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Dear Dr. M.K. Kareem,

Department of Arabic & Islamic Studies,

University of Ibadan,

Ibadan.

ACCEPTANCE LETTER

I am pleased to inform you that your paper titled "Forest Management Practices from Islamic Perspectives" has been peer-reviewed and found publishable in *Orita: Ibadan Journal of Religious Studies*. It will be published in one of the subsequent editions of the Journal.

Congratulations and best wishes.

Yours sincerely,

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FOREST MANAGEMENT PRACTICES FROM ISLAMIC PERSPECTIVE

By

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Abstract

Today, the world is facing the problem of global warming and other environmental crises and malaises; and the effect of these phenomena has serious implications on the survival of man. Many researchers have looked at the problem from different perspectives with a view to finding sustainable solutions. Not much attention has been given by both Muslims and non-Muslims to the Islamic directives on forest management, one of the ways by which the global warming and other environmental crises can be abated. It is against this backdrop that the paper aims at examining the Islamic directives on forest management. A descriptive approach and textual analysis of the Qur'an and the Sunnah were adopted in carrying out this research. The study finds that taking care of the environment is tantamount to good deeds, and as good as other acts stated in the Qur'an and the Sunnah. It shows the honour given to trees and environment. The paper presents how trees mop-up carbon dioxide, a green house gas, from the atmosphere and replenish the oxygen content to give man clean air; fix atmospheric nitrogen to rejuvenate the soil; reduce use of inorganic nitrogen fertilizer and emission of nitrous oxide (N2O). It is against Islamic teachings to cut trees or abuse forests without genuine reason. Therefore, adoption of the teachings of Islam in the areas of forest management can go a long way in changing peoples' attitude positively towards its use and sustainability.

Key words: Islam, Quran, Sunnah, Climate change, Environment, Pollution, Green house gases, Trees.

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Introduction

Islam, being a complete way of life, does not leave any stone unturned as regards both the celestial and terrestrial affairs. Allah says in the Quran "...Nothing have we omitted from the Book... (Q6:38). It has directives on the natural environment which is composed of flora and fauna. The role of the former with regards to the provision of sustenance cannot be overemphasized. The fauna such as human beings, animals, birds and insects derive their sustenance from the forest products (flora).

Islam as a universal religion has concern for the environment including forest. The dictates of the religion of Islam on nature are directed towards not only Muslims but also to the human race not minding their religions particularly in the area of forest management. God has made nature subservient to man as a test to see whether he will be grateful or ungrateful for His gift. Allah created nature so that man can derive his material needs such as food, shelter, cloth and drinks from it. Allah says: "It is Allah who subjected to you the sea so that ships may sail upon it by His command and that you may seek of His bounty; and perhaps you will be grateful. And He has subjected to you whatever is in the heavens and whatever is on the earth- all from Him. Indeed in that are signs for a people who give thanks" (Q45: 12-13).

These verses tell people to show gratitude for all the gifts of nature and warn them against the fruits of their ungratefulness and evil actions towards nature. Religion has stringent bearing on human mind. It has the capacity to direct the action of its adherents towards social welfare of the society. Therefore, the teachings of Islam in the areas of forest management can go a long way in changing peoples' attitude positively towards its use and sustainability.

Islam views environment as gift from Allah to mankind. Man, irrespective of his religion, race, tribe and geographical barriers, is commanded to take care of his environment which Allah has bestowed on him. It is not only the Muslims that are expected to conserve and protect but also the rest of human race.

A cursory look at the sayings and deeds of Prophet Muhammad (PBOH) will reveal that he was a staunch advocate of environmental protection, judicious use of water, proper treatments and care of human and non-human beings such as forests. The Quran and the Sunnah (the Prophet's sayings and deeds) are the primary and the secondary sources of guidance respectively for Muslims in all areas; and they contain many instructions on ecology such as forest and land. One of the most important aspects of protecting the environment and ecology is the conservation of the trees and forests. Trees and gardens are mentioned in the Quran in a way to sensitize man to their importance. Allah uses them to adorn the world. In the Quran, tree is mentioned 26 times¹ Allah refers to trees in relation to al-Jannah in many verses. In fact, Hell also contains trees (Q88:6).

Brief Background

Nasr, Chapra, Iqbal, Manzuur, Sardar and Husaini are some of the researchers who have contributed to Islamic Ecotheology. Nasr, in his works discusses the relationship between man and its environment. His stand is that there is strong link between man and the universe. He believes that taking care of the environment is tantamount to good deeds, and as good as other acts stated in the Quran and the Sunnah². Chapra is of the view that it is prohibited for Muslims to harm others in their environment³. He bases his arguments on the principle of *laa*

¹M.F. Abdul Baaqi, *Al Mu'jamul Fahrsu lialfaazil Qur'aanil Karīm*, (Beirut:Darul Fikr, 1991). P.476-477

² S.H. Nasr, Man and Nature: Beyond Current Alternative, (Kuala Lumpur: The Publishers, 1989)

S.H. Nasr, The Need for a Sacred Science, (Albany: State University of New York Press, 1993)

S.H. Nasr, Religion and order of Nature, (New York: Oxford University Press1996)

S.H. Nasr, Man and Nature: The Spiritual Crisis of Modern Man, (Chicago: ABC International Group, Inc., 1997)

S.H. Nasr, An Introduction to Islamic Cosmological Doctrines, (London; Taylor & Francis.2008)

³ U.M. Chapra, Islam and Economic Development', (International Institute of Islamic Thought and Islamic Research Institute, 1993)

darara wa laa dirara i.e. principle of no injury. The argument of Iqbal is that making mischief on earth includes destroying and killing crops and progeny respectively⁴. Sardar and Mansur enumerate the values of environment to man⁵. Khalil and Brien edited a book titled "Islam and Ecology". The resultant effect of the book culminated in the establishment of "Islamic Foundation for Ecology and Environmental Sciences" in 1994⁶.

Husaini presents the roles of Muslims concerning their environment⁷. Some contributors of note to the issue of environment and man are Ahmad, Uthman, Ozdemir and Muinul Islam⁸. Many different studies have been carried out on nature or environment and man. Despite all these efforts, there is still no work that singled out forest management from Islamic perspective.

⁴Iqbal Munawar (Ed), *Islamic perspectives on Sustainable Development*, (Basingstoke: Palgrave Macmillan, 2005)

⁵ Ziauddin Sardar, The touch of Mudas: Science, values and environment in Islam and the west. (Manchestor:Manchestor University Press, 2006)

S.P. Manzoor, "Environment and Values: the Islamic Perspectives" in *The Touch of Midas*, edited by

Ziauddin Sardar, (Selangor: Pelanduk Publications, 1988)

⁶ F.Khalil, and J.O.Brien, *Islam and Ecology*, (London & New York: Cassell Publishers & World Wide Fundfor Nature, 1992)

⁷ S.W. Husaini Ahmad, Islamic Environmental Systems Engineering: A Systems Study of Environmental

Engineering, and the Law, Politics, Education, Economics, and Sociology of Science and Culture of
Islam, (London: Macmillan Press, 1980)

⁸ A. A. Ahmad, Islam and the Environmental Crisis, (London: Ta-Ha Publishers, 1997)

I. Ozdemir, Towards An Understanding of Environmental Ethics from a Qur'anic Perspective, Islam and Ecology, (Oxford: A Bestowed Trust, 2003)

M. Muinul Islam, "Towards a green earth: An Islamic Perspective", Asian Affairs Muslim Volume 4, (2004) 6264.

I.O. Uthman, I. O. L.O Abbass and K.K. Oloso, (2011), "Contribution of Islamic scholars to Sustainablehuman and environmental Development: Islam Hadhari and future Development of Muslim Countries" International Journal of Arab Culture, Management and Sustainable Development, vol. 2, no. 1, pp. 17-29. 46.

I.O. Uthman, I. O. [2010] "Muslim and Science: Contributions of Islamic Universities to Professional Ethics" AJISS: American Journal of Islamic Social Sciences [USA] vol. 27, no. 1, pp. 54-73

Nasr compares the relationship between man and nature in some religions and the issue of vicegerency and nature⁹. He believes that the environmental problem is caused by spiritual crisis of man in the modern world. No one article on forest management in Islam is given a space in the book of Agwan: "Islam and the Environment" which contains 10 different topics on Islam and environmental crises. Ahmad discusses the different pollutions such as water, land, air and noise and offers some Islamic practical steps to reduce the problems¹⁰. Other authors particularly Muhammad Ridwan Ghalani who worked on environment and Islam looked at environment from different aspects in relation to Islam¹¹.

Methodology

A descriptive approach and textual analysis were adopted in carrying out this research. The main sources in Islam, the Qur'an and the Sunnah were consulted. The Qur'an which was revealed to the Prophet for about 23 years is the source of guidance for Muslims in all their affairs. The Sunnah complements the Qur'an. The receiver of the Qur'an, Prophet Muhammad (PBOH) who had access to the source gave explanations and details of the broad principles of Islam as contained in the Qur'an. This also forms the secondary source of guidance in all areas without an exception. These two sources formed a substantial part of the sources used. The guidelines contained in the two were analysed. The injunctions as contained in these two sources are related to the environmental issues.

Islamic Main Principles and Forest Management Practices

Environmental issues such as forest management have their roots in the Qur'an and the Sunnah. In fact, the two main sources of Islam give guidelines for man on

⁹ S.H. Nasr, *Man and Nature: The Spiritual Crisis of Modern Man*, (Chicago: ABC International Group, Inc., 1997)

¹⁰ A. A. Ahmad, Islam and the Environmental Crisis, (London: Ta-Ha Publishers, 1997)

Muhammad Ridwaan Ghalaani, "The Objective (Maqasid) of the Shariah in the Protection of the Environment," in International Conference on Islamic Jurisprudence and the Challenges of the 21ST Century: Maqasid al-Shariah and its realization Contemporary Societies, Vol. 3 (Kuala Lumpar:IIUM, 2006)

how his surroundings, nature and the universe should be managed. The Qur'an contains a lot of guidelines on nature, while the Prophet enjoined people to protect, preserve and care for trees and other natural resources such as animals and water. The Islamic principles guiding Muslim activities including forest protection are tawhīd (the unity of Allah), Khilāfah (vicegerency) and amānah (trust).

Of the three major principles of nature that contain other principles of environmental ethics in Islam, tawhīd (oneness of God) is the pivot around which others revolve. It is the basis of Islam and affects every aspect of life. Tawhīd means Allah is the Creator, the ultimate Owner of everything and the Sustainer. That is, Allah, in addition to being the Creator, is also the Owner and the Sustainer of all that He created. It is one thing to create, it is another thing to own and sustain the created. In the case of Allah, He creates and owns; and He is the only one that has been maintaining all His creatures including forests. The Qur'an, throwing light on these three proprietorship roles, says: "He created man from a clinging substance" (Q96:2). "O mankind, worship your Lord, who created you and those before you" (Q2:21). "He to whom belongs the domain of the heavens and the earth and who has not taken a son and has not had a partner in dominion and has created each thing and determined it with precise determination" (Q25;2). "To Him (Allah) belongs whatever is in the heavens and on earth and all between them, and beneath the soil" (Q20:6). "And how many a creature carries not its (own) provision. Allah provides for it and for you. And He is the hearing, the knowing" (Q29:60). (Some other Quranic verses on the roles of trees are Q2:21, Q6:73, Q14:19, Q25:2 and Q2:2, 29).

Therefore, all His creatures whether human or non-human, living or non-living must not be abused. There are rights attached to all creatures of Allah including forests. This concept of *tawhīd* shapes human behaviours towards nature particularly forest. God's signs are reflected through nature and through it, man can be guided. Each natural resource is created by Allah for a purpose. "...And who remember God when they stand, and when they sit, and when they lie down

to sleep, and (thus) reflect on the creation of the heavens and the earth: O our Sustainer! You have not created this without meaning and purpose..." (Q3:191). He maintains the balance between all the resources by determining the number, quantity and quality of each natural resource in the environment. The Qur'an says, "Indeed all things We created with predestination" (Q54:49), meaning that God created the universe in a perfect balance. If the equilibrium is disturbed, it is due to the negative acts of man¹². Therefore, God's design of this world to be in a state of balance as stated in the Our'an must be maintained. "The sun and the moon (move) by precise calculation, and the stars and the trees prostrate, and the heavens He raised and imposed the balance, that you not transgress within the balance, and establish weight in justice and do not make deficient the balance" (Q55:5-9). The natural resources were created by Allah to meet the total demand of the inhabitants of the universe. Therefore, there are enough resources for both humans and non-humans on earth. Allah says in the Qur'an, "And there is no creature on earth but that upon Allah is its provision, and He knows its place of dwelling and place of storage" (Q11:6). He has provided all kinds of provision for both human and non-human beings. Everything originates from One God, and nature is created for man to explore and use its resources. Man has been given the power to subdue them to serve his objectives

Vicegerency and Man's Trusteeship

Nature should be respected or considered as part of God's creation and as a sign to show His majesty and existence. When Allah created Adam, He made him *Khalīfah* (vicegerent on earth). He was given the dominion over the rest of the creations. Therefore, the responsibility of taking care of the rest of the creation, including forest, has been given to Adam, and by implication, the same responsibility has been extended to his descendants till eternity. The trust of being *khalīfah* will be fulfilled if they care for both humans and non-humans. This

Abdul Kabir Hussain, "Making Sense of Natural Disasters: An Islamic Hermeneutics of Malevolent Phenomena

in Nature and Its Implication for Sustainable Development.", American Journal of Islamic Social

shows that human beings, the best creature (Q95:4), occupy a special and privileged status. *Khalīfah* is a trustee. He takes a position, a trust, and holds it reliably and in harmony with its Owner. And when your Lord said to the angels: "Indeed, I will make upon the earth a successive authority (trustee)..." (Q2:30-34-38). And it is He who has made you successors upon earth and has raised some of you above others in degrees (of rank) that He may try you through what He has given you (Q6:165). Everything originated from One God, and nature is created for man to explore and use its resources. He has been given the power to subdue them and serve his objectives.

By virtue of man being *Khalīfah*, he has accepted the responsibility of trust. In the preceding sections, we have said Allah creates, owns and sustains the universe. Man is only the trustee to take care of the rest of the creations including forest. He should study nature and recognise Allah's signs from it (Q16:65-69). He should use Allah's natural resources and derive benefit from them based on the term of the trust. Man is a trustee who is accountable to Allah as regards his role on natural resources. Forests are part of trust. They must be conserved and protected from degradation of any form i.e. it is part of a Muslim's duty to protect Allah's creations, the trust he has accepted (Q33:72). Since man has accepted the trust, what is worth doing at all must be done very well. Being a vicegerent of Allah, man is accountable to Allah with regards to the way he manages the resources at his disposal- human and non- human. If there are environmental crises, they are largely due to the failure of vicegerents. When Allah created man, he was given the responsibility of trusteeship which was turned down by other creatures such as earth and mountains. The Qur'an states this clearly in the following verse: "Indeed, We offered the Trust to the heavens and the earth and the mountains, and they have declined to bear it and feared it, but man. Indeed, he was unjust and ignorant" (Q33:72). By swerving, man abuses the trust, using the environment without utmost care. Man cuts trees without immediate replacement; thus affecting the carbon dioxide budget, with excess in the environment. Carbon dioxide is the most important green house gas, its excess in the environment has resulted in the climate change and global warming presently experienced¹³. Also, man in his various anthropogenic activities, especially industrial developments, has continued to discharge to the environment some deleterious chemicals like chlorofluorocarbon and methane, that are interfering with the ozone layer provided by God, the perfect Creator, to protect the earth from ultraviolet radiations coming from the sun¹⁴. As a trustee, man is not only entrusted to take care of nature, he is allowed to make use of it for himself and for the benefit of other creatures in the universe. This is to test whether he will make judicious use of it or not. He will not only be responsible but also accountable to Allah as regards his extent of the fulfillment of his duties. The Qur'an is clear on these instructions when it says: "Later, We made you their successors in the land to see how you would behave" (Q10:14, Q45:12-13, Q2:29). Adam and his descendants were created from earth and water. If man does not treat the earth that supports trees friendly, he becomes alienated from his origin. Man through wanton removal of trees destroys the watershed that protects the water from which he was created; which he uses for irrigation; and from which he derives some other resources. The effect of which the drainage channels of rivers are silted up and uplands are flooded. In fact, man should consider himself a member of the earth. Therefore, he should avoid destroying his origin and the natural resources such as forest on it. He is an irresponsible vicegerents, if He should embark on any step that can cause disaster for the land and what grows on and in it.

Forest provides a shield against global warming by absorbing carbon dioxide from the atmosphere, and storing it in wood, leaves and soil for a long period of time. When forests are burned, carbon dioxide is released into the atmosphere, with negative impact on the carbon cycle.

Oxygen, a component of air, is one of the greatest gifts of Allah. Trees take up the deleterious carbon dioxide from the atmosphere for photosynthesis and

¹³ V. Ramanathan, The greenhouse theory of climate change: A test by an inadvertent global experiment. *Science*, (1988) 240: 293-299.

¹⁴ S. Ogunyemi, R.O. Awodoyin, and O.S. Olubode, "Climate Change, Impacts and Mitigation: Nigerian Experience". Nigerian Journal of Ecology, (2010)11: 10-19.

production of biomass that animals (including man) depend on for sustenance. In the process, trees generate oxygen as a by-product. Most creatures depend on oxygen for respiration, a physiological process that releases energy for various activities. Man must therefore protect trees and replace the trees that are cut in order to sustain the supply of adequate oxygen that gives us clean air for inhalation. Excess carbon-dioxide in the air makes it unclean and the inhalation subjects man to danger, having to grapple with many diseases. It has been established that the atmosphere consists of gases of which oxygen and carbon dioxide by volume account for 21% and 0.03% 15 or 209,500 ppm and 300 ppm respectively16. The former which gives man clean air is being generated by plants, and more by trees. Without trees, man cannot survive owing to inadequate clean air to breathe in. This shows the sign of Allah in clean air being facilitated by trees (Q30:46). The purification of air by trees had all the while abated the global warming and ensures man's sound health. The effect of unjust and reckless destruction of trees is now globally felt with imminent danger. Therefore, there is a close relationship between forest and air (Q10:59).

Forest Management and the Islamic Concept of Sadaqah

Sadaqah refers to voluntary charity. The word is at times used interchangeably with zakah which is a compulsory due on the specified items of wealth of a Muslim. Sadaqah is wider in scope than zakah. It includes cultivation of forest and provision of water. It is a charitable act done to win the favour of Allah. In general, any act that is good is sadaqah. Allah says "Tell me; the seed that you sow in the ground, is it you that cause it to grow? Or are We the causer for it to grow. Were it our will ... we could crumble it to dry piece" (Q56:63-65). Anas bin Malik narrated that Allah's Apostle said, "There is none amongst the Muslims who plants a tree or sows seeds and then a bird, or a person or an animal eats from

¹⁵ R. Herbert, "The Macmillan Family Encyclopedia", (London:Macmillan London Ltd., 1983)

¹⁶ E. Epstein, Mineral nutrition of plants: Principles and perspectives, (Wiley International Edition, 1972).P. 412

it, but is regarded as a charitable gift for him"17. As regards planting trees and sowing seeds, Allah says in the Qur'an that He is the one that causes it to grow (Q 56: 63-64). So, man cannot claim total credit of the produce or the fruits. He can only claim only partial credit for what he realizes from the trees. This is because God provides the soil, the water, air and a host of other things that make the trees to grow. Even, the ability of labour and knowledge used by man is given by God. Therefore, God's share is in the form of sadagah which birds, men and other animals take with or without the permission of the grower. They may also be given willingly. Sadaqah is derived from sadaqah which means to be truthful and sincere¹⁸. The act shows the truthfulness and the sincerity of the sadaqah giver to give Allah a share in the form of sadaqah from what he realizes from the trees he planted. Muslims are also encouraged to plant trees, sow seeds and irrigate the dry land. Doing all these acts earns his doers rewards. The Prophet (PBOH) said: "Whoever brings dead land to life, that is, cultivated waste land, for him is a reward therein; so long as men and animals benefit from it, Allah will record it for him as almsgiving"."Whoever plants a tree, reward will be recorded for him so long as it produces fruit"19. From the foregoing, afforestation and reforestation programmes and greening the earth, all with the aim of planting more trees, come under sadaqah. The 'greening' the campus directive by the National Universites Commission in Nigeria for accreditation and re-accreditation programme fits perfectly into the sadagah aimed at providing green cover on the earth. The trees will not only provide fruits, vegetables and timbers, they will sequester some of the carbon dioxide generated from various anthropogenic activities²⁰. Some trees in the legume group can fix atmospheric nitrogen into the soil. Nitrogen by volume constitutes 78% or 780,900 ppm of the air but cannot be accessed by most

¹⁷ F.A.Khalid, Environmental Crises and Religion: The Islamic View, Islamic Thought and Scientific Creativity, (1992). 3/1

¹⁸ J.M.Cowan, *Hans Wehr of Dictionary of Modern Written Arabic*, (New Delhi: Modern language Services,

^{1960).}p.508-509

¹⁹ F.A.Khalid, Environmental Crises and Religion: The Islamic View, Islamic Thought and Scientific

Creativity, (1992).3/1

²⁰ UNEP, Introduction to Climate Change, (United Nations Environmental Programme Annual Report,2001)

organisms ²¹. It must be converted to water soluble, ionic compounds like nitrate, ammonia and nitrite ions by the process of N-fixation. Integrating such trees into agriculture (agroforestry) will rejuvenate the soil and reduce mineral nitrogen fertilizer being supplied to the crops²². Onim reports that *S. sesban* fixed up to 250 kg N/ha in six months²³. Since urea fertilizer contains 46%N, this fixation is equivalent to approximately eleven 50-kg bags of urea fertilizer in six months. Also, Ozowa reports that green manure can substitute for up to 60-100 kg N fertilizer per hectare in the production of cereals²⁴.

There are environmental costs associated with the excessive use of fertilizer. Decomposition of mineral nitrogen fertilizer and livestock wastes applied to crops generates nitrous oxide (N₂O), another green house gas that accounts for 8% of total emission²⁵. Also, when nitrous oxide is given off to the atmosphere it combines with O₂ to form NO₂ (nitric oxide), which can react with H₂O vapour component of the atmosphere to form nitric acid. This forms a compound of acid rain which is damaging to trees and fishes in water. It has been reported that 30-50% of inorganic fertilizer applied to the soil is taken up by crops. The remaining is carried by runoff and leaching into the surface water and ground water

E. Epstein, Mineral nutrition of plants: Principles and perspectives, (Wiley International Edition, 1972) 412 pp.

M.O. Adedire, "Agroforestry and climate change mitigation": Lead paper presented for the subtheme titled -

Agroforestry and climate change mitigation, (At the 2nd biennial conference of the Forest and Forest

Products Society held at the Federal University of Technology, Akure. April 26-29, 2010).

²³ J.F.M. Onim, Multiple use of pigeonpea. In: Proceedings of ICRISAT Consultative Group Meeting for Eastern and Central African Regional Research on Grain Legumes held at ILCA, Addis Ababa, Ethiopia, 8-10 December (1986). pp. 115-120.

V.N. Ozowa, Information needs of small scale farmers in Africa: The Nigerian example. Quarterly Bulletin of the International Association of Agricultural Information Specialists (IAALD/CABI, 1995) 40(1).

²⁵ S. Ogunyemi, R.O. Awodoyin, and O.S. Olubode, "Climate Change, Impacts and Mitigation: Nigerian Experience". Nigerian Journal of Ecology, (2010)11: 10-19.

²²D.O.Evans, and P.P.Rotar, (1987). Botany of Sesbania. In: Sesbania in Agriculture. Westview Tropical Agriculture series 8. Colorado, USA.: Westview Press, Boulder, FAO, 1987)pp. 5-25

respectively, causing their pollution²⁶. The nitrogen pollutant runs through the food chain to cause ill health in lower animals and humans. Also, the run off of commercial inorganic fertilizer from cropland into aquatic system causes eutrophication, making the water body to be less fertile and productive. This promotes the growth of algae and other aquatic plants. The decomposition of dead algae and water plants by aerobic decomposers deplete the water of some O₂ gas, thus causing the death of many fishes. The nitrate pollution of ground water calls to question the purity of bore hole and deep well water. Reduction of mineral nitrogen fertilizer input will reduce generation of N₂O and nitrogen pollution of surface and ground water.

The list of items of sadaqah is endless. Allah says, "So for this let competitors compete" (Q83:26). During the time of Prophet Muhammad (PBOH), the companions had eagerness to do good and charitable acts to please Allah in response to the Qur'anic injunction on sadaqah. Unfortunately, many of them could not give it because they were not well-to-do. They wanted to be like the rich who gave it and amass rewards through it. This made them to present their predicament to the Prophet who then gave a list of items and other good deeds which are tantamount to sadaqah.

Abu Dharr, radiyallahu'anhu, reported that some of the companions of the Messenger of Allah, sallallahu alayhi wasallam said, "O Messenger of Allah, the rich have taken away all the rewards. They observe the prayers that we do, and keep fast as we do, and they give sadaqah (charity) from their surplus riches." Upon this He (the Prophet) said: "Has Allah not prescribed to you (a course) by following which you can also do sadaqah? Verily in every tasbīh (i.e. saying Subhanallah) there is a sadaqah, every takbīr (i.e. saying Allahu Akbar) is a sadaqah, every tahnīd (i.e. saying Alhamdulillah) is a sadaqah, every tahlīl (i.e. saying Laa ilaha illallah) is a sadaqah, enjoining of good is a sadaqah, forbidding of evil is a sadaqah, and having sexual intercourse with your wife is a sadaqah. They (the companions) said: "O Messenger of Allah, is there for him who satisfies his sexual

²⁶ F.SH.F. Badawi, A.M.M. Biomy and A.H. Desoky, (2011). Peanut plant growth and yield as influenced by co-inoculation with *Brady-rhizobium* and some rhizo-microorganisms under sandy loam soil conditions, (Ann. *Agric. Sci.*, 2011) 56: 17 – 25.

passion among us?" He said: "Tell me, if he were to devote it to something forbidden, would it not be a sin on his part? Similarly, if he were to devote it to something lawful, he should have a reward (Ahmed Badi, J.(nd): 104). Abu Hurairah, radiyallahu 'anhu, reported that the Messenger of Allah, sallallahu 'alayhi wasallam, said:"On every person's joints or small bones (i.e. finger and toes), there is sadaqah (charity) every day the sun rises. Doing justice between two people is sadaqah; a good word is sadaqah; every step you take towards prayer is sadaqah; and removing harmful things from pathways is sadaqah".

Planting trees requires using one's energy, body, small bones and joints. These bones assist man to cultivate lands, plant trees, construct and build many things. By planting trees, one is doing the acts of charity to show one's gratitude to Allah. It must be mentioned that most of what people do in terms of planting trees, manufacturing tables from planks, constructing bridges and using trees as firewood are possible because of these bones that have been created by Allah. Therefore, the acts of sadaqah are very wide and affordable. Everyone should take the advantage of its wide coverage and do good deeds as much as one can. There are choices of doing acts of sadagah according to one's ability. In order to get its benefits herein this world and the Hereafter, the Prophet encouraged people to give sadaqah so as to prevent evils in the world, to get one's wealth increased and to erase one's sins. He said: "Sadaqah extinguishes sin as water extinguishes fire"28. "Sadagah appeases the Lord's angerand averts evil death". "Give the sadagah without delay, for it stands in the way of calamity". "The believers' shade on the Day of Resurrection will be his sadaqah"²⁹. "Charity does not in any way decrease the wealth, and the servant who forgives, Allah adds to his respect, and the one who shows humility, Allah elevates him in the estimation(of the people)"30.

J.B. Ahmed, Commentary on the forty Hadith of al Nawawi, (Alex-Egypt: Conveying Islamic Message).p.108

²⁸ Al Bukhari, *Sahih al-Bukhari*, M.M.Khan (tr.) *Sahih al-Bukhari Arabic and English* vol. 3. (Beirut: Dar al Arabia) vol.2: 295

²⁹ I.A. Al- Tirmidhī, *Al-Jami 'Tirmidhī* (cairo: Shahrahī b.-ī-'Arabī, 1934). 2541, 1909,1887 1925.

³⁰ Sahih Muslim, Volume 4, 6264.

"Every Muslim has to give charity". The people asked, "O Allah's Prophet! If someone who has nothing to give, what will he do?" He said, "He should work with his hands and benefit himself and also give in charity (from what he earns)". The people further asked, "If he cannot find even that?" He replied," he should help the needy who appeal for help. Then the people asked," If he cannot do that? "He replied," then he should perform good deeds and this will be regarded as charitable deeds³¹. The sayings of the Prophet on sadaqah in relation to tree emphasize the charitable acts that benefit not only man but also the rest of the creations such as birds, animals and insects; and also cleanses the environment, and rejuvenate and reinvigorate the soil. These creatures eat leaves, fruits and a host of the forest products. These in turn give the person who plants such trees and manage them the opportunity of giving sadaqah.

Death is inevitable. When it comes suddenly to a person, neither can he do any good acts nor bad deeds. However, if he has planted trees before he dies, the rewards continue flowing into his accounts. The rewards of some *sadaqaat* such as money, maize, beans and any other shariah-compliant products attract rewards once. Of all the forms of *sadaqatum jaariyah* (i.e. continuous charity), planting trees is one of the few that benefit both humans and non-humans. The rewards of planting trees continue during the life of a person that plants them and after his death in as much as people benefit from such trees, and such trees even benefit the environment. Concerning this issue, Abu Hurayrah related that the Holy Prophet is reported to have said: "When a person dies, his actions come to an end except in respect of three matters that he leaves behind; a continuing charity, knowledge from which benefit could be derived and righteous children who pray for him"³². Some of the items that give a person rewards during his lifetime and after his death are; knowledge he has taught people, any tree he has planted, and which is

³¹ Al Bukhari, Sahih al-Bukhari, M.M.Khan (tr.) Sahih al-Bukhari Arabic and English vol. 2. (Beirut: Dar al Arabia).524

³² Y. Sharafah, Gardens of the Righteous, (tr.) M. Z. Khan.B/eirut, (Lebanon:IF, 1985). p.481

benefitting people, a mosque he has built, righteous children who pray for him, and a well he has dug that is providing water for people free of charge.

Forest Management and the Islamic Concept of Sacred Places

With regards to forest protection, Prophet Muhammad took some steps when he got to Madinah. He set aside some areas called the sanctuaries (al-Hima and haram). The purpose of these Zones was to conserve resources i.e. the resources were left untouched. Tree and date groves were planted there. Some areas were also drawn up around wells and water sources so as to protect the ground-water table. This presents the community protected forest groves and watershed. Such grooves conserve rare fauna and flora species; and the watershed reduces erosion and prevents siltation of rivers and its consequent loss as well as flooding of adjoining areas. No one was allowed to cut firewood or cut grasses from there. Some species were also put in hima. The Prophet said:

Its (haram) thorny bushes are not allowed to be cut off." Another account of the sanctuary was narrated by Said bin Abu Said Al-Maqbūri: Abu Shuraih Al-Adawī said that he said to 'Amr bin Saīd when he was sending the troops to Mecca (to fight) Abdullah bin Az-Zubair, "O Chief! Allow me to tell you what Allah's Apostle said on the day following the conquest of Mecca. My ears heard that and my heart understood it thoroughly and I saw with my own eyes the Prophet when he, after glorifying and praising Allah, started, "Allah and not the people, made Mecca a sanctuary, so anybody who has belief in Allah and the Last Day should neither shed blood in it, nor should he cut down its trees. If anybody tells(argues) that fighting in it is permissible on the basis that Allah's Apostle did fight in Mecca, say to him, "Allah allowed His Apostle and did not allow you." (Allah allowed me only for few hours on that day of (the conquest) and today its sanctity is valid as it was before. So, those who are present should inform those who are absent concerning this fact..." He also said: "Allah has made Mecca a sanctuary, so it was a sanctuary before me and will continue to be a sanctuary after me. It was made legal for me (I was allowed to fight in it) for a few hours of a day. It is not allowed to uproot (its shrubs), its games, or to pick its *lugata* (fallen things) except by a person who would announce that (what he has found) publicly." O Allah's Apostle! Except Al-Idhkhir (a kind of grass) (for it is used by our gold smith and for our graves then said "except al-idhkhir"

Hajj is one of the pillars of Islam. A Muslim who is sound in health and is financially buoyant to undertake the journey must perform Hajj. The instruction to observe Hajj is stated in the Quran (Q22:27-29). Hajj has its dos and don'ts. One of its don'ts is that a *Muhrim*(a pilgrim who is in the cloth of Hajj *Ihram*) should not disturb forest by hunting animals for himself or for people who are not in *Ihram* cloth³⁴. Allah says in the Quran: Kill not game while you are in the state of Ihram. If any of you do so intentionally, the penalty is an offering of a domestic animal equivalent to the one he killed...(Q5:95-96).

The Muhrim should not also kill any living things. It is an offence to hunt animals or kill any living while in Ihram cloth. If a person does it, he is liable to pay Fidya (compensation). A muhrim should not hunt an animal. If a non-Muhrim should hunt an animal with the help of a Muhrim, or if a muhrim should call the attention of non-Muhrim to it with a view to killing it, it is forbidden for muhrims to eat that animal. However, if a non-muhrim should hunt an animal on his own, it is allowed for a muhrim to eat the hunted animal if he does not help in the killing or call the attention of non-muhrim to it with a view to killing it. It was narrated by Abdullah bin Abass from As-Saib bin Jath-thama Al-Laithi that the latter presented an onager to Allah's Apostle while he was at Al-abwa or at Waddan, and he refused it. On noticing the signs of some unpleasant feeling of disappointment on his (As-Saib's) face, the Prophet said to him, "I have only returned it because I am Muhrim" 35.

This is another way of showing the importance of keeping, protecting and conserving trees and forests, and protecting the wild animals and birds that reside in the forest.

³³ Al Bukhari, *Sahih al-Bukhari*, M.M.Khan (tr.) *Sahih al-Bukhari Arabic and English* vol. 3. (Beirut: Dar al Arabia).p. 35-37; 325-326

³⁴ Al Bukhari, Sahih al-Bukhari, M.M.Khan (tr.) Sahih al-Bukhari Arabic and English vol. 3. (Beirut: Dar al Arabia).p.30-37

³⁵ Al Bukhari, Sahih al-Bukhari, M.M.Khan (tr.) Sahih al-Bukhari Arabic and English vol. 3. (Beirut: Dar al Arabia).p.28-33

According to Abu Hurayrah who said the Prophet said: "...Allah had withheld the Elephant from Makkah and empowered His Messenger and the believers over it. Fighting in it has not been made lawful to anyone before me, but it has been made lawful for me only during one hour of a day, and it will not be lawful to anyone after me. Its game is not to be molested, its THORNS are not to be cut, Al-Abbaas said, except the (tree called) Al-Idhkhir, O Messenger of Allah, because we use it in our graves and houses. He said except Al-Idhkhir" (Agreed Upon). Idhkhir is a kind of grass which is used in the process of melting of the metals. It is also laid on the roofs and floors of houses and is used in spreading in the graves 36.

Forest Conservation and 'Ibādah

As regards the treatment of the forest, the story of Prophet Muhammad's companions such as Abubakr was along the same lines. They had high regards for the forests and trees. They did not lose control even during the war that was embarked on for the sake of Allah and not for the purposes of evil and aggression. For instance, Abubakr who was the first caliph after the death of the Prophet Muhammad instructed his troops not to destroy trees among other things. Abubakr instructed Yahya b. Abu Sufyan who was the commander of a quarter of the forces".... You will find some people who imagine they have devoted their lives to Allah (the hermits), leave them to their works, you will find some people who shave their heads in the middle (the Magi), strike them with your swords. I instruct you in ten matters: Do not kill women or children, nor the old and infirm; do not cut fruit-bearing trees; do not destroy any town; do not cut the gums of sheep or camels except for purposes of eating; do not burn date-trees nor submerge them; do not steal from booty and do not be cowardly"³⁷. If this is the status of plants from Islamic perspective during war, it means they enjoy a better position during the time of peace.

³⁶ H. Hajar al Asqalani, Bulughu al Maram, (Riyadh: Darus-Salam Publications 1996), p.255

³⁷ Rahimniddin Muhammad, Muwatta Imam Malik, (Beirut: If publication, 1985).p.408

Ibādah means worship in Islam. It is not only human beings that praise God, but other creations such as trees in the forest, mountains, the earth, the heavens and stars in the universe also pray to Him. "And the stars and the TREES prostrate (sujuud)" (Q55:6). Everything that submits to the will of Allah and behaves in accordance with the dictates of Islam is to be regarded as a Muslim. Therefore, all non-humans and non-jinns are Muslims because they are not given the free will to disobey Allah. They obey their Creator's laws. There are many verses in the Quran that support the assertion that other creations apart from man and jinns worship Allah (Q13:15, Q16:48, Q38:18, Q55:6, Q17:44, Q22:18, Q24:41, Q57:1, Q59:1, Q59:24, Q62:1, Q64:1, Q21:79, and a host of others). They glorify Allah in their own ways which may not be understood by human beings and the jinns.

Corruption is not limited to illegal banking system, theft, rape and other socioeconomic issues, it extends to the discharge of toxic wastes, deforestation, burning of the forests, etc. Allah in the Quran warns people against corruption, spoilation, corruption of the environment, etc"... and desire not corruption in this land" (Q 28:77) "... and do not commit abuse on the earth, spreading corruption" (Q 2:60).

It is stated clearly in the above —mentioned verses that all the natural resources are made for the use of man, and not for his abuse. Man is cautioned not to waste natural resources such as trees and water. If human beings abuse nature by burning the forests and polluting the air and water, it will affect sustainability of the whole ecosystem. Therefore, Islam enjoins man to behave morally toward nature. He should avoid anything that affects the environment. Allah, shedding lights on the need to avoid all forms of corruption, says in the Quran: "And cause not corruption upon the earth after its reformation. And invoke Him in fear and aspiration. Indeed the mercy of Allah is near to doers of good" (Q7:56). That is, if you protect or join hands with others to protect the environment you will benefit therein. Allah says in (Q4:85), "Whoever joins himself (to another) in a good

cause shall have a share of it, and whoever joins himself (to another) in an evil cause shall have the responsibility of it, and Allah controls all things."

Another way of being mischievous to the environment is to destroy plants and trees without a genuine reason. It is against Islamic teachings as contained in the Ouran and the sayings and deeds of the Prophet to cut trees or abuse forests. The Prophet is reported to have said:" He who cuts a lote-tree (without justification), God will send him to Hell-fire³⁸. Trees protect the natural resources and preserve the balance between the environmental creatures (ecosystem). A person who cuts a tree without a genuine reason is condemned to hell fire. This brings to focus the honour attached to natural resources, particularly trees. It can be imagined if a person should destroy thousands or millions of trees without genuine reasons. It must be mentioned that Prophet Muhammad cut trees once throughout his life in order to protect his people and to remove the barrier that Banu Nadir were using to perpetuate evils. This is recorded in the Hadith thus: It is narrated on the authority of Abdullah that the Messenger of Allah ordered the date-palms of the Banu Nadir at Buwaira, to be cut and burnt. Qutaibah and Ibn Rumah in their versions of the tradition have added this verse: "So Allah, the Glorious and exalted, revealed the verse: Whatever trees you have cut down or left standing on their trunks, it was with the permission of Allah so that He may disgrace evildoers" (Q62:5).

Cleanliness is one-half of faith in Islam. It is so fundamental that a person does not have prayer if he is not clean. In fact, the Prophet is reported to have said Religion is founded on cleanliness. He also said cleanliness is the key to prayer. In the Quran, Allah says: "Therein are men who love purity and God loves the pure" (Q 9:109). "God desires to make you clean and to complete His favors on you" (Q 5:7).

The act of cleanliness is carried to the management of trees that provide shade for people. It is an act of abuse to defecate under a tree. That made Prophet Muhammad to frown at the act by warning people sternly to refrain from an act

³⁸ I.A. Al- Tirmidhī, Al-Jami 'Tirmidhī (cairo: Shahrahī b.-ī-'Arabī, 1934).5239

that will make people rain curses on them. If a person should defecate under trees or in the path of people or any other objects where people rest, they will breathe in polluted air which can cause problems for them. The polluted air may affect their health. In relation to this act, the Prophet is reported to have warned people against it. He said: "Beware of the two accursed practices. He was asked: What are the two accursed practices? He answered: A person relieving himself in a pathway frequented by people or in a shaded place used by them³⁹

Man is encouraged to work towards protecting and conserving forests for it is one of the means for survival. Other creatures such as animals and birds also depend on it for their livelihood. Islam encourages man to beautify himself and his environment. The purpose is to inhale clean and oxygen-rich air through the plants, and to make use of the textiles made from the forest products. Allah says: "O children of Adam, take your adornment (i.e. wear your clothing) at every mosque, and eat and drink but do not be excessive. Indeed, he likes not those who commit excess" (Q7:31). There are a lot of lessons for Muslims as regards growing trees. In fact, the Prophet likened a believer to a growing tree. Just as trees grow, believers should not be static in their faith, modes of worship and good deeds. They should increase them. The benefits of trees are too obvious to be counted. In fact, the Qur'an considers them to be invaluable as regards sustaining and embellishing human life.

And the earth- We spread it out and cast therein firmly set mountains and made them grow therein [something] of every beautiful kind; And the earth He laid [out] for the creatures; Therein is fruit and palm trees having sheaths [of dates]; And grain having husk and scented plants; So which of the favors of your lord will you deny? Then let mankind look at his food- How we poured down water in torrents; Then we broke open the earth, splitting [it with sprouts]; And caused to grow within it grain; And grapes and herbage; And olive and palm trees; And gardens of dense shrubbery; And fruit and grass- [As] enjoyment [i.e., provision] for you and your grazing livestock; And we have sent down blessed rain from the sky and made grow thereby gardens and grain from the harvest; And lofty palm trees having fruit

³⁹ Y. Sharafah, Gardens of the Righteous, (tr.) M. Z. Khan.B/eirut, (Lebanon:IF, 1985).p 805-806

arranged in layers- As provision for the servants, and We have given life thereby to a dead land. Thus is the emergence [i.e. resurrection](Q50:7, Q55:10-13, Q80:24-32, Q50:9-11).

Apart from getting food and drinks from them, they also provide man with many household facilities such as chair, table, shelves and firewood. Industries also benefit from them by using their products to make papers, medicinal products, plywood, lumber, chipboard and a host of others. Among the uses of forest are regulations of the flow of water from highlands, control of erosion and creation of employment. There are many plants and trees mentioned in the Qur'an that have medicinal values. This is to encourage people to manage trees very well so as not to lose the benefits contained in them (Q6:99). "And it is He who sends down rain from the sky, and We produce thereby the growth of all things. We produce from it greenery from which We produce grains arranged in layers. And from the palm trees-of emerging fruits are clusters hanging low. And (we produce) gardens of grapevine and olives and pomegranates, similar yet varied. Look at (each of) its fruits when it yields and (at) it ripening. Indeed in that are signs for people who believe" (Q6:99). When a believer (A Muslim) takes his time to visit forests and appreciates their beauty, he should reflect on the Creator and how He designed them. That moment, he is able to connect to his Creator (God). This is an act of ibaadah (worship). The benefits of forest have also been stated in the Quran (Q56:71-73). "And have you seen the fire that you ignite? Is it you who produced its tree, or are We the producer? We have made it a reminder and provision for the travellers".

Conclusion

In conclusion, the eternal effects of planting trees and taking care of the environment in both this world and the hereafter have created greater incentives to eare for the natural resources such as water and forest. The Prophet (PBOH), through his sayings and deeds, has created a long-lasting conservation plan for environment. We should take a leaf from the sayings and the deeds of the Prophet to address the current environmental crises such as global warming. If people yield to the instructions and Islamic directives as contained in Islamic teachings

on the forests, they are the ones who will benefit. It is against Islamic teachings as contained in the Qur'an and the sayings and deeds of the Prophet to cut trees or abuse forests without genuine reason. Therefore, the teachings of Islam in the areas of forest management can go a long way in changing peoples' attitude positively towards its use and sustainability. People's awareness need to be expanded concerning the dictates of Islam in the management of forest. Both the people in the rural and urban areas should make use of the directives of the Prophet on the trees and the guidelines stated in the Qur'an as outlined in this paper. Indiscriminate cutting of trees should be stopped. The government should enforce the existing promulgations against cutting of trees without permission or genuine reasons. Government at all levels should also provide enough funds for reviving the dying forests (reforestation) and establishing new forest areas (afforestation).

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