Environmental Protection in Islam

(part 1 of 7): A General Introduction



God has created everything in this universe in due proportion and measure both quantitatively and qualitatively. God has declared in the Quran:

"Verily, all things have We created by measure" (Quran 54:49)

"...Everything to Him is measured." (Quran 13:8)

"And We have produced therein everything in balance." (Quran 55:7)

In the universe there is enormous diversity and variety of form and function. The universe and its various elements fulfill human welfare and are evidence of the Creator's greatness; He it is Who determines and ordains all things, and there is not a thing He has created but celebrates and declares His praise.

> "Have you not seen that God is glorified by all in the heavens and on the earth - such as the birds with wings outspread? Each knows its worship and glorification, and God is aware of what they do." (Quran 24:41)

Each thing that God has created is a wondrous sign, full of meaning; pointing beyond itself to the glory and greatness of its Creator, His wisdom and His purposes for it.

> "He Who has spread out the earth for you and threaded roads for you therein and has sent down water from the sky: With it have We brought forth diverse kinds of vegetation. Eat and pasture your cattle; verily, in this are signs for men endued with understanding." (Quran 20:53-54)

God has not created anything in this universe in vain, without wisdom, value and purpose. God says:

"We have not created the heavens and the earth and all that is between them carelessly. We have not created them but for truth." (Quran 44:38-39)

Thus, the Islamic vision revealed in the Quran is of a universe imbued with value. All things in the universe are created to serve the One Lord Who sustains them all by means of one another, and Who controls the miraculous cycles of life and death:

"God it is that splits the seed and the date stone, brings the living from the dead and the dead from the living: That is your God - how are you turned away?" (Quran 6:95)

Life and death are created by God so that He might be served by means of good works.

"Blessed is He in Whose Hand is dominion, and He has power over every thing: He Who has created death and life to try you, which of you work the most good." (Quran 67:1-2)

All created beings are created to serve the Lord of all beings and, in performing their ordained roles in a cohesively designed society, they best benefit themselves and each other in this world and the next. This leads to a cosmic symbiosis (*takaful*). The universal common good is a principle that pervades the universe, and an important implication of God's Oneness, for one can serve the Lord of all beings only by working for the common good of all.

Man is part of this universe, the elements of which are complementary to one another in an integrated whole indeed, man is a distinct part of the universe and it has a special position among its other parts. The relation between man and the universe, as defined and clarified in the Glorious Quran and the Prophetic teachings, is as follows:

- A relationship of meditation, consideration, and contemplation of the universe and what it contains.
- A relationship of sustainable utilization, development, and employment for man's benefit and for the fulfillment of his interests.
- A relationship of care and nurture for man's good works are not limited to the benefit of the human species, but rather extend to the benefit of all created beings; and "there is a reward in doing good to every living thing." (*Saheeh Al-Bukhari*)

God's wisdom has ordained stewardship (*khilafa*) on the earth to human beings. Therefore, in addition to being part of the earth and part of the universe, man is also the executor of God's injunctions and commands. He is only a manager of the earth and not a proprietor; a beneficiary and not a disposer or ordainer. Heaven and earth and all that they contain belong to God alone. Man has been granted stewardship to manage the earth in accordance with the purposes intended by its Creator; to utilize it for his own benefit and the benefit of other created beings, and for the fulfillment of his interests and of theirs. He is thus entrusted with its maintenance and care, and must use it as a trustee, within the limits dictated by his trust. The Prophet declared,

"The world is beautiful and verdant, and verily God, be He exalted, has made you His stewards in it, and He sees how you acquit yourselves." (Saheeh Muslim)

All of the resources upon which life depends have been created by God as a trust in our care. He has ordained sustenance for all people and for all living beings.

" And He has set within it mountains standing firm, and blessed it, and ordained in it its diverse sustenance in four days, alike for all that seek." (Quran 41:10)

Thus, in Islam the utilization of these resources is the right and privilege of all people and all species. Hence, man should take every precaution to ensure the interests and rights of all others since they are equal partners on earth. Similarly, he should not regard such as restricted to one generation above all other generations. It is, rather, a joint responsibility in which each generation uses and makes the best use of nature, according to its need, without disrupting or adversely affecting the interests of future generations. Therefore, man should not abuse, misuse, or distort the natural resources as each generation is entitled to benefit from them but is not entitled to "own" them in an absolute sense.

The right to utilize and harness natural resources, which God has granted man, necessarily involves an obligation on man's part to conserve them both quantitatively and qualitatively. God has created all the sources of life for man and all resources of nature that he requires, so that he may realize objectives such as contemplation and worship, inhabitation and construction, sustainable utilization, and enjoyment and appreciation of beauty. It follows that man has no right to cause the degradation of the environment and distort its intrinsic suitability for human life and settlement. Nor has he the right to exploit or use natural resources unwisely in such a way as to spoil the food bases and other sources of subsistence for living beings, or expose them to destruction and defilement.

While the attitude of Islam to the environment, the sources of life, and the resources of nature is based in part on prohibition of abuse, it is also based on construction and sustainable development. This integration of the development and conservation of natural resources is clear in the idea of bringing life to the land and causing it to flourish through agriculture, cultivation, and construction. God says:

"...It is He Who has produced you from the earth and settled you therein..." (Quran 11:61)

The Prophet declared:

"If any Muslim plants a tree or sows a field, and a human, bird or animal eats from it, it shall be reckoned as charity from him." (Saheeh *Al-Bukhari, Saheeh Muslim*)

"If anyone plants a tree, neither human being nor any of God's creatures will eat from it without its being reckoned as charity from him."[1]

"If the day of resurrection comes upon anyone of you while he has a seedling in hand, let him plant it."[2]

The approach of Islam toward the use and development of the earth's resources was put thus by Ali ibn Abi-Talib, the fourth Caliph, to a man who had developed and reclaimed abandoned land:

"Partake of it gladly, so long as you are a benefactor, not a despoiler; a cultivator, not a destroyer."[3]

This positive attitude involves taking measures to improve all aspects of life: health, nutrition, and the psychological and spiritual dimensions, for man's benefit and the maintenance of his welfare, as well as for the betterment of life for all future generations. As is shown in the Prophetic declarations above, the aim of both the conservation and development of the environment in Islam is for the universal good of all created beings.

Footnotes:

 \amalg Sound report related by Imam Ahmad in the Musnad and by Tabarani in al-Mu'jam al-Kabir.

[2] Sound report reported by Imam Ahmad in Musnad, by Bukhari in al-Adab al-Mufrad, and by Abu Dawud at-Tayalisi in his Musnad.

[3] Related by Yahya ibn Adam al-Qurashi in Kitab al-Kharaj on the authority of Sa'id ad-Dabbi.

(part 2 of 7): Conservation of Basic Natural Resources

Throughout the universe, the divine care for all things and all-pervading wisdom in the elements of creation may be perceived, attesting to the All-Wise Creator. The Glorious Quran has made it clear that each thing and every creature in the universe, whether known to man or not, performs two major functions: a religious function in so far as it evidences the Maker's presence and infinite wisdom, power, and grace; and a social function in the service of man and other created beings.

God's wisdom has ordained that His creatures shall be of service to one another. The divinely appointed measurement and distribution of all elements and creatures, each performing its ordained role and all of them valuable, makes up the dynamic balance by which the creation is maintained. Over exploitation, abuse, misuse, destruction, and pollution of natural resources are all transgressions against the divine scheme. Because narrow-sighted selfinterest is always likely to tempt men to disrupt the dynamic equilibrium set by God, the protection of all natural resources from abuse is a mandatory duty.

In the divine scheme by which all creatures are made to be of service to one another, God's wisdom has made all things of service to mankind. But nowhere has God indicated that they are created only to serve human beings. On the contrary, Muslim legal scholars have maintained that the service of man is not the only purpose for which they have been created. With regard to God's saying:

> "And He has made the ships to be of service unto you, that they may sail the sea by His command, and the rivers He has made of service unto you. And He has made the sun and the moon, constant in their courses, to be of service unto you, and He has made of service unto you the night and day. And He gives you all you seek of Him: If you would count the bounty of God, you could never reckon it." (Quran 14:32-34)

...and similar verses in which God declares that He created His creations for the children of Adam; it is well known that God in His great wisdom has exalted purposes in them other than the service of man, and greater than the service of man. However, He makes clear to the children of Adam what benefits there are in these creatures and what bounty He has bestowed upon mankind."[1]

Even though the societal functions of all things are vitally important, the primary function of all created beings as signs of their Creator constitutes the soundest legal basis for conservation of the environment. It is not possible to base the protection of our environment on our need for its services alone, since these services are only of supporting value and reason.

Because we cannot be aware of all the beneficial functions of all things, to base our efforts at conservation solely on the environmental benefits to man would lead inevitably to the distortion of the dynamic equilibrium set by God and the misuse of His creation, thereby impairing these same environmental benefits. However, when we base the conservation and protection of the environment on its value as the sign of its Creator, we cannot omit any thing from it. Every element and species has its individual and unique role to play in glorifying God, and in bringing man to know and understand his Creator by showing him, through their being and uses, God's infinite power, wisdom, and mercy. It is impossible to countenance the willful ruin and loss of any of the basic elements and species of the creation, or to think that the continued existence of the remainder is sufficient to lead us to contemplate the glory, wisdom, and might of God in all the aspects that are intended. Indeed, because species differ in their special qualities, and each evidences God's glory in ways unique to it alone.

Furthermore, all human beings and, indeed, livestock and wildlife as well, enjoy the right to share in the resources of the earth. Man's abuse of any resource, such as water, air, land, and soil as well as other living creatures such as plants and animals is forbidden, and the best use of all resources, both living and lifeless, is prescribed.

Footnotes:

[1] Taqi ud-Din Ahmad ibn Taymiyah in Majmu 'al-Fatawa.

(part 3 of 7): The Conservation of Basic Natural Elements - Water

God has made water the basis and origin of life. God says:

"We made from water every living thing..." (Quran 21:30)

Plants, animals, and man all depend on water for their existence and for the continuation of their lives. God has said:

"Verily... in the rain that God sends down from heaven, thereby giving life to the earth after its death..." (Quran 2:164)

"It is He Who sends down water from the sky; and thereby We have brought forth the plants of every kind..." (Quran 6:99)

"And you see the earth barren and lifeless, but when We pour down rain upon it, it stirs and swells, and puts forth growth of every resplendent kind." (Quran 22:5)

"And We send down pure water from the sky, thereby to bring to life a dead land and slake the thirst of that which We have created-cattle and men in multitudes." (Quran 25:48-49)

God has called on man to appreciate the value of this so essential source of life:

"Have you seen the water which you drink? Was it you who sent it down from the rain cloud, or did We send it? Were it Our will, We could have made it bitter; why then do you not give thanks?" (Quran 56:68-70)

"Say: Have you considered, if your water were one morning to have seeped away, who then could bring you clear-flowing water?" (Quran 67:30)

In addition to this vital function, water has another socio-religious function to perform which is the purification of the body and clothing from all dirt, impurities and defilement so that man may encounter God clean and pure. God has said in the Glorious Quran:

"And He caused rain to descend on you from heaven to cleanse you therewith..." (Quran 8:11)

God has also shown us other functions of lake, sea, and ocean water. He has made it the habitat of many created beings which play vital roles in the perpetuation of life and the development of this world. God has said:

"It is He Who has made the sea of service, that you may eat thereof flesh that is fresh and tender, and that you may bring forth from it ornaments to wear, and you see the ships therein that plough the waves, that you may seek of His bounty." (Quran 16:14)

"Lawful to you is the pursuit of water-game and its use for food a provision for you, and for those who travel..." (Quran 5:96)

There is no doubt that conservation of this vital element is fundamental to the preservation and continuation of life in its various forms, plant, animal, and human. It is also obligatory, for, in Islamic law, whatever is indispensable to fulfill the imperative obligation of preserving life is therefore itself obligatory. Any action that obstructs or impairs the biological and social functions of this element, whether by destroying it or by polluting it with any substance that would make it an unsuitable environment for living things or otherwise impair its function as the basis of life; any such action necessarily leads to the impairment or ruin of life itself and the juristic principle is, "What leads to the prohibited is itself prohibited."

Owing to the importance of water as the basis of life, God has made its use the common right of all living beings and all human beings. All are entitled to use it without monopoly, usurpation, despoilment, wastage, or abuse. God commanded with regard to the people of Thamud and their camel,

> "And tell them that the water shall be shared between them..." (Quran 54:28)

and the Prophet said:

"Muslims are to share in these three things: water, pasture, and fire."[1]

Extravagance in using water is forbidden; this applies to private use as well as public, and whether the water is scarce or abundant. It is related that the Prophet passed by his companion Sa'd, who was washing for prayer, and said:

"What is this wastage, O Sa' d?"

"Is there wastage even in washing for prayer?" asked Sa'd;

and he said, "Yes, even if you are by a flowing river!"[2]

The long experience of Muslim jurists in the allocation of water rights in arid lands has given rise to an outstanding example of the sustainable use of a scarce resource; an example which is of increasing relevance in a world where resources which were once abundant are becoming progressively more scarce.

Footnotes:

[1] Abu-Dawud, Ibn Majah, and al-Khallal.[2] Ibn Majah.

(part 4 of 7): Air, Land, and Soil

2. Air

This element is no less important than water for the perpetuation and preservation of life. Nearly all terrestrial creatures are utterly dependent on the air they breathe. The air also has other functions which may be less apparent to man but which God has created for definite purposes, as we have been made aware of by the Glorious Quran -such as the vitally important role of the winds in pollination. God has said:

"And we send the fertilizing winds..." (Quran 15:22)

The winds are also clear evidence of God's omnipotence and grace, and the perfection of design in His creation. He has also said:

"Verily in the creation of the heavens and the earth; in the alternation of night and day in the change of the winds, and the clouds compelled between heaven and earth surely there are signs for a people who have sense." (Quran 2:164)

"And He it is Who sends the winds as tidings heralding His grace: until when they have raised a heavy-laden cloud, We drive it to a dead land and cause the rain to descend upon it, and thereby bring forth fruits of every kind." (Quran 7:57)

Since the atmosphere performs all these biological and social functions, its conservation, pure and unpolluted, is an essential aspect of the conservation of

life itself which is one of the fundamental objectives of Islamic law. Again, whatever is indispensable to fulfill this imperative obligation is itself obligatory. Therefore any activity which pollutes it and ruins or impairs its function is an attempt to thwart and obstruct God's wisdom toward His creation. This must likewise be considered an obstruction of some aspects of the human role in the development of this world.

3. The Land and Soil

Like air and water, the land and soil are essential for the perpetuation of our lives and the lives of other creatures. God has declared in the Quran:

"And the earth He has established for living creatures." (Quran 55:10)

From the minerals of the earth are made the solid constituents of our bodies, as well as those of all the living animals and plants. God has said in the Quran:

> "And among His signs is that He has created you from dust; then behold, you are humans scattered widely." (Quran 30:20)

He has also made the land our home and the home of all terrestrial beings.

"And God has made you grow, as a plant from the earth; then to it He returns you, and He will bring you forth a new..." (Quran 71:17-18)

And as our home, the land has value as open space:

"...and God has made the earth a wide expanse, that you may traverse its open ways." (Quran 71:19-20)

God has made the land a source of sustenance and livelihood for us and other living creatures: He has made the soil fertile to grow the vegetation upon which we and all animal life depend. He has made the mountains to catch and store the rain and to perform a role in stabilizing the crust of the earth, as He has shown us in the Glorious Quran:

> "Have We not made the earth a vessel to hold the living and the dead? And We have made in it lofty mountains and provided you sweet water to drink." (Quran 77:25-27)

> "And the earth, after that He has spread it out; from it He has brought forth its waters and its pastures, and He has made fast the mountains, a provision for you and for your cattle." (Quran 79:30-33)

"And the earth, We have spread it out, and made in it mountains standing firm, and grown in it every thing in balance. And We have provided in it sustenance for you, and for those whom you do not support." (Quran 15:19-20)

"And a sign for them is the lifeless earth: We bring it to life and bring forth from it grain of which they eat. And we have made therein gardens of palms and vines." (Quran 36:33-35)

If we would truly give thanks to the Creator, we are required to maintain the productivity of the soil, and not expose it to erosion by wind and flood; in building, farming, grazing, forestry, and mining, we are required to follow practices which do not bring about its degradation but preserve and enhance its fertility. For to cause the degradation of this gift of God, upon which so many forms of life depend, is to deny His tremendous favors. And because any act that leads to its destruction or degradation leads necessarily to the destruction and degradation of life on earth, such acts are categorically forbidden.

(part 5 of 7): The Conservation of Basic Natural Elements - Plants and Animals (1)

4. Plants and Animals

There is no denying the importance of plants and animals as living resources of enormous benefit, without which neither man nor other species could survive. God has not made any of His creatures worthless: every single form of life is the product of a special and intricate development by God, and each warrants special respect. As a living genetic resource, each species and variety is unique and irreplaceable. Once lost, it is lost forever.

By virtue of their unique function of producing food from the energy of the sun, plants constitute the basic source of sustenance for animal and human life on earth. God has said:

> "Then let man consider his nourishment: that We pour down the rain in showers, and We split the earth in fragments, and therein make the grain to grow, and vines and herbs, and olives and palms, and gardens of dense foliage, and fruits and fodder - provision for you and your cattle." (Quran 80:24-32)

In addition to their importance as nourishment, plants enrich the soil and protect it from erosion by wind and water. They conserve the water by detaining its runoff; they moderate the climate and produce the oxygen which we breathe. They are also of immense value as medicines, oils, perfumes, waxes, fibers, timber, and fuel. God has said in the Glorious Quran,

> "Have you seen the fire you kindle? Was it you who grew its timber or did We grow it? We have made it a reminder, and a comfort for the desert dwellers." (Quran 56:71-73)

Animals in turn provide sustenance for plants, for one another, and for man. Their dung and their bodies enrich the soil and the seas. They contribute to the atmosphere by respiration and by their movements and migrations contribute to the distribution of plants. They provide food for one another and provide mankind with leather, hair and wool, medicines and perfumes, and means of conveyance, as well as meat, milk, and honey. And for their highly developed senses and perceptions and their social interrelationships, animals are accorded special regard in Islam. For God considers them living societies exactly like mankind. God has declared in the Glorious Quran:

"There is not an animal on the earth, nor any being that wings its flight, but is a people like unto you..." (Quran 6:38)

The Glorious Quran mentions the aesthetic functions of these creatures as objects of beauty in addition to their other functions. Since peace of mind is a religious requirement which needs to be fully satisfied, those things which cause it should be amply provided and conserved. God has made in plants and animals that which excites wonder and joy in man's soul so as to satisfy his peace of mind, a factor which is essential for man's proper functioning and full performance.

The Glorious Quran also mentions other functions which these creatures perform and which man may not perceive, namely the functions of worshipping God, declaring if His praise and bowing down to Him as they are compelled by their very nature to do. God has said,

> "Do you not see that to God bow down in worship all things that are in the heavens and on the earth - the sun, the moon, the stars, the mountains, the trees, the animals..." (Quran 22:18)

> "The seven heavens and the earth and all the beings therein proclaim His glory: There is not a thing but celebrates His praise, but you understand not how they declare His glory..." (Quran 17:44)

"To God bow all beings in the heavens and the earth - with good will or in spite of themselves..." (Quran 13:15)

Islam emphasizes all measures for the survival and perpetuation of these creatures so that they can fully perform the functions assigned to them. The absolute destruction of any species of animals or plant by man cannot be justified; nor should any be harvested at a rate in excess of its natural regeneration. This applies to hunting and fishing, forestry and wood-cutting for timber and fuel, grazing, and all other utilization of resources. It is imperative that the genetic diversity of living beings be preserved - both for their own sake and for the good of mankind and all other creatures.

(part 6 of 7): The Conservation of Basic Natural Elements - Plants and Animals (2)

The Prophet Muhammad was sent by God as:

"...a mercy to all beings." (Quran 21:107)

He has shown us through his commandments and teachings, how to tend and care for these creatures. He said:

"The merciful are shown mercy by the All-Merciful. Show mercy to those on earth, and He Who is above the heavens will show mercy unto you." (*Abu Dawud, Al-Tirmidhi*)

He commanded mankind to provide for the needs of any animals under their care, and he warned that a person who causes an animal to die of starvation or thirst is punished by God in the fire of hell.[1]

Furthermore, he directed human beings to provide for needy animals in general, telling of a person whose sins God pardoned for the act of giving water to a dog in desperate thirst. Then, when the people asked:

"O Messenger of God, is there a reward in doing good to these animals?" Al

He said:"**There is a reward in doing good to every living thing**." (Saheeh Al-Bukhari, Saheeh Muslim)

Hunting and fishing for food is permitted in Islam; however, the Prophet cursed anyone who uses a living creature as a target, taking a life for mere sport.^[2] Likewise he forbade that one prolong an animal's slaughter.^[3] He declared,

"God has prescribed the doing of good toward every thing: so, when you kill, kill with goodness and when you slaughter, slaughter with goodness. Let each one of you sharpen his blade and let him give ease to the animal he is slaughtering." [4]

The Prophet Muhammad forbade that a fire be lit upon an anthill, and related that an ant once stung one of the prophets, who then ordered that the whole colony of ants be burned. God revealed to him in rebuke:

"Because an ant stung you, you have destroyed a whole nation that celebrates God's glory." (*Saheeh Al-Bukhari, Saheeh Muslim*)

He once ordered a man who had taken the nestlings of a bird from their nest to return them whence he got them, to their mother which was trying to protect them."[5]

He forbade that one needlessly and wrongfully cut down any tree which provides valuable shelter to humans or animals in the desert, [6] and the aim of this prohibition may be understood as prevention of the destruction of valuable habitat for God's creatures.

On the basis of the Prophetic commands and prohibitions, Muslim legal scholars have ruled that God's creatures possess inviolability (*hurmah*) which pertains even in war. The Prophet of God forbade the killing of bees and any captured livestock, for killing them is a form of corruption included in what God has prohibited in His saying,

"And when he turns away, he hastens through the land to cause corruption therein and to destroy the crops and cattle: And God loves not corruption." (Quran 2:205)

"And they are animals possessing inviolability just as do women and children."

It is a distinctive characteristic of Islamic law that all animals have certain legal rights, enforceable by the courts and by the office of the *hisbah*. Muslim jurists have written:

"The rights of livestock and animals with regard to their treatment by man: These are that he spend on them the provision that their kinds require, even if they have aged or sickened such that no benefit comes from them; that he not burden them beyond what they can bear; that he not put them together with anything by which they would be injured, whether of their own kind or other species, and whether by breaking their bones or butting or wounding; that he slaughter them with kindness if he slaughters them, and neither flay their skins nor break their bones until their bodies have become cold and their lives have passed away; that he not slaughter their young within their sight; that he set them apart individually; that he make comfortable their resting places and watering places; that he put their males and females together during their mating seasons; that he not discard those which he takes in hunting; and neither shoot them with anything that breaks their bones nor bring about their destruction by any means that renders their meat unlawful to eat."[8]

Islam looks upon these created beings, both animals and plants, in two ways:

- 1. As living beings in their own right, glorifying God and attesting to His power and wisdom;
- 2. As creatures subjected in the service of man and other created beings, fulfilling vital roles in the development of this world.

Hence the binding obligation to conserve and develop them, both for their own sake and for their value as unique and irreplaceable living resources for the benefit of one another and of mankind.

Footnotes:

[1] Saheeh Al-Bukhari, Saheeh Muslim[2] Saheeh Al-Bukhari, Saheeh Muslim

[3] Saheeh Al-Bukhari, Saheeh Muslim

[4] Saheeh Muslim, Abu-Dawud

5 Abu Daud

6 Abu Daud

[7] Muwaffaq ad-Din ibn Qudamah in al-Mughni.

181 'Izz ad-Din ibn 'Abdas-Salam, in Qawa 'id al-Ahkamfi Masalih al-Anam. This passage falls within a discussion of huquq al-'ibad, the rights or legal and moral claims of human beings and other creatures upon each legally responsible person. The rights or legal claims of animals are less comprehensive than those of man, and are subject to limitations such as the defense of human life and property and the requirements of human beings for food. It is, however, significant that in Islam the concept of rights or legal claims enforceable by law applies to animals as well as human beings.

(part 7 of 7): Protection of Man and Environment from Harm

Damage of all forms and kinds is forbidden in Islam. One of the fundamental principles of Islamic law is the Prophetic declaration:

"There shall be no damage and no infliction of damage." (Al-Hakim)[1]

Prevention of damage and corruption before it occurs is better than later treatment. Another important juristic rule in Islamic Law states, "The averting of harm takes precedence over the acquisition of benefits." Accordingly, all activities which aim at achieving good and securing benefits by way of satisfying human needs, providing services and developing agriculture, industry, and means of communication should be carried out without causing significant damage, injury, or corruption. It is therefore imperative that precautions be taken in the processes of envisaging, planning, and implementing such activities so that, as far as possible, they may not be accompanied by, or result in, any form of damage or corruption.

1. Wastes, Exhausts, Cleansing Materials, and Other Toxic and Harmful Substances

Waste products and exhaust fumes, resulting from ordinary human or industrial activities and the uses of modern and advanced technology, should be carefully disposed of or eliminated in order to protect the environment against corruption and distortion. It is also vital to protect man from the effects of the harmful impact of these on the environment, and its beauty and vitality, and to ensure the protection of other environmental parameters. The accumulation of waste is largely a result of our wastefulness. Islam's prohibition of wastefulness, however, requires the re-use of goods and recycling of materials and waste products in so far as is possible, instead of their disposal as trash.

The Prophet forbade that a person relieve himself in a water source or on a path, or in a place of shade, or in the burrow of a living creature.^[2] The values

underlying these prohibitions should be understood as applicable to the pollution of critical resources and habitats in general. Waste products, exhaust fumes, and similar pollutants should be treated at their sources with the best feasible means of treatment, and care should be taken in their disposal to avoid adverse side effects that lead to similar or greater damage or injury. The juristic principle in this connection is, "Damage shall not be eliminated by means of similar or greater damage."

This is also true of the harmful effects of cleansing agents, and other toxic or harmful materials, used in homes, factories, farms, and other public or private premises. It is absolutely necessary to take all possible measures to avoid and prevent their harmful effects before they occur, and to eliminate or remove such effects if they do occur in order to protect man and his natural and social environment. Indeed, if the damage resulting from these materials proves greater than their benefits, they should be prohibited. In this case, we should look for effective and harmless, or at least less harmful, alternatives.

2. Pesticides

These same principles apply equally to all pesticides, including insecticides and herbicides. The use of such materials should not lead to any harm or damage to human beings or the environment in the present or the future. Consequently, control and prohibition of whatever leads to harm or damage, to people or to ecosystems, is required, even though this control or prohibition may affect the personal interests of some individuals. This is in accordance with the principle that "A private injury is accepted to avert a general injury to the public." All legitimate and lawful means should be used to avoid and prevent damage or harm, provided that such means do not lead to, or cause similar, or greater, damage. The juristic rule in this connection is "The lesser of two evils should be chosen." If the use of such pesticides is unavoidable, then "Dire necessity renders prohibited things permissible." However, "Every necessity shall be assessed according to its value," and "That which is permitted on account of an excuse ceases to be permissible with the cessation of that excuse."

The most selective and least destructive means of pest control are required by these values and principles of Islam. Preventive measures, biological controls, non-poisonous repellents, biodegradable substances, and narrowspectrum pesticides should be favored whenever possible over their more destructive alternatives. Furthermore, their application should be carefully calculated to protect human life, crops, and livestock with utmost efficiency and effectiveness, and with an eye to make the minimum overall impact on God's creation.

3. Radioactive Substances

The principles mentioned above apply to radioactive substances as well, which are not only extremely toxic, but also remain so over extremely long

periods of time. We should prevent and avoid the harmful effects of their use on people and ecosystems. It is also imperative that we satisfactorily dispose of all radioactive wastes. Special precautions are required to prevent the discharge of such wastes from nuclear facilities, whether due to carelessness or malfunction, and to avoid all harmful effects from the testing of nuclear explosives.

4. Noise

Since industries, mass communication and transport tend to be accompanied by, and associated with, noise, it is necessary to look for all possible ways and means of avoiding and minimizing this noise. Noise has a harmful impact on man and the living elements of the environment - hence the necessity of reducing and preventing this harm as far as possible and by every means, according to the rules and injunctions of Islamic Law.

5. Intoxicants and Other Drugs

It is also clear that intoxicants and narcotics have a harmful effect on the physical and mental health of human beings and, as a consequence, on his life and reason; his offspring, work, properties, honor, and righteousness. It has been proven, without doubt, that intoxicants and other drugs cause considerable physical, social, and psychological disorders. Therefore, all kinds of intoxicants and mind-affecting drugs have been prohibited in Islam. Their production and marketing as well as of anything that is associated with them or assists in their production is forbidden. This shows the concern of Islamic legislation over fourteen centuries for the protection of human life and the conservation of the social and physical environment against all forms of corruption, harm, damage and pollution.

6. Natural Catastrophes

All necessary precautions should be taken to minimize the effects of catastrophes which befall man and the environment, such as floods, earthquakes, volcanic eruptions, storms, natural conflagrations, desertification, infestations, and epidemics. It must be recognized that natural disasters are sometimes caused, at least in part, by acts of man, and that the consequences of their occurrence by way of loss of life and property are, in many cases, aggravated by inappropriate settlement, building, and land use practices. Accordingly, their impact can be largely mitigated by planning with foresight, based on the understanding of natural processes. Unsuitable land use practices and activities should not be permitted in areas inherently, or potentially, hazardous to human life and health or in areas vulnerable to the disruption of natural processes.

Protection of human life, property, and interests is essential and necessary and "Whatever is indispensable to fulfill an imperative obligation is, in itself, obligatory." Islamic law maintains that "Damage should be eliminated," and "Damage should be removed to the extent that is possible." However, the protective measures that are taken should not lead to other adverse effects in accordance with the principle, "Damage shall not be eliminated by means of similar damage."

Footnotes:

[1] This, and the subsequent legal principles are well known, and unless otherwise referenced, are found in the books of *al-Ashbah wa 'n-Naza 'ir* by Jalal ad-Din as-Suyuti and Zayn al-Abidin ibn Nujaym, and in the *Majalat al- Ahkam al-'Adliyah*.

[2] Abu Dawud