (*tashjīr*; *ḍar'*) and cleanliness (*tahārah*) as discussed below.

Vicegerency and trusteeship place upon humankind the responsibility to safeguard the rights not only of fellow humans, but also of nature and other inhabitants of the earth. Man's vicegerency on the earth is, moreover, complemented by that of servanthship (*'ubūdiyyah*) toward God. Man is God's servant (*'abd Allāh*) and must obey Him. As *'abd Allāh*, he must be passive toward God and recipient of the grace that flows from the world above. As *khalīfat Allāh*, he must be active in the world, sustaining cosmic harmony and disseminating the grace for which he is the channel as a result of his being the most noble of God's creatures.

In the same way that God sustains and cares for the world, man must nurture and care for the ambience in which he plays the central role. Man cannot neglect the care of the natural world without betraying its trust of vicegerency (cf., Qur'ān 7:172) as he is entrusted with authority to manage the earth in accordance with the purposes intended by its Creator. Yet there is nothing more ominous for the natural environment than the practice of the power of vicegerency by a humanity which no longer accepts to be God's servant, obedient to His commands. Islam strongly opposes this form of human self-glorification at the expense either of God or His creation.

Vicegerency contemplates a man-earth relationship that looks toward sustainable utilisation of earth's resources. The Qur'ān makes no less than 485 references to *al-ard* 'the earth', mostly in the context of its relationship to human beings. The earth is described as the *alma mater* (nourishing mother) from which humankind is made, the place and source of their livelihood, and ultimately where they end their final journey (cf., Qur'ān 20:55). A variety of expressions are employed to describe the earth. The language is generally theocentric wherein God ingratiates His human servants: "Did We not make the earth as your cradle and resting place?" (78:6); and as "your field and couch for your comfort... endowed it with vast resources of water and pastures for you and your livestock?" (2:33).¹⁸

Man has inalienable biological and ecological needs for light, air, water, food, shelter and community and may utilise the resources of the earth to secure those needs, but to also share them with other living creatures. The Qur'ān often mentions the domestication of animals and plants as God's special favours on humankind. Then comes the reminder: "We have willed that all beauty on earth be a means by which We put people to test," to see how well they measure up and conduct themselves (Qur'ān 18:7).

Accountability and faithful observance of trust demand the promotion of good and the prevention of evil, building the earth and establishing a just order: "Let there be of you a nation that calls others to the good, establishes right and eradicates wrong. Such are they who shall prosper" (Qur'ān 20:53). Two of the broad and comprehensive principles of Islam that subsume most of these are justice and the doing of good (*'adl wa-ihsān*, cf., Qur'ān 16:91). Acts of injustice are committed not only among humans, but in the human treatment of natural environment, acts that pollute the earth, air and water and which cause dangerous disease to humans and other life forms.

Trusteeship (*Amānah*)

The Qur'ānic narrative on *khilāfah* began with God's decision to confer a great trust (*amānah*) on His creatures, the heavens, the Earth, the mountains, the angels, and mankind – but they all declined to take it, only mankind did, due to his enormous potential for good, yet also a certain audacity on his part. (33:72) It was due to this combination of good and evil in man that when God offered the *amānah* to him, the angels protested saying "will you place on it (earth) such as will spread corruption and shed blood – whereas it is we who extol your unbounded glory?" (2:30). However, God chose mankind for the task telling the angels "I know what you know not," of the enormous potential for good of the progeny of Adam. Qur'ān and *Sunnah* make *amānah* an integral part of the faith of a Muslim. *Amānah* is a hallmark of faithful Muslims, those who "fulfil their trusts (*amānāt*) and observe

their promises and commitments” (23:8). A breach of *amānah* is a grave matter as in the *ḥadīth* “One who betrays his *amānah* has no faith.”¹⁹

In a place where *amānah* appears in its plural form in the Qur’ān (4:58), God commands the believers to render the trusts (*amānāt*) to whom they belong. Then immediately follows the injunction “and when you judge among people you judge with justice.” Thus it appears that justice is the most important of all *amānāt* that God has entrusted to mankind. Elsewhere the injunction to do justice is juxtaposed with benevolence, beauty and perfection (*ihsān*; Qur’ān 16:90). Justice is a measure for measure concept whereas *ihsān* can be unilateral and reach far beyond the dictates of justice, especially in relationships between the human and non-human inhabitants of the earth. Thus it is declared that God has ingrained beauty and perfection in all things (Qur’ān 41:7); which is reiterated in a *ḥadīth* that “God has inscribed beauty and perfection (*ihsān*) on all things.”²⁰ It is mankind’s assignment then to strive to discover and manifest it. To facilitate this, man must not only observe the natural balance of all things, but also remove obstacles that may hinder their natural growth. This becomes, however, a remote prospect when man himself violates the God-ordained natural balance and actively engages in extravagance and excess. It is a religio-ethical mission of mankind in the earth, as the contemporary scholar al-Qaraḍāwī noted, “always to act conscientiously in his capacity as God’s vicegerent and custodian.”²¹ The following *ḥadīth* juxtaposes trusteeship with moral autonomy:

Beware that every one of you is a custodian and responsible for that which is in his custody. The leader is a custodian and he is responsible for his subjects; a man is a custodian and he is responsible for his family; a woman is the custodian of her husband’s home and children and she is responsible for them. Surely each one of you is a custodian and responsible for his charge.²²

Building the Earth (*I’ mār al-Arḍ, Umrān*)

Vicegerency also confers on humankind the authority to build the earth and develop its resources. To quote the text: “He it is who created you from the earth and made it your assignment to build it” (Qur’ān 11:61). The scope and potential of this assignment naturally varies in tandem with the state of human progress and civilisational attainment, but even then humans will be unable to support all that which live in the earth: “And We have provided in it (earth) sustenance for you, and for those who you do not support” (Qur’ān 15:19). The Prophet’s appreciation of the earth’s natural endowment is espoused in the following *ḥadīth*, with a challenge: “The world is green and pleasant and God has put it under your charge to see how you will manage.”²³ The earth is inherited by those of God’s servants, as the Qur’ān says, that do good works and fulfil their responsibilities (21:105).

Building the earth for beneficial uses is an evolving concept depending on the tools and know-how that may be available to particular individuals and communities. *I'mār* and *'umrān* (civilisation) are from the same Arabic root and our usage of *i'mār* encapsulates its broader civilisational vision informed by the material, ethical and artistic aspects of development. Some aspects of *i'mār* that are explicitly mentioned in the Qur'ān, *ḥadīth*, and texts of Islamic jurisprudence Islamic (*fiqh*) relate to the reclamation of barren land (*iḥyā' al-mawāt*), planting of trees and growing of flora and fauna, fruits and vegetables therein.²⁴ Thus the encouragement in the *ḥadīth*, "One who reclaims barren land is entitled to own it."²⁵

Barren land is unowned land mostly away from residential quarters with no signs of anyone having owned or developed it. It is an act of merit to reclaim it for productive purposes, especially for food and livestock-raising. Thus the *ḥadīth*: "Anyone who plants a tree or sows a field and a human, bird or animal eats from it, it shall be counted as charity from him."²⁶ The Prophet elaborated the Qur'ānic concept of *i'mār al-arḍ* in another inspirational *ḥadīth*: "If the day of resurrection comes upon any one of you while he has a seedling in his hand, let him plant it."²⁷ *Iḥyā' al-mawāt* is not confined to agriculture, as land may also be reclaimed for building of houses, hospitals and factories, etc. Yet "it is obligatory," according to al-Qaraḍāwī, "that industrial installations and factories are further removed from residential quarters so that people are safe from their harmful emissions, smoke, smell and other pollutants—simply because Islam outlaws infliction of harm."²⁸ The Qur'ān commentator and Mālikī jurist al-Qurṭubī (d. 1273) has drawn the conclusion that greening the earth and planting of trees is a collective obligation (*farḍ kifāyah*) of the Muslim community. In the event of total neglect of this duty, the ruling authorities are within their rights to compel people to do it.²⁹ The Muslim philosopher Al-Rāghib al-Iṣfahānī (d. 1124) observed on a similar note that building and greening the earth and development of its resources is one of the three cardinal objectives of Islam.³⁰ The early traditionist Abū Dawūd (d. 899) has recorded *ḥadīth* reports to the effect that in some parts of Medina, the Prophet had strictly prohibited the cutting of trees and hunting of animals.³¹ These last are also prohibited during war, on the authority of *ḥadīth* and established precedent of the four first caliphs (*al-khulafā' al-rāshidūn*) – unless there be a manifest need or benefit therein for Muslim warriors.

In addition to their nutritional and medicinal value for humans and animals, plants enrich the soil and protect it from erosion by wind and water; they conserve the water by draining its run-off, moderate the climate and produce the oxygen we breathe. The Qur'ān also mentions the aesthetic values of plants and animals that bring excitement, joy and peace of mind.

The significance of *iḥyā' al-mawāt* is brought into sharp relief by the phenomena of deforestation and expanding deserts. Sudan alone is annually losing 10 km of land, and the rate of deforestation in Tunisia due to the same phenomenon is 1800 hectares

per annum.³² Deforestation is a much wider problem and it is by no means confined to any particular region of the world.

Keeping the Balance

The Qur'ān is expressive of the state of equilibrium God has ordained in the natural world that reveal intricate interdependence between its parts, as well as relationships of the parts, to the whole: "Verily all things We have created are in due measure and proportion" (45:49 and 13:8); "We have produced therein (earth) everything in balance" (15:19). The sun and the moon move according to a fixed reckoning. "He has raised the heaven high and set up the measure, that you may not transgress the measure. So weigh all things fairly and fall not short of the balance" (55:5-9). God has determined, to borrow Husaini's phrase, the earth's "geographic and hydrologic characteristics. He has determined the precipitation patterns of the globe, and also water movement through soils. The recharge of ground water and its drainage occur according to properties of water, soils, and other factors that God has determined [in due proportions]."³³ This basically conveys the purport of the verse: "We send down water from the sky in accordance with a determined measure, and then We cause it to settle in the earth; We are most certainly able also to drain it off" (23:18).

All parts of the natural world, with its enormous diversity, have a value to each other and to the total global system over and above their value to mankind. The text repeatedly alludes to biological revival of the lifeless earth through rain which is likened to man's resurrection on the Day of Judgement: God sends forth the wind that raises the cloud and drives it toward dead land, and from it issues rain which enlivens the Earth after it had been lifeless; much like the resurrection and return of life after death (Qur'ān 35:9).

All the produce of the earth is duly proportioned (*bi-qadarⁱⁿ mawzūn*; Qur'ān 15:19), not just in what is evident, but as to their internal composition of nutrients, water, minerals, salts, etc. God blessed the earth and made it safe such that "you shall not see imperfection in the creation of the Most Merciful" (67:13).

When man acts, instead of a trusted custodian and architect of the Earth, as its most dangerous destroyer, driven by greed rather than need and becomes an extravagant and insatiable consumer; when the Earth is made into a testing field for deadly atomic bombs with immeasurable radioactive emissions, its *fiṭrah* (innate nature) is subjected to dangerous distortion. The translucent water that God sends to earth is polluted with endemic waste and industrial pollution. Imagine that more than 120 littoral cities of the Mediterranean sea dispose their refuse water and pollutants directly into the sea.³⁴

When the natural purity of the Earth's produce is incessantly eroded by chemical infusions for commercial gain, and when dense carbon emission, traffic and industrial

pollution poison the air that inflict harm on humans and other life forms, its God-ordained balance is disrupted. When the cattle and grass eating animals are fed with animally-sourced protein until it is manifested in such problems as ‘mad-cow disease’ etc., and when genetically modified fruits overtake the natural variety for commercial gain, the God-ordained balance in them is no longer immune - this is nothing less, in al-Qaraḏāwī’s view, than transgression and mischief, *ẓulm* and *fasād*.³⁵

Beauty and Cleanliness (*Jamāl and Ṭahārah*)

Qur’ān and *Sunnah* are emphatic on cleanliness, in terms of both personal hygiene and the living environment. Thus the Prophet declared that “cleanliness is a part of the faith (of every Muslim).”³⁶ He also said that “God does not accept *ṣalāh* [ritual prayer] that is not preceded by ablution.”³⁷ Personal cleanliness, clean clothes and ablution are parts of the daily observances of all practicing Muslims, and there is much attention to details in the Qur’ān (cf., 5:6; 8:11; 74:4) and *Sunnah*, on such matters as the requirements of ablution and bathing, regular brushing of one’s teeth, cutting of hair and nails, washing of hands before and after meals, and observance of hygiene when drawing and drinking water from wells and springs. It is recommended that one make a special effort in personal hygiene when attending the mosque congregational prayers as well as on the upkeep and cleanliness of the mosque environment.³⁸ The *Sunnah* also bans urination and excretion of body waste in standing or running water, near public paths and mosques, throwing refuse and litter on public passages that annoy the people.³⁹ The *fiqh* rules elaborate further on toilet behaviour, water and attire that may or may not be deemed to be clean for purposes of ablution and prayer. However, the teachings of religion reach out further: “Truly God loves those who return to him and those who insist on cleanliness” (2:222). In a particular reference to the congregation of the Medinan mosque of Qubā’, the Qur’ān speaks in their praise: “Among them are people who love to purify and God truly loves those who purify themselves” (9:108).

Cleanliness is an integral part of beauty within and outside the rituals of faith. The Qur’ān asks the believers to “Beautify as God has beautified you,” and “Is not the recompense for beautifying, but beautification” (28:77 and 55:60).⁴⁰ The Prophet has also said: “God is beautiful and He loves beauty.”⁴¹ Commentators have held that the reference here is to one’s body, living quarters and surrounding environment. It is reported in a *ḥadīth* that when the Companion Abū Barzah asked the Prophet “O Messenger of God! teach me something that would benefit me (which I can regularly practice), the Prophet replied: “Remove obstructions (and litter) from the path of Muslims.”⁴² Samūrah b. Jundab reported that “The Prophet ordered us to build mosques in our living quarters and ordered us also to keep them clean.”⁴³ Other *ḥadīth* reports provide details on prohibition of spitting, release of body fluids in the

vicinity of mosques, and under the shade of trees occasioned by people for relaxation and shelter.

The Qur'ān warns the people to take personal responsibility for their well being and health: "O people! The excesses you commit will harm only yourselves. Enjoy the (lawful) pleasures of this world" (10:23). The *ḥadīth* conveys a similar message "He who goes to bed at night with his hands unclean should only blame himself (if he falls ill)."⁴⁴ Personal and environmental hygiene are thus a shared responsibility of the individual and community, but it is the former that must exercise due diligence in the first place, at least for the part under his control.

Beauty and cleanliness admittedly depend on financial means at one's disposal, just as the arts and other aesthetic aspects of civilisation can be expected to prosper in more affluent societies. Having said this, cultural attitude and outlook are equally important. Notwithstanding the rigorous and comprehensive calibre of Islamic teachings on cleanliness, it would be hard to claim, without wishing to engage in generalisations, that Muslim cities and population centres have excelled in their observance of environmental cleanliness. This may be changing as of late. There is a certain disconnect, nevertheless, with the teachings of Islam, and realities on the ground. If there is a case for civilisational renewal (*tajdīd ḥaḍārī*), the essence of renewal here is not to bring a new attitude and message, but to recapture what has gradually been diluted over the course of time.

Violation and Abuse

Abuses of *khilāfah* are manifested in mischief making and corruption, which is when man becomes, instead of builder and caretaker of the earth, an agent of its ruin through greed, extravagance, infliction of harm and arrogant disregard of Divine guidance. These are discussed below.

Mischief-Making and Corruption (*Fasād ft 'l-Ard*)

Khilāfah and its ensuing trust can be violated in numerous ways, but an instance of violation which the Qur'ān highlights is spreading mischief and corruption in the earth. The text identifies human beings as having the greatest potential for good as well as mischief making. Hence the warning: "Spread not corruption in the earth;" and "behold what happened in the end to the *mufsidūn*, who spread corruption and ruin [around them]" (Qur'ān 7:85). Yet even after many warnings:

Mischief (*fasād*) has emerged on the land and sea as an outcome of what men's hands have wrought; and so God may give them a taste of some of their own deeds in order that they may take heed and retract (30:41).

Fasād in the Qur'ānic language is connected to the destruction of tilth and fertility (cf., 2:205), of crops and soil through abusive practices and depletion of the soil of its goodness. The various forms of environmental damage through soil erosion and marine pollution we are witnessing today are veritable manifestations of the Qur'ānic concept of *fasād*.⁴⁵ Mischief becomes rampant on Earth due to human defiance of Divine guidance.

Al-Qarāḍāwī identifies conservation of the natural environment (*hiḏḏ al-bay'ah*) as one of the higher objectives of the *sharī'ah*, side by side with protection of life (*hiḏḏ al-naḏs*) and protection of property (*hiḏḏ al-māl*). He elaborates that environmental pollution, resource depletion, and disturbance of ecological balance constitute major threats to human life and safety as “we experience today. For as long as this course of *fasād* continues, the danger to human life can only be expected to increase.”⁴⁶ In numerous places, the Qur'ān warns the wealthy, but arrogant individuals and nations of old, the Pharaoh, the peoples of 'Ād, Thamūd, Madyan, Gog and Magog that spread tyranny and corruption on Earth. They are described as *mufsidūn fī 'l-ard*, agents of mischief, degradation and ruin; truly they abused the trust in clear contrast to those who strove to observe it.

The Prophet forbade setting of fire to an anthill by one who might have been stung by a single ant.⁴⁷ He also forbade the killing of bees, and captured livestock, as killing them is a form of mischief. He once ordered a man who had taken away the nestlings of a bird from their nest to return them to their nest. He also forbade the cutting down of trees that provided valuable shelter to humans or animals in the desert.⁴⁸ Muslim jurists have consequently held that destroying a living creature that does not pose a threat to one's safety is forbidden, both in peace times and war.

Extravagance and Waste (*Isrāf, Tabdhīr*)

Although Qur'ān and *hadīth* use these two Arabic words synonymously, a technical distinction has been drawn between them. *Isrāf* signifies extravagance and wasteful use of what is otherwise permissible. *Tabdhīr* on the other hand is spending on that which is unlawful in the first place. Thus one who exceeds the limits of moderation in what is lawful is a prodigal (*musrif*), such as one who consumes food to excess, or uses water wastefully for ablution.⁴⁹ However, those who spend money on procuring what is unlawful, such as the purchasing of drugs and gambling tools, even by small quantities, are *mubadhhirūn* – described in the Qur'ān as the “devil's brethren” (17:26). This is because extravagance of one person leads to the deprivation of another, and the excess of one limits the accessibility right to resources of another. The basic guideline on utilisation of resources and spending is moderation that avoids both the extremes of niggardliness and extravagance.⁵⁰ The rules of *fiqh* maintain that use of water for drinking takes priority over its usage for ablution. One may eat and

drink, preferably with a sense of gratitude to God, but avoid wasting for “God loves not the prodigals – *al-musrifūn*” (Qur’ān 2:172 and 7:31). Further instruction on this is found in the *ḥadīth* advising moderation in eating even to the extent that one should finish the food one takes on one’s plate. Moderation is also advised in clothing, which should not indulge in extravagance and self-glorification.⁵¹ The prodigals are, moreover, equated with the agents of corruption (*musrifūn* and *muḥsidūn*) and the faithful are advised “not to follow the bidding of the *musrifīn*, those who cause corruption on Earth” (Qur’ān 26:150).

Destruction in futility is sinful. ‘Abd-Allāh b. ‘Umar thus reported that the Prophet cursed one who needlessly destroys the life of a living creature as a pastime. The Prophet said this when he passed by two youths from the Quraysh tribe who had tied a bird or a chicken (reporter unsure), for a shooting target.⁵² In another *ḥadīth*, the Prophet warned that anyone who kills a sparrow in vain will be taken to account for it on the Day of Judgement.⁵³ The Prophet is also reported to have said that one who (wastefully) cuts down a tree invokes upon himself punishment of Hell in the Hereafter.⁵⁴

Passive destruction due to neglect, such as letting an animal die of hunger and disease, or neglecting a crop until it goes to waste, letting farm land or houses to deteriorate due to prolonged neglect also fall under loss of assets (*iḍā‘at al-māl*) that violates the *sharī‘ah* objective (*maqṣid*), of protection of property (*ḥifẓ al-māl*). This is because ownership in Islam partakes in trust (*amānah*), and it is the owner’s responsibility to take care of what he owns and use it for his own benefit or the community at large. Thus the owner is not entitled to destroy or set fire to his own property for no good purpose.⁵⁵

Elimination of Harm

“Harm must be eliminated – *al-darār‘u yuzāl*”⁵⁶ – is the exact wording of one of the leading maxims of Islamic law, which has in turn been taken from the renowned *ḥadīth* that “harm may neither be inflicted nor reciprocated- *lā darār wa lā ḍirār fī ‘l-islām*.” This *ḥadīth* is also a legal maxim by itself.⁵⁷ The ruling it contains would subsume abusive exploitation of resources, even if by the owner, in a way that manifestly harms the living environment.⁵⁸ The harm so inflicted must, however, be manifest and exorbitant, which means that a slight harm is usually tolerated, especially when it emanates from the normal exercise of one’s ownership rights. The owner’s exercise of ownership rights may cause some harm to another person but unless it is exorbitant (*fāḥish*), no legal action should be taken.

To ensure accuracy in the evaluation of harm and its remedial measures, the law provides additional guidelines for action. Note also the subtle difference between mischief-making (*fasād fī‘l-ard*) as discussed above, and the infliction of harm

(*ḍarār*) as under review. Mischief-making may be unilateral and may or may not involve more than one actor - such as in the case of one who sets fire to an anthill or one who disposes of harmful industrial waste in an adjacent river. Infliction of harm, most likely visualises two parties, its instigator, and its victim, who is entitled to seek judicial relief. This is not to say that mischief and harm do not overlap, as black and white distinctions are difficult to draw. *Fasād* and *ḍarār* may indeed combine in one and the same case, for instance, in respect of a factory that disposes harmful chemical waste into a river and cause personal injury (*ḍarār*) to a consumer, in which case it would most likely be responsible both for an act of *fasād* against the general public and damages for personal injury. Mischief making would thus appear to be a public rights issue for the most part, often involving individuals and communities, and may entail not only civil damages, but also punitive sanctions, whereas infliction of harm often gives rise to a civil claim for compensation. The former can be initiated by the public prosecutor on behalf of the state and community, whereas the latter is initiated by the injured party, and both or either may have recourse to legal action as the case may be.

The present writer has not seen in the existing *fiqh* literature this distinction between *fasād* and *ḍarār*, one being treated as a public rights issue, and the other as a civil claim. While no hard and fast divisions are proposed, it seems a reasonable line of distinction that facilitates protection of the general public against mischief, even if no individual claim has arisen, and also to protect individuals in cases where evidence may be less than actionable to prove *fasād* and mischief to society at large.

According to a supplementary legal maxim “harm shall be removed to the extent possible.”⁵⁹ Harm is, in other words, eliminated within reasonable bounds such that the remedial measure does not lead to a bigger harm. On a similar note “harm shall not be eliminated by means of a similar harm.”⁶⁰ Furthermore, “A private injury is tolerated in order to prevent injury to the general public.”⁶¹ If one harm could not be avoided without causing another, then the “lesser of the two harms shall be chosen.”⁶² The state also bears responsibility to take remedial action to protect public interest.⁶³ According to yet another legal maxim “Harm cannot establish a precedent – *al-ḍarār lā yakūn qadīm*,” which means that lapse of time cannot justify continuation of a harm.⁶⁴ All of this is further to be guided by the maxim that “averting harm takes priority over attracting benefit.”

The *sharī'ah* also empowers government authorities to impose moratoria on activities, projects and enterprises they consider will result in real damage to the environment. Applying the legal maxim that “averting of harm takes precedence over the acquisition of benefit,” may mean abandoning some projects. If, however, the community is in urgent need of a project that may result in some damage, that may be allowed under the principle that “dire necessities render the unlawful lawful.”⁶⁶

The Islamic tradition is expressive of a great deal of concern for animal welfare. There are *ḥadīths* on record where the Prophet has warned, in particularly emphatic terms, with God's wrath and punishment on individuals who were guilty of cruelty to animals, such as dogs, cats, camels and cattle under their care.⁶⁷ The *ḥadīth* directives on animal care were followed by the Rightly-Guided Caliphs and others that led to establishing an inspiring precedent.⁶⁸ Space does not permit entering details, but merely to say that Government authorities should intervene to curb abusive practices and protect both domestic and wild animals in private and public institutions such as zoos and research institutions under pain of compensation and punishment. Notwithstanding the distinctively compassionate tenor of our tradition, actual practice is uninspiring as welfare of animals is not a particularly visible feature of Muslim society practices. This is perhaps an area where our concern for civilisational renewal (*tajdīd ḥaqārī*) is again relevant in that we need to reconnect ourselves with the original teachings of Islam.

Furthermore, the Islamic public law principle of *sharī'ah*-oriented policy (*siyāsah shar'īyyah*) empowers government authorities to impose technical standards, licensing provisions and policy measures that encourage moderation and prevent or minimise environmental damage.⁶⁹

Clearly these and similar other provisions of Islamic law encapsulate between them most, if not all, instances of environmental damage. They also empower judicial authorities to take appropriate preventive and remedial action, including financial compensation and punitive sanctions. *Sharī'ah* guidelines on elimination of mischief and *darār* empower national governments and actors to take action, yet they may be powerless, especially in the case of weaker countries, to take deterrent action against multinational corporations and more powerful countries. It is here where international conventions and binding covenants are necessary to develop consensus and common strategies to curb further damage to natural environment.

Conclusions and Recommendations

Scientists agree almost unanimously that human activities are the likely cause of a rapid increase in global temperatures over the past several decades, resulting in global warming.⁷⁰ A scientist himself, Zakri Abdul Hamid, has rightly observed that the "modest and incremental approach" that world leaders have taken so far to the climate issue "is not enough [...] only a major overhaul of the governance system will address the challenges of environmental sustainability." A proposal was consequently made for the formation of a World Environment Organisation (WEO) similar to that of World Trade Organisation (WTO) which sets standards and facilitates collective planning to curb environmental damage. Currently more than 40 UN agencies deal

with environmental issues; these should be consolidated under one umbrella of the proposed WEO.⁷¹

Solutions to the environmental crisis can hardly be expected to come without addressing the spiritual malaise of modern man and his rediscovery of the vision and wisdom that must inform his responses to the crisis. In pre-modern times, dominant religions remained altogether impervious to the discourses of minority religions and cultures. Today those boundaries have been broken and there is a need for us to understand each other and reach out for harmony as we have all become victims and participants, some more widely than others, in the destruction of the earth's environment.

It is essential for those who speak for spirituality and religion to collaborate in matters of their shared concern and take common platforms to save the planet from its crisis. It is also important for those who refuse to acknowledge the reality of the crisis and its ruinous manifestations to put an end to that state of denial. Muslim communities and leaders certainly have their share of responsibility to draw the attention of their peoples to the spiritual significance of nature and harmony with the rest of God's creation. Muslim countries and most other nations are fortunately not in a state of denial over the environmental crisis. It is encouraging to note for instance "The Muslim Seven Year Action Plan on Climate Change (2010-2017)," created at a landmark event at Windsor Castle in November 2009 titled "Many Heavens, One Earth," organised by the United Nations and the Alliance of Religions and Conservation to encourage environmental action among a variety of faiths.

The Islamic tradition possesses an ethics and metaphysics of nature, rooted in the revelation and Divine law, which concern the duties and responsibilities of man towards the non-human realms of the created order. All proponents of traditional Islam should carry out a dialogue with followers of other religions on an issue which concerns men and women everywhere. By sharing the wisdom of their tradition with others, and learning from them in the meantime, they can contribute together not only to the Islamic world itself, but to the betterment of the larger humanity.

The destruction of one part of creation affects other parts in ways that the science of today may not have adequately exposed. In an interdependent natural environment in which we all live, it is for men and women everywhere to unite, to borrow Nasr's phrase "not in an agnostic humanism which kills the Divine in man [...] but in the one Spirit which manifests itself in different ways in the vast and complex ocean of humanity."⁷²

Ethical teaching and spiritual wisdom in defence of the natural environment should be backed by legislation and effective enforcement measures. For appeals only to conscience without positive inducement may well put those who respond with self-restraint at a disadvantage with respect to those who are bent on transgression. The Islamic tradition combines ethical teaching with the legal injunction of the *sharī'ah*

concerning care for the earth's environment and living inhabitants. This aspect of the *sharī'ah* merits greater attention in that it can move the environmental debate from mere show of concern to an actionable plane that is likely to bear a greater restraining influence on potential violators. When a moral norm is developed into a legal principle it is indicative of moral progress. Developments of this kind have taken place with respect to twentieth century human rights discourse where certain moral precepts have actually been elevated into legal principles.

Mass media, civil society institutions, welfare bodies and parents all play important roles, side by side with governments, in alerting the public on instances of environmental abuse and the need to curb them through persuasive measures and education. This is a continuous effort that requires planning and proactive action, indeed a change from within ourselves, before we can expect the fruits of that vision in real life. While calling for civil society action and a fresh cultural awareness al-Qaraḍāwī advised that “parents should not throw the burden on to the school nor the authorities but to join hands with them [...]. Cultural institutions and the media should also support this effort.”⁷³ Al-Qaraḍāwī adds that in earlier times the *muḥtasib* (ombudsman, market inspector) used to play an important role in discharging some of these social obligations, but that role is now played by a variety of other actors and welfare organisations.⁷⁴ All should support ecologically sustainable development. Scientific and technical knowledge of environmental care should continually be improved and developed through safer methods and monitoring. Ecologically sustainable development and planning should espouse and nurture suitable restraints and take into consideration inherent proclivities of various localities and climes. Economic development and city-planning should always include analysis of environmental impacts and be designed so as to minimise damage.

Qur'ān and *Sunnah* are evidently emphatic on environmental care and cleanliness, but honourable exceptions apart, Muslim '*ulamā*' hardly speak about it. The '*ulamā*' should make their presence felt and renounce the attitude that implies environment is not a matter of concern to Islam!

The International conference in Amman where the present writer spoke, presented another opportunity for Jordan's Royal Aal al-Bayt Institute to liaise with the Muftis and leading '*ulamā*' of selected Muslim countries to take a common platform on environmental awareness and its religious significance for Muslims. It was recommended that this be done through sermons, mosque – organised events, TV programmes and the like. Interesting developments have also been taking place in some parts of Indonesia in recent years.⁷⁵

At the national level, environmental care, awareness of its pollutants and protective measures should be introduced in public schools at an early stage, to be pursued by suitable educational programmes in industrial centres, farms and factories. At the international level, it is essential to wage a rigorous campaign for international

treaties and binding instruments that safeguard the environment from the menace of nuclear weapons, and their proliferation by all states, including Israel and North Korea.⁷⁶

Lastly, self-seeking individuals and institutions should be made responsible to repair the environmental damage they cause. Cramping too many sky scrapers in congested areas has become commonplace in cities such as Kuala Lumpur, leaving on-lookers often askance whether any amount of ethical education will constrain greedy developers and their collaborators in municipal offices to care for environmental safety and the wellbeing of the general populace. Private or local interest should not be encouraged at the expense of public interest and damage to larger society.

To summarise:

- Unless a problem is recognised for what it is, the question of finding effective solutions to it is not likely to begin. To deny the existence of environmental crisis is unhelpful, especially in the case of the major contributors to the crisis. This should be put to an end.
- Muslims have much to contribute to the evolving environmental discourse, yet they need to articulate their resources, engage and develop the language of persuasion both within their countries and internationally.
- Ideas to address environmental crisis are not actionable by themselves without enabling legislation and policy initiatives as well as international treaties. The *sharī'ah*-doctrine of *ḍarār* and its allied legal maxims merit recognition by government actors and the Organisation of Islamic Cooperation to hold the miscreants liable for their violations.
- In their effort to prevent further damage to the natural environment Government authorities may impose, within the ambit of the *sharī'ah* law doctrine of *siyāsah shari'yyah*, moratoria and emission limits on producers and users of coal and fossil fuel, as well as licensing requirements, to ensure environmentally friendly construction planning in urban areas.
- Educational institutions, mass media, and civil society, scientific and legal thinkers and institutions should all support environmental protection efforts. Citizen awareness through family influence, schools and universities is essential for waging a comprehensive campaign to prevent waste and promote cleanliness. From the Islamic religious viewpoint this effort also merits spiritual reward. Religious leaders and Imams should make environmental care and care for animals an integral part of their guidance and advice to their communities.
- An authoritative world body, the proposed World Environment Organisation, should be established under the auspices of the United Nations.

Notes

1. Cf., Chris Baltimore, "Did Gulf Coast Dodge an Ecological Bullet?" *New Straits Times* (Kuala Lumpur), 6 August 2010, 18.
2. *The Malay Mail* (Kuala Lumpur), 18 August 2010, 12.
3. Widespread deforestation, the conversion of wetlands to farms or urban sprawl and the clogging up of natural drainage systems with garbage also exacerbate the impacts of the devastating floods. See the AFP report "Damaged Ecosystems Reason for Asia's Killer Floods," *New Straits Times* (Kuala Lumpur), 20 August 2010, 27.
4. The United States has not ratified the Kyoto Protocol, and Western governments generally took questionable postures in the Copenhagen conference.
5. Parvez Manzoor, "Environment and Values: the Islamic Perspective," in: Ziyauddin Sardar (ed.), *Touch of Midas: Science, Values and Environment in Islam and the West* (Kuala Lumpur: Pelanduk Publications, 1988), 151.
6. Cf., Lionel Rubin, *An Essay on the Nature and Significance of Economic Science* (London, 1932), quoted in Adi Setia, "The Inner Dimension of Going Green: Articulating Islamic Deep Ecology," *Islam and Science* 5 (2007), 137.
7. The twentieth century saw the disappearance of half the world's forests and the depletion of fish by about two thirds. For instance, Peru's fishing was estimated 3.5 million tonnes in 1960, increasing by 1965 to 9 million, and to 13.5 million in 1970. In 1975, it declined to 3 million and to 1.5 million in 1978. See Aḥmad 'Abd al-Wahhāb 'Abd al-Jawād, *Al-Manhaj al-islāmī li-'Ilaj talawwuth al-bay'ah* (Cairo: al-Dār al-'Arabiyyah li 'l-Nashr wa 'l-Tawzī', 1991), 34.
8. Seyyed Hossein Nasr in conversation with Muzaffar Iqbal, *Islam, Science, Muslims and Technology* (Serwood Park, Canada: Al-Qalam Publishing (Canada), reprint Kuala Lumpur: Islamic Book Trust, 2007), 101.
9. Delegates were left frustrated as the US refused to agree to any binding treaty. The Copenhagen Accord was drafted by the United States and the BASIC group of countries (Brazil, China, India, and South Africa). The document is not legally binding and no set decisions on emission reductions were made. Note also that China overtook the United States as the biggest emitter in 2008 and recently it was reported as the largest consumer of energy.
10. Report by Nur Atifi, "COP15: The Good, the Bad and the Ugly," *Business Today* (Kuala Lumpur), 13 February 2010, 42.
11. *Ibid.*, 43.
12. See *New Sunday Times* (Kuala Lumpur) editorial, "New Climate Deal Reached," 12 December, 2010, 34.
13. The names of *sūrahs* in the Qur'ān thus include the Arabic equivalents of cattle, honey bees, the ant, spider, cow, horse, elephant, iron, the star, the moon, the morning, night, the time, the mountain, the city, lightning, winds, fig, olive, and so forth. See for a discussion al-Qaradawi, *Ri'ayat al-Bay'ah*, 54.
14. Cf., Seyyed Hossein Nasr, *An Introduction to Islamic Cosmological Doctrine* (Cambridge MA: Harvard University Press, 1964), 4-5. See also Sultan Ismail, "Environment and the Islamic Perspective," in: A. R. Agwan (ed.), *Islam and the Environment* (New Delhi: Institute of Objective Studies, 1997), 166.
15. Cf., Osman Bakar, "Environmental Health and Welfare as an Important Aspect of Civilisational Islam," *Al-Shajarah* [Kuala Lumpur] 11, no.1 (2006), 41.
16. Seyyed Hossein Nasr, "Islam and the Environmental Crisis," in: Agwan (ed.), *Islam*, 17.
17. *Ibid.*, 18.
18. Other qur'ānic references to the Earth: "We vested it (the earth) with the means of livelihood for

- you” (7:10); blessed it and made it a safe place for you to live (41:10); richly endowed it with greenery and fruits of all kinds (22:63); and subjugated it to you to harness its resources for your enjoyment (45:13; 67:15).
19. *Hadīth* narrated by Anas b. Mālik, in: Muḥammad Naṣīr al-Dīn al-Albānī (ed.), *Ṣaḥīḥ al-jāmi‘ al-ṣaḡhīr* (Cairo: Muṣṭafā al-Bābī al-Ḥalabī, 1954, 4th ed.), *ḥadīth* no. 7,179.
 20. Muslim b. al-Ḥajjāj al-Nīshābūrī, *Mukhtaṣsar Ṣaḥīḥ Muslim*, ed. Muḥammad Naṣīr al-Dīn al-Albānī (Beirut: al-Maktab al-Islamī, 1407 AH/1987, 6th ed.), *ḥadīth* no. 1,249.
 21. Yūsuf al-Qaraḍāwī, *Ri‘āyat al-bay‘ah fi ‘l-sharī‘at al-islām* (Cairo: Dār al-Shurūq, 1421 AH/2001), 212.
 22. Muḥammad b. Ismā‘īl al-Bukhārī, *The Translation of the Meaning of Sahih al-Bukhari*, transl. Muhammad Muhsin Khan (Lahore: Kazi Publications, 1986), vol. 9, *ḥadīth* no. 252.
 23. Al-Khaṭīb al-Tabrīzī, *Mishkāṭ, al-Maṣābīḥ*, ed. Muḥammad Naṣīr al-Dīn al-Albānī (Cairo: 1979, 2nd ed.), vol. 2, *ḥadīth* no. 3,086.
 24. Cf., Qur’ān 6: 99; 27: 60; 36:33.
 25. Abū Dawūd al-Sijistānī, *Sunan Abu Dawud*, transl. Ahmad Hasan, 3 vols (Lahore: Ashraf Press, 1984), *ḥadīth* no. 3,073; Abū ‘Īsā Muḥammad al-Tirmidhī, *Sunan al-Tirmidhī* (Beirut: Dār al-Fikr, 1400 AH/1980), *ḥadīth* no. 1,379.
 26. Agreed upon *ḥadīth* (*muttafaq‘ah ‘alayh*), recorded by al-Bukhārī, *Ṣaḥīḥ*, *ḥadīth* no. 1,001.
 27. Muḥammad b. Ismā‘īl al-Bukhārī, *Al-Adab al-mufrad* (Cairo: Muḥibb al-Dīn al-Khaṭīb, 1959, 2nd ed.); *ḥadīth* no. 479; Aḥmad b. Ḥanbal, *Musnad Imām Aḥmad b. Ḥanbal* (Cairo: Dār al-Ḥadīth, 1994) 3:183, *ḥadīth* no. 184.
 28. According to al-Qaraḍāwī, *Ri‘āyat, 72-73, iḥyā‘ al-mawāt* is regulated by detailed *fiqh* rules, but one that may be mentioned here is that reclamation should be with the approval of government just as the latter is authorised to repossess the land from one who fails to build it after two or three years and assign it to someone else who can develop it.
 29. *Tafsīr al-Qurṭubī*, 3:306 also quoted by al-Qaraḍāwī, *Ri‘āyat*, 60.
 30. Al-Rāghib al-Isfahānī, *Al-Dharī‘ah ilā makārim al-sharī‘ah*, as quoted in al-Qaraḍāwī, *Ri‘āyat*, 64.
 31. Three such *ḥadīths* are discussed in Muḥammad Haytham Khayyāt, *Dē chaperyal roghṭya dē islam pē mīzān kē* (Environmental Health in Islamic Teachings) (Kabul: Ministry of Health and WHO branch of Afghanistan, 2002), 32 [in Pashto].
 32. *Ibid.*, 216-17.
 33. S. Waqar Ahmad Husaini, *Islamic Thought in the Rise and Supremacy of Islamic Technological Culture: Water Resources and Energy* (New Delhi: Goodword Press, 2001, rev. 2nd ed.), 90.
 34. See for details ‘Abd al-Jawād, *Al-Manhaj*, 35.
 35. Al-Qaraḍāwī, *Ri‘āyat*, 225.
 36. Al-Nīshābūrī, *Mukhtaṣsar*, ed. al-Albānī, *ḥadīth* no. 120.
 37. *Hadīth* recorded by most of the major collections of *ḥadīth*. See al-Albānī (ed.), *Ṣaḥīḥ al-jāmi‘ al-ṣaḡhīr*, *ḥadīth* no. 7,746.
 38. See for details al-Qaraḍāwī, *Ri‘āyat*, 75f.
 39. See for details ‘Abd al-Jawād, *Al-Manhaj*, 39f.
 40. Translation of verses quoted from Joseph Lumbard, *Submission, Faith and Beauty: The Religion of Islam*, (Berkeley CA: Zaytuna Institute, 2008), 66.
 41. Al-Tirmidhī, *Sunan*, *ḥadīth* no. 2,800.
 42. *Ṣaḥīḥ Muslim*, *ḥadīth* no. 2,618.
 43. al-Sijistānī, *Sunan*, transl. Ahmad Hasan, *ḥadīth* no. 456; also in Aḥmad b. Ḥanbal, *Musnad*, vol. 5, *ḥadīth* no. 17.
 44. Al-Khaṭīb al-Tabrīzī, *Mishkāṭ*, ed. al-Albānī, vol. 3, *ḥadīth* no. 4,209; also quoted in ‘Abd al-Jawād, *Al-Manhaj*, 103.

45. Cf., Seyyed Hossein Nasr, *Islam, Science and Muslim Technology* (Kuala Lumpur: Islamic Book Trust, 2007, repr.), 147. See also cf., Mawil al-Samarai, "The Human Appointment and Creation," in: Agwan (ed.), *Islam*, 163.
46. Al-Qaraḍāwī, *Ri'āyat*, 48.
47. *Ḥadīth* of sound authority related by al-Bukhārī and Muslim on the authority of Abū Hurayrah.
48. Several *ḥadīths* recorded in *Ṣaḥīḥ al-Bukhārī*, *Ṣaḥīḥ Muslim* and *Sunan Abī Dawūd*. See for a discussion of these and other reports Abubakar Ahmad Bakadar et al., "Islamic Principles for the Conservation of the Natural Environment," in: Agwan (ed.), *Islam*, 83f.
49. 'Abd Allah b. 'Umar reported that the Prophet, when he passed by Sa'd b. Abī Waqqāṣ who was taking the ablution for prayer but using more water than necessary, said: "What is this waste, O Sa'd! He replied "Can there be waste in washing for the prayer?" The Prophet replied: "Yes, even if you are beside a flowing river" (reported by Aḥmad b. Hanbal in his *Musnad*, also quoted in al-Qaraḍāwī, *Ri'āyat*, 102). There is a weakness in the chain of narration of this *ḥadīth*, but it is strengthened by another *ḥadīth* recorded by Ibn Mājah in *Sunan Ibn Mājah* (*ḥadīth* no. 424) to the effect that the Prophet "saw a man doing ablution and told him : do not waste, do not waste."
50. Thus the instruction: "Tie not your hand to your neck nor stretch it to its utmost reach that may then leave you self-blaming and regretful" (Qur'ān 17:29).
51. al-Albānī (ed.), *Ṣaḥīḥ*, , *ḥadīth* no. 4,505.
52. *Ṣaḥīḥ al-Bukhārī*, *ḥadīth* no. 5,515, and *Ṣaḥīḥ Muslim*, *ḥadīth* no. 1,958.
53. Al-Nasā'ī, *Sunan al-Nasā'ī*, vol. 7, 229.
54. Al-Khaṭīb al-Tabrīzī, *Mishkāṭ*, ed. al-Albānī, vol. 2, *ḥadīth* no. 2,790.
55. See for details al-Qaraḍāwī, *Ri'āyat*, 146f.
56. Cf., Zaydan, 'Abd al-Karīm Zaydān, *Al-Wajīz fī sharḥ al-qawā'id al-fiqhiyyah* (Beirut: Mu'assasat al-Risālah Nāshirūn, 1425 AH/2004), 86.
57. Cf., C. S. Tyser (transl.), *The Mejelle: An English Translation of the Majallah el-Ahkam el-Adliya* (Lahore: Law Publishing Co. 1967, repr.), Art. 19. See for details on this legal maxim also Zaydān, *Al-Wajīz*, 83f.
58. Cf., 'Abd al-Jawād, *Al-Manhaj*, 33.
59. Zaydān, *Al-Wajīz*, 90.
60. Ibid., 88. See also Tyser (transl.), *The Mejelle*, Art. 25.
61. Tyser (transl.), *The Mejelle*, Art. 26, and Zaydan, *al-Wajeez*, p. 92.
62. Zaydān, *Al-Wajīz*, 96.
63. Cf., 'Abd al-Jawād, *Al-Manhaj*, 147.
64. See for a discussion of these and other legal maxims, Mohammad Hashim Kamali, *Shari'ah Law: An Introduction* (Oxford: Oneworld Publications, 2008), chapter 7 bearing the title "Legal Maxims (Qawā'id al-kulliyah al-fiqhiyyah)," 141-62, at 148f.
65. Zaydān, *Al-Wajīz*, 99.
66. See for details on this legal maxim ibid., 222.
67. See for English translation of a number of hadiths on animal care, Abd al-Hamid, "Islamic Principles for the Conservation of the Natural Environment," in: Agwan (ed.), *Islam*, 62-63.
68. See for details al-Qaraḍāwī, *Ri'āyat*, 122-34.
69. See for further details on *siyāsah shar'iyyah*, Kamali, *Shari'ah Law*, chapter 11 entitled "Beyond the Shari'ah: An Analysis of Shari'ah-Oriented Policy," 225-46.
70. Cf. Zakri Abdul Hamid "One Small Step in Climate-Change Fight," *New Straits Times* (Kuala Lumpur), 18 March 2011), 21.
71. Idem, "Need for Single World Agency on Environment," *New Straits Times* (Kuala Lumpur), 29 June 2011, 17.
72. Nasr, "Islam and the Environmental Crisis," 35.

73. Cf., al-Qaraḏāwī, *Ri'āyat*, 235 quoting the qur'ānic verse (13:11) according to which God won't change a people unless they make that decision for themselves.
74. *Ibid.*, 237.
75. Note that when the '*ulamā*' of the Central Kalimantan branch of Majelis Ulama Indonesia (MUI) in 2006 issued a *fatwā* against the open-burning of forests and declared unauthorised deforestation as 'sinful' and 'prohibited' (*ḥarām*), the villagers complied. Activists said that only the religious 'elite' could reach out the villagers. On 19 June 2007, the local MUI head, Abdul Wahid Qusimy, said his 'learned body' had stepped up that effort to inform Muslims in Indonesian Borneo about the ruling against burning of forests. It is instructive to note also that Muslim schools in Java, started an Islamic green movement in Indonesia: When the founders of the Darul Ulum boarding school, a traditional *pesantren* (*madrasah*), started building the school compound in Sukabumi (West Java) in 1995, it was hot and humid. The founders decided to set aside one hectare of the 7 hectares as *ḥarīm* designated only for the planting of trees. Four years later, and after 700 trees planted, the air around the school is cool and fresh. The 700 is exactly the number of graduates as every student is required to plant one tree before graduation. This was the result of the 'one student one tree' policy initiated by the school, which also required each student to maintain a tree. The Darul Ulum success story drew the attention of *pesantrens* in Bogor, including NGOs to follow suit. On 29 July 2009, nineteen *pesantren* representing 31,900 students, converged in Bogor to launch a more ambitious move to protect a local national park through the implementation of the Islamic conservation tradition of *himmah*, a system of resource tenure established by the Prophet himself. See Kafil Yamin, "Muslim Schools Lead Islamic Green Movement in Java," *Jakarta Globe*, 9 August 2009.
76. Cf., Wahbah al-Zuhaylī, *Qaḏāyā al-fiqh wa 'l-fikr al-mu'āṣir* (Damascus: Dār al-Fikr, 2006), 719.