

THE MISSING SPIRITUAL DIMENSION IN ENVIRONMENTALISM

Promise of Islamic Environmental Ethics and Principles

by

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ABSTRACT

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Interviews were conducted with Imams from different Mosques in the greater Seattle area with the purpose of examining their perspective on environmental issues, the level of environmental awareness in the Masjids, and their Masjids' engagement with environmental programs. The results of the transcribed interviews showed that there was a high level of awareness of environmental issues amongst Imams in the greater Seattle area. They all recognize the importance of the environmental movement in securing people's basic physical and spiritual needs. Also, they all considered pollution and degradation as a form of corruption and mischief on Earth that warrant fighting against. At the same time, this awareness did not translate well into action. Only one of the interviewees directly included environmental topics in their Friday Sermons, and not all Masjids were engaged in environmental educational programs or community work concerning the environment.

However, they showed a strong desire to include environmental topics into their future lectures, get their respective Masjids involved in more community activities, and work with any environmental organization that is willing to include them. Imams also acknowledged the importance of having Muslims feel like this is their home and they are a part of the community. Nurturing the feeling of 'I belong here' would help Muslims become more productive within their communities, which in turn would help enhance our planet's ecological state.

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CHAPTER 1: Introduction

Human activities are harming nature and rendering this planet significantly less habitable for our children and grandchildren. Scientists are anticipating some major global changes by the year 2100. Among these changes are: increase in the severity of cyclonic storms, rise in global temperatures, rise in sea level threatening our coastal communities, rise in ocean's acidity, and frequent eruption in major forest fires (Bloom, 2010). Here in the United States, without even factoring in the expected drought effects of climate change, thirty-six states predict water shortfalls in the next five years that will put their environmental health at serious risk. The sea level in New York is now about a foot higher than it was just a century ago. Crops are wilting in front of American farmers one year and being washed away the next. As a result of these changes caused by humanity, not only will the environment be effected, but humans will be adversely affected too.

With its possession of strong environmental principles, Islam can potentially offer a viable solution to these environmental issues. Fifteen hundred years ago, Muslims were able to develop a number of environmental management systems. These Islamic Environmental Management Systems included: Land resurrection or reclamation (ihyaa al-mawat), special reserves (al-hima), inviolable zones (al-harim), land grants (iqtaa), state-leased land (ijara), charitable endowments (waqf), and an office of public inspection (muhtasib) which is responsible of the protection and conservation of the environment (Saniotis, 2011; Khalid, 2002; Bagader et al. 1994).

Islam is unique in the sense that it cannot be constrained under the narrow understanding of an ordinary religion. It goes beyond the limits of ritual performances. The Deen¹ of Islam is a comprehensive way of life which provides guidance for a wide spectrum covering personal, social, political, and eco-ethical practices. Qur'an² and Sunnah³ are the primary sources of Sharia Law⁴. There are three major principles upon which Sharia has evolved:

1. The interests of the community take precedence over the interests of the individual.
2. Warding off evil (or harm) takes precedence over bringing interests (or benefits).
3. Smaller loss (or harm) cannot be alleviated through prescribing a bigger loss, and bigger interest (or benefit) takes precedence over smaller one.

Moreover, the geographical settings and local circumstances surrounding the birth of Islam helped serve as the basis for which the conservation of natural resources was established. In the desert of Saudi Arabia, Muslims had very limited natural resources. Water, fruit trees and livestock had to be carefully conserved for survival. These circumstances naturally made Muslims at the time use their environment in a sustainable manner.

The environmental movement has made some strides in raising awareness of the seriousness of today's environmental crisis. However, the efforts of the environmental movement are lacking the much needed spiritual dimension (Nasr, 1996). The movement

¹ Religion or way of life

² The final heavenly book revealed to the last Prophet Mohammad through Angel Gabriel

³ Teachings of the Prophet Mohammad which were taught to him by Allah

⁴ Islamic legislation

fell short of addressing the overall worldview that nature is something separate from us and that its resources are only there for our exploitation. We are in need of faith-based environmental activism that would restore nature its sacredness. It seems though that the only way to prevent human-caused destruction of the environment is to view nature, with all of its fauna and flora, as having inherent value. To mitigate the over-exploitation of natural resources and save the environment, first there needs to be a change of the core attitude of people towards nature, which is the most responsible driver of such actions. Even though today Muslims are not necessarily known for their eco-ethical practices (DeHanas, 2010), still Islam is equipped both scripturally and historically to produce active and practical environmentalists, and lead the way to a sustainable environment. Muslim scholars, leaders and Imams⁵ must take the lead in the fight against ‘eco-terrorism’ and change Muslims attitudes and environmental behaviors through promoting awareness of Islamic environmental ethics.

The ecological ethics in Islam are arguably based on three major founding concepts or principles:

1. Tawhid⁶ which is the basis of Muslims thoughts and actions, covering every aspect of personal and social life (Saniotis, 2011).

⁵ An Islamic leadership position, congregational leaders

⁶ The oneness of Allah, which in Islam is believed to be the message of all Prophets and Messengers throughout Men’s history, is the key to Paradise. No amount of good work will help a person attain Paradise without first establishing Tawhid. That is because Shirk (opposite of Tawhid), which is associating partners with Allah, nullifies all good actions and deeds. Allah forgives everything but Shirk. Allah (SWT) said: “Whoever rejects Evil and believes in Allah hath the most trustworthy handhold, which never breaks.” (2:256) and the Prophet (PBUH) said: “Whoever says (La-Ilaha-Illa-Allah), and rejects and disbelieves in all that is worshipped besides Allah, his wealth and blood will be protected, and his account will be with Allah” Sahih Muslim

2. Khilafah⁷ or vicegerency which is declared in the Qur'an and affirms human's duties and responsibilities towards the creation; this responsibility comes from the fact that humans have been given the privilege of being able to reason and thus be ultimately accountable for our actions (Khalid, 2001).
3. Akhirah⁸ or the hereafter which is the belief that gives life meaning and purpose beyond just material gains and physical pleasures.

Islam, a religion of moderation, promotes environmental sustainability and teaches against the extreme human exploitation of resources. It does so by setting limits on human behavior. Its doctrines promote sensitivity and care towards the environment (Haneef, 2002). Islamic institutions, particularly in the west, can help establish a realistic and meaningful environmental movement, a movement that can change people's attitude towards the natural world. Without a constant reminder of their responsibilities as vicegerents of the earth, people will remain unjust and their irrationality will continue to supersede their actions (Bagader et al., 1994). Initiating educational programs and seriously getting involved in practical environmental activities, Islamic Centers and Masjids in the U.S. can close the gap between the theory of Islamic environment and the practices amongst adherents.

The work in this research is aimed at investigating Imams environmental views and actions in the greater Seattle area. This study is set to reveal whether the Imams in Seattle are:

⁷ To be a khalifa, is to be steward or caretaker.

⁸ Life after resurrection

- Aware and concerned about today's environmental crisis
- Working towards bringing awareness to their congregations
- Including environmental topics in their Friday Sermons
- Engaged in any environmental educational program or community work concerning the environment
- Familiarizing Muslims with how the Creator has entrusted them part of His power on Earth, making stewardship (Khalifa) their central role on Earth

An in-depth one-on-one interview was conducted with several Imams from different local Masjids. The results of the transcribed interviews were managed and arranged to understand: the Imams perspective on environmentalism, the level of environmental awareness with their congregations, and their level of engagement with environmental programs. Any patterns or trends identified could possibly help create active Muslim environmental members in society, young leaders and role models in the greening of our communities, and fierce fighters against environmental pollution and degradation in general. The information derived from these interviews could also help future researchers in areas such as environmental teachings in Islam, or Muslim environmental practices in North America could benefit from having these results available.

Additionally, the American Muslim community is very diverse in socioeconomic status, education level, and age (Matin, 2010). This multilevel diversity of the Muslims along with other factors (such as the ongoing systematic slander of Islam perpetrated by the main stream media) encourages the sense of alienation and discourages the sense of

attachment and belonging to the American society. Therefore, Muslims as a group feel dis-attached from the country's main body. For the full participation of the Muslims as residents and citizens of this country, Muslims should feel attached to the country and perceive it as theirs and their children's home (Tariq, 2013). Imams have a vital role to play in nurturing this feeling of belonging and help the American Muslim community feel at home, so that they can become productive citizens, and help enhance our planet's ecological state. Therefore, the last question of this in-depth one-on-one interview will address this issue in the hope of gathering helpful information and insight that could lead to useful suggestions.

CHAPTER 2: Literature Review

Introduction

This chapter starts with providing some basic information about Islam intended primarily for readers who don't know much about the religion. This section includes a brief explanation of the relationship between the Creator and His creation, Salaat,⁹ as one of the major tenets in Islam, and primary sources of Sharia¹⁰ are all presented in this portion of the literature review. The next section provides an explanation of what worship means in Islam and what are its pillars, without which worship would not be accepted.

The next section examines the promise of Islamic scriptures and principles, an outline of major founding concepts for ecological ethics in Islam which might help drive Muslims actions towards the greater good. An especially important idea is the way Islam teaches us that nature with all of its elements is the shared property of all creatures and people are to use its resources only in a usufruct manner, because the real owner of things is their Creator (Allah¹¹). A brief history of the way these Islamic principles have played out in practice is given in the 'Islamic Environment Systems' section, followed by some possible reasons for why Muslims seems to be indifferent towards the environment today. What is causing Muslims, particularly in Muslim majority countries, to violate their own environmental ethos and principles is presented and discussed in this section.

The next section, 'Muslims are rediscovering Islam,' shows how Muslims are increasingly becoming more receptive to global ecological problems recently. It includes

⁹ Ritual act, can be translated as prayer, it is mandatory for Muslims to perform Salaat five times a day

¹⁰ Islamic legislation

¹¹Is God in Arabic

examples of Muslims majority countries where Islam and ecology are merging together to protect the environment, as well as examples of how Muslims in Western countries have increased their environmentalism efforts and formed many environmental action groups that are involved in a number of projects throughout Europe and the U.S.

The chapter concludes with an explanation of my research project, and how faith-based environmental activism can contribute to the prevention of human-caused destruction of the environment. With its rich scriptures and history, Islam is able to produce active and practical environmentalists, and can lead the way to a sustainable environment. Muslim scholars, leaders and Imams can play a major role in changing Muslims attitudes and environmental behaviors through promoting awareness of Islamic environmental ethics.

Before commencing, the following information is deemed necessary:

It is nearly impossible to translate The Qur'an in its pure Arabic form into other languages. Studying the Qur'an requires a good knowledge of Arabic. However, to get as close as possible to the original Arabic meaning of the Qur'an, it has been suggested to have more than one English translation available (Khalid, 1999). For the English translation of the Qur'an quoted in this thesis work, I have relied upon Abdullah Yusuf Ali's *The Meaning of The Holy Qur'an*, Amana Publications (1996). All quotes from The

Qur'an are italics and after each quote immediately comes the Surrah¹² number¹³ followed by the Ayat¹⁴ number with colons in between.

A Glimpse at the Basics of Islam

Judaism, Christianity and Islam, are three religions that share their heritage as the Abrahamic monotheistic faiths. All of the Prophets and Messengers of Allah (SWT)¹⁵ came with the same monotheistic message, which is to worship Allah and not associate any partners with Him. The Prophet Mohammad (PBUH)¹⁶ was the seal of all Prophets.

In Islam there is the Creator and the creation. Allah (SWT) is the Creator and everything else (seen and unseen) represents the creation. Allah created this entire universe with its diverse and various elements by precise measurement, proportion, and balance: *Verily, all things have We created by measure (54:49) and We have produced therein everything in balance (55:7)*. Everything in this universe was created with wisdom, value and purpose: *We have not created the heavens and the earth and all that is between them carelessly. We have not created them but for truth (44:38-39)*. Also, everything glorifies and praises Allah (SWT): *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 (24:41)*. These elements of order enable scientific technique measurements of some of what we experience to give

¹² A chapter of the Qur'an

¹³ For convenience, the names of the chapters are left out.

¹⁴ A verse of the Qur'an

¹⁵ Short for (Subhaanahu wa Ta'aala) in Arabic, which means (The Exalted)

¹⁶ Peace and Blessings be upon Him

us little understanding of a small portion of Allah's creation (Khalid, 2001): *Of knowledge it is only a little that is communicated to you, (O men!) (17:85).*

The term environment (or nature) is referred to in the Qur'an as khalq¹⁷ (Khalid, 2001). The very first verse that was revealed to the Prophet Mohammad (PBUH) contained the word 'khalaqa' (created): *Proclaim! (or Read) in the name of thy Lord and Cherisher, Who created - created man, out of a (mere) clot of congealed blood (96:1-2).* Everything besides Allah (the Creator) is His creation and His only. Thus, Islam rejects all forms of anthropocentrism¹⁸ by clearly distinguishing between God (The Creator) and the rest (His creation). *He to Whom belongs the dominion of the heavens and the earth: no son has He begotten, nor has He a partner in His dominion: it is He who created all things, and ordered them in due proportions (25:2).*

Not only that humankind shares the attributes of being God's creation with the rest of the creation world, but in fact, Allah has told us in the Qur'an that certain creation such as the heavens and the earth are far greater than us in creation, *Assuredly the creation of the heavens and the earth is greater (in matter) than the creation of men: Yet most men understand not (40:57).*

One of the major tenets in Islam is Salaat. Muslims perform Salaat five times a day. Performing Salaat is not confined to a specific Masjid¹⁹. Muslims can perform Salaat anywhere they might be. The entire earth is considered a Masjid. Thus the entire earth is sacred and should be treated as such. Narrated by Jabir bin Abdullah that the Prophet

¹⁷ Creation

¹⁸ Arriving at the denial of anthropocentrism is the ultimate goal of deep ecology.

¹⁹ The place where Muslims come together for daily Salaat, sometimes called Mosque

Mohammad (PBUH) said: *...the earth has been made for me (and for my followers) a place for praying and a thing to perform Tayammum, therefore anyone of my followers can pray wherever the time of a prayer is due, ...*

Islam is unique in the sense that it goes beyond the boundaries of the ritualistic acts performed on a particular day of the week. This Deen²⁰ is a comprehensive way of life. It provides guidance for how Muslims are to live their daily lives from the moment they wake up to the moment they go to sleep. The guidance covers a wide spectrum of things ranging from personal hygiene (i.e. how to relieve oneself), to government and politics (i.e. how to run national and international affairs), to environmental ethics (i.e. how to behave and deal with both the living and non-living worlds). By basing all of their actions on the Islamic teachings, Muslims become in a state of constant service and worship of Allah, which is the main purpose of mankind's existence.

All activities of every aspect of life, both private and public, within an Islamic State are guided by Sharia Law. There are five primary sources of Sharia, the first two are:

1. Qur'an²¹ which is the final heavenly book revealed to the last Prophet Mohammad (PBUH) through Angel Gabriel. It is the word of Allah revealed in Arabic and transferred to us in an unbroken chain without any distortion, change or alteration through transcription and memorization: *We have, without doubt, sent down the Message; and We will assuredly guard it (from corruption) (15:9).*

²⁰ Religion or way of life

²¹ Was memorized, compiled and completely written during the life of the Prophet Mohammad (PBUH)

2. Sunnah²² (or Prophetic traditions), also a revelation from Allah (SWT) but with Mohammad's wording, is the teachings of the Prophet Mohammad (PBUH) taught to him by Allah. It comprises the Prophet's statements, actions, and endorsements. It was written during the time of the Messenger, compiled and authenticated after His death (PBUH) based on written as well as verbal narrations. *Nor does he say (aught) of (his own) Desire (53:3).*

Once the Muslim population grew and expanded geographically, their governmental needs became more complex and required more sophisticated methods to use alongside the first two sources. Other sources which are based on the Qur'an and Sunnah were added such as:

1. Ijmaa²³: It is the agreement of the Muslim Ummah²⁴ on a legal judgment after the Prophet (PBUH). The Prophet said: *My nation does not meet and consent on going astray.*
2. Qiyas²⁵: It is a process of reasoning by analogy.
3. Ijtihad²⁶: It is the interpretation in context.

These last three sources and other sources which are left off the list are all based on the Qur'an and the Sunnah. It was reported that the Prophet Mohammad (PBUH) said:

²² The Prophet's Sunnah clarifies, illustrates and explains in details all of the concentrated texts of the Qur'an. The beloved Prophet Mohammad (PBUH) was a walking Qur'an

²³ Consensus of opinion amongst the companions of the Prophet or/and amongst Muslim scholar jurists on a particular issue from an Islamic point of view

²⁴ Groups such as Shi'a are excluded. One of the Shi'a prominent contemporary scholars said: "Among the essential beliefs of our school of thought is that our Imams occupy a position which no angel who is close to Allah and no Prophet who was sent has ever reached" (Al-Hukoomah al-Islamiyah by Khomeini, Pp. 52)

²⁵ The analytical thinking of qualified Muslim scholars on the basis of comparison and measurement

²⁶ The diligence based on the views of qualified scholars in contemporary issues, which are based on logic and analysis

I left you, with what if you firmly hold on to, you will never go astray: the Book of Allah (the Qur'an) and my Sunnah (my way).

Moreover, Sharia has evolved based upon three major principles or guidelines:

4. Community's interests take precedence over individual's interests.
5. Warding off evil (or harm) takes precedence over bringing of seeking interests (or benefits).
6. Smaller loss (or harm) cannot be alleviated through prescribing a bigger loss, and likewise, bigger interest (or benefit) takes precedence over smaller one.

Worship in Islam

Worship is the ultimate goal of the creation: *I have only created Jinn and men, that they may serve Me (51:56)*. In Islam, worship encompasses every inward and outward word or act that Allah loves and is pleased with. Examples of outward form of worship would include praying as well as actions such as planting a tree. The Prophet Mohammad, (PBUH) declared that *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*. Inward forms of worship would include believing in Allah (SWT) and believing in economic, social and environmental justices. However, not every worshiper can have his or her worship accepted from them and reap the promised rewards. There are two pillars that must be met to ensure validity and acceptance of the worshiping acts:

1. Truthfulness and Sincerity: *And they have been commanded no more than this: To worship Allah, offering Him sincere devotion...(98:5), ...it were Best for them if they were true to Allah (47:21)*
2. Following the way of the Messenger Mohammad (PBUH): Actions must be in accordance with the examples of our beloved Prophet. *Say: If ye do love Allah, follow me: Allah will love you and forgive you your sins; for Allah is Oft-Forgiving, Most Merciful (3:31)*

In addition, worship comes with three essential components that need to be fulfilled: love, fear and hope. The Salaf²⁷ said: “The one who worships Allah with love only is Zindik²⁸, the one who worships Him with fear only is Khariji²⁹, the one who worships Him with hope only is Murjii³⁰, and who worships Him with love, fear and hope is a true believer.” The true believer is the one that alternates between loving Allah and His Prophets, humbling himself before Allah and fearing His punishment, and placing his hope in Allah and seeking His Mercy and Paradise. *Even those who are nearest: They hope for His Mercy and fear His Wrath: for the Wrath of thy Lord is something to take heed of (17:57)*

These tenets of worship set the boundaries that guide people’s actions, and restrict injustices and transgressions against the creation of Allah, such as those committed by major polluters today. It is only when people’s actions stem from the love of Allah and His creation, seeking His pleasure, hoping for His rewards (in this life and in the

²⁷ The pious believing predecessors

²⁸ Irreligious and blasphemous

²⁹ The one who seceded from the main stream of the Muslims and considers sinners as disbelievers

³⁰ Opposite of Khariji

hereafter), and fearing His wrath and punishment, that human-caused destruction of the environment can be prevented. Within Islam's teachings lies the guidance for a state of harmony between humankind and his Creator and between humankind and the rest of the creation.

Promise of Islamic Scriptures and Principles

Islam's advocacy for the environment is deeply rooted in its core spiritual concepts. There are arguably three major founding concepts for ecological ethics in Islam. In some literature, these concepts are listed as being four and in other as many as six. However, this is not a contradiction, as they all branch out of the following major three principles:

1. Tawhid³¹ (La-Ilaha-Illa-Allah-Mohammad-Rassul-Allah) which means that there is no God but Allah and Mohammad is His Messenger. 'La-Ilaha-Illa-Allah' is the belief in the unity (oneness) of Allah's Essence and Attributes, and worshipping Allah alone without partners or associates: *Say: He is Allah, The One and Only; Allah the Eternal, Absolute, He begetteth not, nor is He begotten; and there is none Like unto Him (112:1-4) and There is nothing whatever like unto Him, and He is the One That hears and sees (all things) (42:11).* The greatest word which

³¹ This is the unity principle, the oneness of Allah, which in Islam is believed to be the message of all Prophets and Messengers throughout Men's history, is the key to Paradise. No amount of good work will help a person attain Paradise without first establishing Tawhid. That is because Shirk (opposite of Tawhid), which is associating partners with Allah, nullifies all good actions and deeds. Allah forgives everything but Shirk. Allah (SWT) said: "Whoever rejects Evil and believes in Allah hath the most trustworthy handhold, which never breaks." (2:256) and the Prophet (PBUH) said: "Whoever says (La-Ilaha-Illa-Allah), and rejects and disbelieves in all that is worshipped besides Allah, his wealth and blood will be protected, and his account will be with Allah" Sahih Muslim.

Allah has revealed to his Prophets and Messengers throughout history, beginning with Adam and ending with Prophet Mohammad (PBUH) is the testimony of Tawhid. It is for the purpose of Tawhid that Allah created the creation, sent Prophets and Messengers, revealed the Divine books, and beautified paradise (for people of Tawhid) and stoked the flames of hellfire (for the enemies of Tawhid). The concept of Tawhid asserts the interconnectedness of the creation and forms the foundation of the holistic approach in Islam (Khalid, 2002). The theoretical Tawhid of simply knowing that Allah is One is not enough. Tawhid must be translated into deeds and actions. To be considered a believer, a person's behavior and actions need to reflect the belief that Allah is the Creator, the Provider, the Giver of life and death, the One Who bears the attributes of perfection, and is the only One Who is deserving of worship (al-Ashqar, 2003). Tawhid is the basis of Muslims thoughts and actions, covering every aspect of personal and social life (Sanjotis, 2011).

2. Khilafah³² (vicegerency) is declared in the Qur'an placing us as vicegerency and custodians of Allah's creation, *Behold, thy Lord said to the angels: I will create a vicegerent on earth. They said: Wilt Thou place therein one who will make mischief therein and shed blood? – Whilst we do celebrate Thy praises and glorify Thy holy (name)? He said: I know what ye know not (2:30)*. Allah (SWT) has blessed us with intellect and reason and assigned us as His representatives on earth. The role of guardianship is the sacred duty Allah has imposed upon the human race. This enormous responsibility that was placed on the shoulders of

³² To be a khalifa, is to be a trustee, a vicegerent, or a caretaker

humankind is a test. If we are to succeed in this life and the hereafter, we must exercise our responsibility harmonically with the balanced universe and without disruption of the order of nature (set by Allah) or corruption of the environment. Allah (SWT) said: *Do not mischief on the earth, after it hath been set in order, but call on Him with fear and longing (in your hearts): for the Mercy of Allah is (always) near to those who do good (7:56).*

This Khalifa or vicegerency requires humankind to be just and fair in their dealings. It demands from people to take honest and reasonable actions to preserve and maintain the balance already established by the Creator.

*(Allah) Most Gracious! It is He Who has taught the Qur'an. He has created man: He has taught him speech (and Intelligence). The sun and the moon follow courses (exactly) computed; and the herbs and the trees – Both (alike) bow in adoration. And the Firmament has He Raised high, and He has set up The Balance (of Justice), in order that ye may not transgress (due) balance. So establish weight with justice and fall not short in the balance. It is He Who has spread out the earth for (His) creatures: Also corn, with (its) leaves and stalk for fodder, and sweet-smelling plants. Then which of the favours of your Lord will ye deny?
(55:1-13)*

People hold a special place in Allah's creation. Having this status over the rest of the natural world does not contradict or negate the human membership in the ecology.

Like nature, human beings are members of the creation world. They share the attributes of being God's creations with the rest of the creation, biotic and abiotic alike. Every life or living thing is related to every single entity, no matter how microscopic or gigantic it is. Both man and nature being derived from the same source and having their Creator as a commonality defines people's place in the natural world as well as their relationship with the non-human world in the ecosystem. We are part of an equilibrium and balanced system in which everything has its role and place. Scientists throughout history have been studying and writing about this process for decades, if not centuries. In the eighteenth century, Carolus Linnaeus, the Swedish botanist who developed a hierarchal system for classifying living things, proposed this idea of equilibrium and a cycle of dependence in nature where everything acts to regulate one another. In the twentieth century Rachel Carson, in her book 'Silent Spring', explained the very important detailed and already existing balance of nature and spoke against tampering with its precision and delicacy. This speaks to the strong existing bond that links between the living and non-living worlds because everything comes from the same fabric of creation.

Khalifa position affirms the human's duties and responsibilities towards the creation. This responsibility comes from the fact that unlike any other sentient being, we have been given the privilege of being able to reason and thus be ultimately accountable for our actions (Khalid, 2001). This means that every generation is responsible for leaving the earth in good condition for the

generations that come after. No generation is allowed to pollute and degrade the environment or deplete earth's natural resources (Saniotis, 2011).

3. Akhirah³³ (the hereafter): believing in the hereafter is one of Islam's central tenets of faith. This belief gives our lives meaning and purpose beyond just material gains and physical pleasures. Death is not the ultimate end of things. A life exists after death and its nature is determined by how we act and behave in this life, *nay - whoever submits His whole self to Allah and is a dower of good – He will get his reward with his Lord; on such shall be no fear, nor shall they grieve (2:112).*

Humankind is not only obligated to be Allah's vicegerents on Earth, but will be held accountable on the day of Judgement if they stray away. They must keep their actions and behavior in check to pass the Last Day's final test. Moral principles are somewhat pointless without the belief in the Day of Judgement. Knowing that there will be consequences encourages people to channel their actions towards the greater benefit and good in this life and the hereafter. "On the broader social level, this belief imposes controls on human greed and restrains people from committing transgressions for which they would ultimately have to answer" (al-Ashqar, 2003).

Concepts such as Tawhid, Khalifa, and Akhirah form the grounds on which ecological ethics in Islam are based on and outline the Islamic attitudes towards nature. Many concepts and principles have been derived from the Qur'an which is the manual guide for humanity on how to function in the natural world. The Qur'anic teachings and guidelines dealing with the human community within the creation world could be

³³ Life after resurrection

described as ‘Ilm ul Khalq’³⁴ which existed fourteen centuries before the Science of Ecology (Khalid, 1999).

Natural Resources in Islam

As demonstrated in Muslim sacred texts and Sharia law, honest and reasonable actions must be taken in protecting the environment and using its resources in a sustainable manner. The relationship between man and the natural world, in Islam, is mutually complementary. Humankind cannot exist without the natural world. Muslims are expected to protect the environment and the natural resources at all times (Karagiannis, 2014). Nature is always valued and justice must be established even during times of war. In Islam, humans are never to separate themselves from their environmental obligations (Khalid, 2002), even during times of war. It was reported that Abu Bakr³⁵ instructed his armies not to harm women, children and the infirm, not to kill animals except for food sustenance, not to burn date palms or cut down fruit trees, and not to bother monks and to leave them alone. Early Muslims lived their lives with the understanding that nature with all of its elements is the shared property of all creatures. People are to use its resources only in a usufruct manner, without damaging, destroying or wasting what is in their trust (Masri, 1992) because the real owner of things is their Creator. Allah (SWT) said: *O Children of Adam! Wear your beautiful apparel at every*

³⁴ Knowledge of creation

³⁵ The first Caliph of Islam after the death of Prophet Mohammad (PBUH)

time and place of prayer: eat and drink: But waste not by excess, for Allah loveth not the wasters (7:31).

Moreover, the geographical settings and local circumstances surrounding the birth of Islam helped served as the basis for which the conservation of natural resources was established. In the desert of Saudi Arabia, Muslims had very limited natural resources. Water, fruit trees and livestock had to be carefully conserved for survival. These circumstances naturally made Muslims at the time use their environment in a sustainable manner.

Out of all the natural resources, land, water and air are the most important resources, because the biosphere³⁶ on our planet is limited to water, a fraction of the earth's crust, and the lower part of the atmosphere (Science Desk Reference). Land and water are essential to both, human existence as well as human development (Ziran, 1999).

The following is a summary of Islam's attitudes towards land, water, air, plants and animals.

Land

Land is where the majority of human activities take place, particularly those areas of land that support agriculture, habitat, and natural resources. For land-use purpose, Sharia divides land into three different categories: developed lands (amir), undeveloped lands (mawat) and protective zones (harim). The word amir means in Arabic 'alive', the word mawat means 'dead' and the word harim means 'forbidden' (Dutton, 1992).

³⁶ Zone of life

1. Amir lands or developed lands are those settled by people or used for agriculture. They comprise of property owned by known owners as well as property whose owners are not known. The later type of lands include those “set aside by the government from conquered territory for the benefit of the whole community, which belongs to the people and so can be hired out but not given away, and land that reverts to the government if the owner dies without an heir” (Dutton, 1992).
2. Mawat lands or undeveloped lands (the natural environment) fall under the general Islamic rule of ‘*if you bring a dead piece of land back to life, it’s yours*’ said the Prophet of Allah (PBUH). Meaning, that if a person develops an undeveloped land, he or she earns a right to it. However, there are specific actions by which a land would be considered brought to life or developed. Such actions can include: irrigating a land that is too dry; draining a land that is too wet; digging a well or directing a spring to the land in question; clearing the land from brushes and stones, and levelling its ground; cultivating it; planting crops and trees on the land; building on it (Dutton, 1992).
3. Harim lands or protective zones are areas surrounding developed land used for the purpose of protecting the development and ensuring easy access from and to it as well as preventing impairment of utilities and natural resources. These zones are municipal common lands managed by people of the settlement, but governing authorities have the duty of preventing their violations (Bagader et al, 94).

These land divisions are part of the overall environmental measures that are guided by Sharia. The goal is not only to protect land, but to develop it and help it serve

its purpose which it was created for. Helping land reach its maximum potential in benefiting the creation of Allah, is deeply rooted in Islam.

Water

Water in Islam is governed by the state and equally shared in the community. The Messenger of Allah (PBUH) said: *members of the community are equal partners in three things: water, fire and pasture* (al-Mawardi). If water falls under the control of power corporates, the poor would suffer immensely.

Recognizing that millions of people die each year simply for not having access to clean and potable water, an article (Article 31) has been added to the 30 articles of the Universal Declaration of Human Rights, expressing having access to clean drinking water as a universal human right; everyone has a right to have access to adequate amount of water sufficient for one's health and well-being (The Millennium Development Goals Report, 2013). Identifying water as a fundamental human right might be a beginning to good water ethic practice. However, Knechtel eloquently argues that

instead we need to begin by recognizing that we are all part of a radically embodied hydrocommons, and that we must listen to the differentiated needs of the multitude of bodies within it. In this watery web, we are all downstream from one another – as individuals and species, at biological, geological, and semiotic levels – and we all have responsibility for the well-being of the commons (Knechtel 2009 p.83-91)

This human right to water is nothing new for Muslims. It has been recognized by Islam for over fifteen hundred years. In fact, Islam goes even further and states that all creatures have a right to water, not just human beings. Animals are communities just like us, as we're reminded in the Qur'an: *there is not an animal (that lives) on the earth, nor a being that flies on its wings, but (forms Part of) communities like you* (6:38).

Surprisingly enough, even the word Sharia, is strongly connected to water. It has “an interesting etymology with strong environmental connotations” (Khalid, 2002). The path to take or the pathway to water source is referred to in the Arabic language as Sharia. It is the beaten track by animal traffic leading to water. In the desert environment, water represents life and so everyone knows of the pathway to water (Sharia).

Purposes of Sharia, in its protection of people’s interests, fall into three categories; necessities, needs and ameliorates:

1. Necessities are limited to the protection of religion, life, mind, progeny and property. Their loss leads to the disruption of the system of life, chaos and corruption.
2. Needs, are those things which bring comfort and ease, and improve the quality of life. Their loss cause hardship and distress but does not amount to the level of disrupting the system of life as is the case with necessities.
3. Ameliorates (or luxuries), are things that can improve customs, morals and characters, and their loss does not disrupt life’ system as it is the case with necessities, nor does it cause hardship and distress as is the case with needs.

Water is one of the essential elements of life, as stated in the Qur’an, *We made from water every living thing* (21:30) and falls under the first category of necessities. As such, safeguarding and protecting water becomes mandatory in Islam. Additionally, one of the juristic rules of Islam states that “whatever is indispensable to fulfil the imperative obligation of preserving life is itself obligatory” (Bagader et al, 1993). This rule adds more emphasis to the safeguarding of water being an obligatory act. Thus, any action that

leads to water loss or water pollution automatically becomes prohibited in Islam. Prophet Mohammad (PBUH) told us not to waste water even if we're making ablution³⁷ in a flowing river. Overconsumption of water is then forbidden even when water is abundant. Sustainable use of water was demonstrated through the Prophet's actions as he (PBUH) would perform ablution using the equivalent of 3 cups of water and bathe using about 14 cups.

The same Sharia rules that lead to the conservation and protection of water without which we can't last days, also apply to other natural resources such as air, without which we can't even last minutes before we start gasping for it.

Air

The Earth is warmer today than it has been for centuries. Over the last century, the global average temperature has increased by 0.6 degree Celsius (Bloom, 2010). This increase in temperature is associated mainly with the emission of carbon dioxide from energy consumption through the burning of fossil fuels. This high energy consumption is also producing millions of tons of pollutants every day which fall as acid rain and destroys life in both land and sea. *Mischief has appeared on land and sea because of (the meed) that the hands of men have earned (30:41).*

As an element of the biosphere, air is important in the preservation of life on earth. Countless terrestrial creatures rely on air for breathing. Air has other functions besides breathing as well. We are told in the Qur'an, *and We send the fecundating winds (15:22) and it is He Who sendeth the winds like heralds of glad tidings, going before His*

³⁷The act of washing and cleansing oneself in preparation for Salaat

Mercy: when they have carried the heavy-laden clouds, We drive them to a land that is dead make rain to descend thereon, and produce every kind of harvest therewith: thus shall We raise up the dead: Perchance ye may remember (7:57)

The atmosphere is responsible for many biological and social functions which renders its conservation an essential element of the conservation of life itself (Bagader et al, 94). Any act that destroys or denies life is categorically forbidden in Islam. Polluting and poisoning air simply means disrupting “the very patterning of Allah’s creation that has uniquely endowed planet earth with a climate suited to the propagation and sustenance of life” (Khalid, 2001).

Fauna

We are not the only creatures on this planet entitled to care and protection. Animals are too living creatures of Allah, worthy of the best care possible. We will be held responsible on the Day of Resurrection for our treatment of Allah’s creatures in this life. It will be in our best interest to bear this in mind (Izzie Dien, 1992). Animals are protected by Allah (SWT) and any violation of this protection is a direct violation of Allah’s orders. Animals are to be treated properly and without cruelty. Over-burdening them or causing them harm and pain is not permissible. We are told in famous hadiths by Prophet Mohammad (PBUH) that a women entered hellfire for starving a cat to death, while a man was forgiven his sins for going to great lengths to quench a dog’s thirst.

There are even guidelines for milking an animal such as a cow. Nails are to be clipped and the milking must not take place in a time or in a way that would cause harm to its young. Likewise, “when honey is taken from a beehive, enough should be left for

bee's own use." (Izzie Dien, 1992). In numerous hadiths, Allah's Messenger (PBUH) forbade inciting animals to fight each other, such as cockfighting and the annual bull killing by the Spaniards. Based on Islamic teachings, a legal Muslim scholar, Izz ad-Din Ibn Abd As-Salam, in the thirteenth-century summarized animal rights in the following statement,

The rights of livestock and animals upon 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, whether by breaking their bones or butting or wounding; that he slaughter them with kindness; that when he slaughters them he 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 but that he isolate them; 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 as game; 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 (Izz 1980, p167; Khalid and O'Brien 1992).

Islamic ethos includes all animals, not just domestic livestock. For example, the hunting of wild animals is permissible, but with rules and guiding principles. The hunter must have a reasonable purpose and the hunted must be killed correctly. Hunting an animal for purposes other than food, such as to place it in a cage, or use it in a circus, or keep it as a pet is forbidden in Islam (Dutton, 1992). Dutton summarizes the Islamic hunting rules and said the game is to be killed "by piercing the body ('aqr) with a spear, arrow, bullet, etc. or that the game be killed by a trained animal (dog, cheetah, etc.) or bird (hawk, falcon, etc.). If the hunter can get to the game while it is still alive, without danger, it should be slaughtered in the same way as domestic animal" (1992). The brutal commercial killing of wild animals that is taking place today for furs, skins and bones, is

not allowed in Islam. The Prophet Muhammad (PBUH) forbade the use of wild animal skins for floor-coverings or in saddles. It was reported that the Prophet said: *Do not ride on saddles made of silk or leopard skins* (Riyad as-Salihin). The concern of Islam for animals goes beyond just physical wellbeing. A woman was reprimanded by Allah's Prophet when he (PBUH) overheard her cursing a camel (Izzie Dien, 1992).

Flora

Prophet Mohammad (PBUH) said, *you are not to damage any plant life because you are the vicegerent of Allah* (Mishkat al-Masabih, Vol. 2, p. 387). Islam encourages plantation, restoration of the wetland and the reviving of the dead land (Haneef, 2002). The Islamic attitude towards plants is summarized in the Prophet's following hadiths, *No Muslim, who plants a shoot, except that whatever is eaten or stolen from it, or anyone obtains the least from it, is considered like paying charity on his behalf until the day of judgement* (Tarmidi) and *If the day of resurrection comes upon anyone of you while he has a seedling in hand, let him plant it* (Al-Bukhari, Ahmad and Abu-Dawud).

Natural resources in Islam are commonly shared among man and other species, and every creature has a right to their use. As a vicegerents, people are responsible for ensuring the interests of all creatures as well as not depleting resources for future generations. Therefore, any action that would deny future generations their right to use these natural resources is forbidden. Islamic attitudes towards natural resources does not rest solely on the prohibition or abuse, it also includes care and sustainable development. This development approach of earth's resources was perfectly put by the fourth Caliph of

Islam Ali (RA)³⁸ when he told a man who had reclaimed and developed an abandoned piece of land: *Partake of it gladly, so long as you are a benefactor, not a despoiler; a cultivator, not a destroyer.*

Islamic Environmental Management Systems

The Qur'an and Sunnah lay the blueprint for Muslim's ecological behavior and form the basis of Sharia environmental law and practices. As such, Muslims were able to establish Islamic systems for conserving natural resources and sustaining their development (Saniotis, 2011; Khalid, 2002; Bagader et al. 1994). These environmental management systems include the following:

- Land resurrection or reclamation (ihyaa al-mawat): As an incentive to invest in sustainable land use and soil management, people are allowed to undertake unowned land and put it to beneficial use. Reviving a piece of land by investing in its development, cultivation, or driving water to it, gives the person ownership over it so long as the general welfare is not harmed. There are extensive and detailed rules and regulations that govern land revival practices.
- Special reserves (al-hima): For the common good, the state has both the right and obligation to establish public reserves as conservation zones. These protected zones should be in the most strategic and proper locations as to provide the optimum wild life protection and biodiversity maintenance, forestation and woodland preservation, and watershed conservation and management.

³⁸ Short for (Radi-Allahu 'Anhu) in Arabic which means (May Allah be pleased with him)

Biodiversity is mentioned in the Qur'an in many places such as: *He created the heavens without any pillars that ye can see; He set on the earth mountains standing firm, lest it should shake with you; and He scattered through it beasts of all kinds. We send down rain from the sky, land produce on the earth every kind of noble creature, in pairs.* (31:10).

Activities such as hunting, farming, grazing or woodcutting within these zones may be prohibited or restricted. Prophet Mohammad (PBUH) created such zones just south of the city of Medina where hunting was forbidden within a four mile radius as well as a no farming, grazing or woodcutting within a twelve mile radius.

- Inviolable zones (al-harim): Sharia prohibits or restricts the development within these zones to protect natural resources from impairment and damages. Water sources and public utilities such as roads should have inviolable zones “resembling easement to prevent their impairment, to facilitate their use and maintenance, and to preclude nuisances and hazards” (Bagader et al., 1994). Municipalities should have these zones that are managed for the long term welfare of the people. As explained by Haq, these zones also have the purpose of protecting the Muslim’s interest by making them the property of the Muslim community (2001) and not the property of the exclusive few powerful and wealthy individuals.
- Land grants (iqtaa): Over time, Muslims implemented a system of land grants. At least four known types of land grants were in operation by the ninth century (Saniotis, 2011). These land grants which comprised unused land as well as land

with mineral deposits are state-owned and are usually offered to civil servants such as military personnel or other public officials as donations, but subject to taxation (Khalid and O'Brien 1992).

- State-leased land (ijara): In an effort to encourage productive land use, the Islamic state allowed individuals to cultivate land in return for rent. The property had to be used for agriculture, and if it sat for some time without use, or if it entered a state of environmental degradation, the state would then take the land back or lease it to a different person (Khalid and O'Brien, 1992).
- Charitable endowments (waqf): This is the avenue in which personal contributions are made for the public good. Muslims are always encouraged to donate personal property for the benefit of the community. Under a system of 'charitable endowment', wealthy individuals could give money or land in support of community's interest such as public schools and community parks. For example, after acquiring a valuable property in Khaybar, Omar ibn al-khattab (the fourth caliph) went to the Prophet to be advised as to what to do with it. The Prophet suggested to make it an endowment. Omar's son reported that *Omar gave it [the property] in charity, declaring that it must not be sold or gifted or inherited, and that its yield would be devoted to the poor, to kinsfolk, to the freeing of slaves, for the cause of Allah, for travelers, and for guests* (Al-Bukhari and Muslim).
- Office of public inspection (muhtasib): One of the most distinctive qualities of the Muslim society is the fact that they promote good and eschew evil: *ye are the best of peoples, evolved for mankind, enjoining what is right, forbidding what is*

wrong, and believing in Allah (3:110). For this reason, the office of hisba was established by the Islamic state from its early years. The head of this office or agency is a learned jurist (muhtasib) who is very familiar with the Sharia rules. The responsibilities of protecting and conserving the environment fall under the jurisdiction of the muhtasib's office.

He was responsible for the inspection of markets, roads, buildings, watercourses, reserves (hima) and so forth. Among his duties were supervision and enforcement of regulations and standards pertaining to safety, hygiene, and cleanliness; the removal and disposal of wastes and pollutants; the prevention and elimination of hazards and nuisances; the protection of reserves (hima) from violation and trespass; and the prevention of abuse and ill treatment of animals. He was responsible for assessing damages and imposing fines and other penalties (Bagader et al., 1994)

Multiple duties and responsibilities are invested in the muhtassib. These duties extend to the battle field. During war, Muslim armies are accompanied by a muhtassib that makes sure that soldiers don't violate the Islamic codes. In addition to assuring that army's practices stay within the guidelines of Islam, muhtassib, also protects prisoners of war and make sure that they are provided food, water and medicine (Al-Taratib al-Idariyya).

The development of such systems is evident of Islam's possession of strong environmental principles and ecological ethics. These Sharia guided environmental measures are designed to help protect the greater good and support humankind's ecological vicegerency on earth (Saniotis, 2011). With these valuable Islamic environmental ethics and principles listed above, why then do Muslim Majority countries today seem to be in violation of their religion's ethos and practices?

Possible Reasons for Muslims Environmental Indifference

Scholars have proposed a number of reason for why Muslims today are lagging behind in eco-ethical practices. The followings are some of the possible reasons:

Hisba

Ecological practices, animal protection, and prohibition of unethical behaviors are all enforced by the office of hisba (Saniotis, 2011). Promoting good and forbidding evil is the primary duty of an Islamic state: *Let there arise out of you a band of people inviting to all that is good, enjoining what is right, and forbidding what is wrong: They are the ones to attain felicity* (3:104). For this reason, since the beginning of Islam, Islamic state established the hisba agency. The duties of the hisba's office are to inspect and supervise all avenues of life, and to prohibit any unethical behavior or practice. However, today it has completely disappeared from most Muslim countries practices and reduced to the service of Islamic rituals in a few others. For example, in Saudi Arabia (the heart of the Muslim world) the institution of hisba "is now limited to the very restricted area of making sure that Muslims pray at the proper time" (Izzi Dien, 1992). This is possibly one of the many reasons why Muslim majority countries today seem to be indifferent towards the environment and its pressing issues.

Technology

S. H. Nasr, one of today's world leading experts on Islamic science and spirituality, believes that Islam intentionally halted technological development once its environmental threat became evident (Al-Damkhi, 2007). Nevertheless, according to Saniotis, today's Muslim majority countries fall into two different technological

categories: one category with countries that are able to use technology for their economic development. The second category comprises of countries that are unable to produce or use foreign technologies (De Lemos, 2006). Countries in the second category, which are predominantly Muslim majority countries, represent the equivalent of one-third of the world (Saniotis, 2011) and are facing serious environmental issues due to their reliance and dependency on raw material such as crude oil. Muslim “nations are specialised in selling their natural resources (often with a heavy economic dependence upon a single natural resource), at very low prices in relation to the prices of consumer goods produced in the wealthier industrialized centres” (Al-Damkhi, 2008). Some countries produce around 3 million barrels of crude oil a day at a selling price of about \$100 a barre said Al-Damkhi. This heavy dependency on fossil fuels for economic development hinders any possibility of sustainable development in the future (Lal, 1997).

Secularism

Z. Sardar, an author and considered one of the contemporary British Muslim scholars, states that the economy and technology are not to blame for the poor environmental track record in Muslim majority countries. He said that the lack of environmental concern is due to the clear gap between theory and practice (1988). He argues that the separation of leaders and decision makers from their religion, are to blame for such a gap. In fact he labeled nearly all Muslim countries as dictatorial regimes and said that none of them could really be described as an Islamic regime. In agreement, one of the prominent Muslim figures today ‘Nasr’ said that the so called Islamic world today is not completely Islamic (1992), “and much that is Islamic lies hidden behind the cover of Western cultural, scientific, and technological ideas and practices emulated and aped

to various degrees of perfection, or rather of imperfection, by Muslims during the past century and a half' (Al-Damkhi, 2008).

Population and illiteracy

Rapid population increase in the Muslim world is another factor. It is expected that the Muslim population will increase by 70% by year 2050 which will amount to 30% of the global population, with almost 3 billion Muslim (<http://www.pewforum.org>). Also, according to Splenger, with the exception of Indonesia, today's illiteracy rates in Muslim majority countries are estimated at 53% (2005). These factors are forcing decision makers and planners in many developing Muslim majority countries to focus on issues such as unemployment and poverty rather than climate impacts and environmental issues. Mukheibir (2010) argues that for 'adaptation strategies to climate impacts' to be taken seriously by decision makers, they must be integrated with national and local sustainable development strategies in pursuance of the local development goals and not be viewed simply as a different planning process.

European colonization

The European colonization of the Muslims between the eighteenth and twentieth century divided the Muslim world (Saniotis, 2011) and negatively impacted the Muslim ecological practices with their Cartesianism and their utilitarian view of the natural world (Nasr, 1997). Ideologies of the Western European powers were materialistic in nature with the focus of natural resources exploitation (Saniotis, 2011). Even after the independence of the Muslim Majority countries in North Africa, the Middle-East and South Asia, colonial power's institutions remained in place. Often times, rulers of the

independent Muslim countries were either selected by the colonialists or had their ways to a dictatorial power paved for them (Sardar and Malik, 1994). Regimes of Muslim countries today are almost all with leaderships completely disconnected from its people and Islam (Sardar, 1988). A leadership that is separated from its people will also be separated from the environment of its people (Al-Damkhi, 2007), which will lead to a misused and abused environment.

However, while colonialism can rightfully be blamed for its negative impacts on environmental practices, it still not clear what ecological practices existed in the Muslim world prior to the European colonization. This presents an opportunity for some research to be conducted on the type of Muslim ecological practices existed in the 17th century.

Muslims Rediscovering Islam

Recently, there seems to be an interest among Muslims for environmental reform. There is an increase in the number of conferences, forums and workshops, regarding the environment in both Muslim majority countries and western countries involving Muslim scholars, scientists and activists (Saniotis, 2011). This is a strong indication that Muslims are becoming more aware of the seriousness of today's environmental issues. Islamic NGOs, academics, government figures and Muslim environmental activists from 14 different countries all attended the Kuwait workshop late 2008, and after a three days meeting, they drew the Muslim 7 Year Action Plan (M7YAP) for Islamic action on the environment (EMDC, 2008). This project was initiated by Earth-Mates Dialogue Center (EMDC) with the following objectives:

1. To provide an Islamic vision with regard to the environment in general and climate change in particular.
2. To identify and study the interactions of Islamic civilization with the environment and offer models for those experiences.
3. To discuss the challenges facing the world particularly global warming and climate change.
4. To state the characteristics of the Islamic world in general and the particular characteristics of the different countries in fighting these challenges.
5. To present projects and experiments that took place in the Islamic world to deal with climate change and global warming.
6. To survey the different resources and tools stemming from the Islamic religion and to identify the ones that could be used in carrying out the operational plan for dealing with the problem.
7. To develop a final draft and blue print of a seven year action plan that may be applied in the Islamic world to confront the phenomenon of global warming and climate change. Such plan would contain potential tools, specific targets and a timetable for implementation (EMDC, 2008).

As environmental issues grow, Muslim environmental concern grows. Not only that Muslims worldwide are increasingly looking to these Islamic sources and principles for solutions (Al-Damkhi 2008; Hamed 1993; Izzi Dien 1997; Khalid 2002; Kula 2001; Mohamed 2007), prominent non-Muslim figures are too recognizing the potential of Islamic sources for providing answers (Gilliat-Ray and Bryant, 2011). The Prince of Wales, for example, delivered a lecture at Oxford University in the summer of 2010 titled ‘Islam and the Environment’ alliterating that without sacred traditions such as Islam, science and technology alone will not be able to solve our environmental issues.

www.princeofwales.gov.uk).

Whilst scripturally and historically, Islam is equipped to produce active and practical environmentalists, Muslims today, in general, are not necessary known for their eco-ethical practices (DeHanas, 2010). Poverty and instability in the Muslim world are marginalizing the environmental issues, causing efforts to concentrate on economic development to raise the standards of living, and keeping Muslim ecological thinking in a dormant state (Nasr, 2003; DeHanas, 2010).

Some quantitative studies are showing that Muslims are increasingly becoming more receptive to global ecological problems in recent years. For example, a study by the Pew Research Center (2010) on global attitudes and trends towards environmental issues included a number of Muslim majority countries. Jordanians, Egyptians, Indians, and Indonesians considered that global climate change a serious problem with percentage increases in 2010 from 2007 (Pew Research Center 2010: Q45). In the survey, 74% of Turkish, 70% of Lebanese, 66% of Kenyans, 62% of Indians perceived global climate change as a very serious problem, and also with percentage increases in 2010 from 2007 (Pew Research Center 2010: Q45). These statistics are indicative of how Muslims in Muslim majority countries are becoming increasingly concerned with the environmental issues. This is particularly true in Lebanon, where 41% of Lebanese were very concerned in 2007, compared with 70% in 2010 (Pew Research Center 2010: Q45).

Moreover, according to Mary Evelyn Tucker, Professor at Yale University and one of the cofounders of the Forum on Religion and Ecology, Iran and Indonesia are two countries that exhibit some of the most notable examples of religion and ecology merging together.

In June 2001 and May 2005, under former President Mohammad Khatami, the government of Iran and the United Nations Environment Programme sponsored conferences in Tehran focused on Islamic principles and practices for environmental protection. The Iranian Constitution identifies Islamic values for appropriate ecological practices and threatens legal sanctions against those who do not follow them. In Indonesia projects of tree planting and restoration work draw on the Islamic principle of maintaining balance (*mizaa*n) in nature. Students in Islamic boarding schools are taught such principles and are encouraged to apply the Islamic doctrine of vicegerency regarding the environment (Tucker, 2007).

Iran

Today, Iran is most likely the only Muslim majority country where the government has officially adapted Islamic teachings as a foundation for environmental ethics (Foltz, 2000). The department of environment in Iran published a statement in 1996 saying that the principles of environmental conservation are found to be within the general guidelines of Islam and therefore, environmentalists are to encourage Imams to convey environmental messages to the congregation during Friday Sermons (Foltz, 2001). Additionally, article 50 in Iran's 1979 constitution reads as follow:

In the Islamic Republic protection of the natural environment, in which the present and future generations must lead an ever-improving community life, is a public obligation.

Therefore all activities, economic or otherwise, which may cause irreversible damage to the environment, are forbidden (Foltz, 2001).

Indonesia

Indonesia, which is the world's most populous Muslim country, can be an example to be studied by the rest of the Muslim world. Once heavily covered in forests, Indonesia has lost over 60 million ha of its forested land in the last 50 years and since 1996, the deforestation has increased to about 2 million ha per year (Saniotis, 2011). However, the development of an active faith-based movement has been successful at influencing the political domain (Schwencke, 2012). In 2009, the Indonesian environmental ministry introduced an eco-pesantren pilot program to 90 pesantren boarding schools in Central Java. The state environment minister Gusti Muhammad Hatta stated that 4 million pesantren students are engaged with communities and villages in search of environmental solutions (Saniotis, 2011). One of the students said that for every

tree we have to cut down, we must plant two more (Gelling, 2009). An increasing number of pesantrens networks are going green. Seeing the benefits of possibly having all of the country's 17000 pesantren adopt some type of an environmental program is encouraging the Indonesian government to aggressively promote such programs (Gelling, 2009).

The Secretary General of the Alliance of Religions and Conservation (ARC), Martin Palmer, said that Indonesian Muslims have on separate occasions coordinated enormous effort to protect their environment. "There have been several impressive initiatives, including in 2003, when pupils from 19 Islamic boarding schools (pesantren) managed to persuade the Indonesian Government to create a national park and in the process protect their river from pollution."

http://wwf.panda.org/what_we_do/endangered_species/elephants/

Also, as a result of decades of hunting, logging and unsustainable plantations practices, Indonesia experienced a massive loss of wildlife. According to Dr. Fachruddin Mangunjaya (Religion and Environment Program Manager at National University's Institute for Research and Community Service), Indonesia now has less than 400 tigers, 200 rhinos, several thousand elephants, and few thousand orangutans. In September 2013, Muslim leaders from the Indonesian Ulema Council (MUI), Indonesia's top Muslim clerical body, went on a field trip co-organized by World wildlife fund (WWF) in Indonesia, UNAS (National University), and ARC (Alliance of Religions and Conservation). They visited sites in Sumatra and the Tesso Nilo National Park which is a rich biodiversity place for critically endangered Sumatran elephants and tigers. After conversing with the village representatives and answering some of their questions regarding the status of animals like elephants and tigers in Islam, it had become apparent

to MUI scholars and leaders that people are looking for guidance on how to act with wildlife. In January of 2014, MUI issued one of the first fatwa of its kind. The fatwa requires, of the 200 million Muslims in Indonesia, to protect the endangered species such as tigers, rhinos, elephants and orangutans.

Regarding this fatwa, Dr. Hayu Prabowo, Head of the MUI's Agency for Honoring Environment and Natural Resources, an agency established in 2010 with the aim of contributing to Indonesia's environmental well-being said,

This fatwa is issued to give an explanation, as well as guidance, to all Muslims in Indonesia on the sharia law perspective on issues related to animal conservation, ... Animals are viewed in Islam as being key parts of an ecosystem that in the end, also benefits the livelihood of human beings, ... At this time of environmental crisis it is so important to remember our religious beliefs and values, ... Muslims must change their behavior in accordance with Islam and with Allah so that other species can live in peace.

Martin Palmer, Secretary General of ARC, notes,

We hope the announcement of this new fatwa in the most populous Muslim country in the world will inspire other fellow Muslims worldwide to protect threatened wildlife and their habitats. Often environmental issues are debated only in terms of economics. This fatwa reminds us that most people are motivated by beliefs and values, not just by money. It is an exciting and defining moment for both Islam and for the greater protection of God's Creation (http://wwf.panda.org/what_we_do/endangered_species/elephants/?217531/Indonesian-Muslim-Council-Issues-Fatwa-to-Protect-Threatened-Animals)

Egypt

The Muslim Brotherhood, an Egyptian organization, focusing on ecology and nature conservation, proposed a plan that would fight all types of pollution during their legislative election campaign in 2005. The group initiated an Islamic policy on the environment after the election of one of its members, Mohamed Morsi, as the President of Egypt amid the overthrow of Hosni Mubarak's regime during the Arab Spring in 2011.

Dr. Morsi was Egypt's first ever democratically elected president and he perceived pollution as the greatest challenges facing Egypt. Under his presidency, the Ministry for Environmental Affairs led the Clean Homeland Campaign which was aimed at cleaning the streets of Egypt, especially those in the impoverished neighborhoods of big cities. The homeland cleaning project was interrupted by the military coup in 2013.

Palestine

Next door, the Palestinian group Hamas was founded to liberate Palestine from the Israeli occupation. During the 2006 Palestinian parliamentary elections, Hamas won a decisive Palestinian majority and became the governing party. As reported in their legislative elections program (2006), Hamas aware of the serious environmental problems facing the country proposed an environmental policy that would work on cleaning the environmental pollution of Palestine caused by the Israeli occupation. However, Israel and Egypt managed to impose a devastating economic blockade on Gaza and completely sealed their borders. Still, Hamas's ministries of Agriculture and Social Affairs managed to launch a campaign in 2010 to plant one million olive trees in Gaza just to have thousands of productive olive trees deliberately uprooted by Israeli forces (Karagiannis, 2014).

Africa

A number of environmental groups and organizations from different African countries (Kenya, Zambia, Tanzania, Zimbabwe and South Africa) have joined their efforts and formed one of the most active environmental networks named the African Muslim Environmental Network (AMEN) (Karagiannis, 2014). Muslim leaders, from

Kenya, Zambia, Tanzania, Zimbabwe and South Africa, are cooperatively working together to fight poverty and environmental degradation in their communities under the banner of AMEN. It was officially launched in 2006 with the vision titled, ‘African Muslims helping African Muslims helping the Earth’ (<http://www.arcworld.org>).

The primary focus of AMEN is to promote information-sharing and networking between Islamic groups and organizations around Africa, as well as supporting Masjids in becoming key players in sustainable projects. Such projects include,

encouraging sustainable fishing in Kenya and organic honey production in Zambia, and the organization hopes to expand to other Muslim countries and organizations in sub-Saharan Africa. A member of the Alliance of Religions and Conservation (ARC), AMEN grew out of a 2005 meeting in Mombasa, Kenya, sponsored by ARC, the Muslim Civic Education Trust, and the World Bank. As AMEN is currently awaiting new funding, Muslim faith groups supported by the network are continuing their environmental work independently (<http://berkeleycenter.georgetown.edu/organizations/african-muslim-environment-network>).

Muslims in Western Countries

Muslims in Western countries have increased their environmentalism efforts. Many eco-Muslim groups worldwide have formed in the past decade. For example, a study conducted by Gilliat-Ray and Bryant (2011) found that Muslims in Britain have formed many environmental action groups involved in a number of projects aiming at promoting sustainability and environmental conservation. Gilliat-Ray and Bryant also noted that the efforts of the Muslims involved in the grassroots environmental activities “are indicative of an important new sense of agency, belonging, and ownership of local spaces among Muslims in Britain” (2011).

By 2010 there were six regional Islamic environmental groups in Britain (WIN, RITE, SHiNE, Earth Guardians, MINE, and WELCOME) and one international body (Islamic Foundation for Ecology and Environmental Sciences, IFEES)... These groups have been primarily organized by and for Muslims, and are inspired by what the founders regard as the principles of conservation and environmental awareness embedded in Islamic sources (Gilliat-Ray and Bryant, 2011).

Islamic Foundation for Ecology and Environmental Sciences (IFEES)

The Birmingham based organization, IFEES, is the most notable one of them all. The organization has grown rapidly since it was first founded by Fazlun Khalid in the 80's and has become well-established internationally. Very active in its commitment to the promotion of Islamic environmental ethics and principles, it publishes a newsletter (Eco-Islam) and provides advice, guidance and resources for Islamic organizations and Masjids. It also joint the UK Lifemakers foundation, in the publication of a free downloadable handbook called the *Green Guide for Muslims*. The hand book is a clear guide for how Muslims can limit the impact of climate change, and is funded by the largest Islamic charity organization in the UK named 'Muslim Hands' (Gilliat-Ray and Bryant, 2011). The main goals of IFEES are summarized in the followings:

1. Changing Muslims attitudes and environmental behaviors through Islamic ecological teachings.
2. Combating poverty by promoting the implementation of ecological sustainable developments.
3. Advancing and developing Islamic science natural resource management.
4. Working with communities, NGOS and governments to develop Islamic green projects (IFEES website <http://www.ifees.org.uk/>).

Using audio-visual and other means to organize rubbish-collection working groups and motivate the Muslims of Birmingham to improve the city's urban landscape, IFEES ran an anti-litter campaign in Birmingham called 'Clean Medina' (Gilliat-Ray and Bryant, 2011). Medina means 'city' in Arabic. Applying Islamic terminology, a movie bearing the same name as their anti-litter campaign, presented a young Muslim declaring jihad on trash and another singing environmental rap songs (Saniotis, 2011). The organization is also involved in environmental programs in countries such as Indonesia and Zanzibar. In Zanzibar, the organization is working to make the fisherman more in tuned with Islamic environmental ethos to help curve their fishing behaviors and

practices which are using bombing and destroying the coral reefs and fish breeding grounds (Dickinson, 2005). This work is relying on Imams and school teachers to communicate Qur'anic ethical messages to the masses. In addition, the organization established a controlled and supervised hima zone (Khalid 2005).

London Islamic Network for the Environment (LINE)

LINE is a community-based organization founded by Muzzamal Hussain in 2004. It was the UK's first local Islamic ecological action group. It initiated a number of groundbreaking activities including a demonstration where protesters marched along 'curry avenue', Brick Lane wearing snorkels and flippers expressing the dangers of flooding caused by climate change and rising sea-levels in Bangladesh (DeHanas, 2010).

Wisdom in Nature (WIN)

WIN evolved out of LINE and was established in 2009. Hussain stated that the holistic approach of encompassing environmental, spiritual and social dimensions, as well as including everyone Muslim and the non-Muslim alike; necessitate a change in the name to make it congruent with the organization's focus (Hussain, 2009). Looking back at his early days of activism, Hussain said,

in the 1990s, there were very few people who were actively promoting awareness of environmental ethics amongst Muslim communities in the UK. There was the occasional public talk at which after a bit of listening the nodding of heads, questions and answers and momentary inspiration, the audience would return home and re-immense themselves into their normal routine. Of course, whilst seeds would have been sown, the dispersed and rare nature of enthusiastic environmentalists in Muslim communities meant that any progress would confine itself to a small sphere of possibilities (Hussain 2009).

The chair and founder of both LINE and WIN, Muzammal Hussain acknowledged the uphill struggle of Muslim environmental activism in London, but he believed that the

small group of young Muslim activist in London are prepared for action. “Global issues such as climate change are very important, especially with their impact on Muslim society. When an Imam does give a Friday sermon on the environment, it always goes down well.” (Vidal, 2007).

Reading Islamic Vicegerency for the Environment (RITE)

RITE is a community group with the vision of bringing wider appreciation of the environment (Allah’s creation). Although RITE was established in 2009, coinciding with World Environment Day, the seeds were planted several years earlier when Huzammal Hussain delivered a speech on GM foods at the meeting that took place in Reading on ‘Islam and the Environment’(Hussain 2009). The group “works with mosques and community organizations to raise awareness of environmental issues and assists them in running events or activities with their members and networks.” (<http://rite.btik.com>).

Sheffield Islamic Network for the Environment (SHiNE)

SHiNE a ground level group with no major political agenda. It works locally on grassroots environmental projects to help improve the local environment in the best way possible. That process can come in many forms. The group’s efforts are informed by the Qur’an and the teachings of the Prophet Mohamed (PBUH). SHiNE’s members pray that their efforts are successful and that the whole of humanity benefits from their work (www.shineonline.org.uk). SHiNE partook in the national ‘Big Clean’ project campaign that took place in April 2009. Their efforts were concentrated towards cleaning the area surrounding a local mosque (Masjid Umar).

The project as small as it may be, is a reflection of how a particular group of British Muslims felt at home and expressed a sense of community (Gilliat Ray and Bryant, 2011). Just a decade ago, Muslims in Europe were still working on strengthening their internal infrastructures, and bonding and connecting with one another within their own religious communities (Fetzer and Soper 2004). But now, with their internal states being strong and well developed, their focus is shifting towards bridging activities and projects that close the gaps between Muslims and non-Muslims and strengthen the extended communities in which they live (Fetzer and Soper 2004).

Earth Guardians, Leicester

Earth Guardians is a small group that was established in 2008. Their goal is to guide Muslim and non-Muslim communities towards Islamic environmentalism. Working with Leicester City Council, 'Earth Guardians' held a one-day conference on 'Islam and Sustainability' in 2009. The group "has also been active with rubbish collection and re-planting of neglected public areas. The founder of Earth Guardians is committed to increasing urban greenery, urban gardening, and inner city food production, and via a Royal Horticultural Society course, intends to move into gardening as a career." (Gilliat Ray and Bryant, 2011).

Midlands Islamic Network for the Environment (MINE)

The main person behind the establishment of MINE in the city of Birmingham is Rianne ten Veen. She is a Dutch convert to Islam who works for an International NGO. Rianne ten Veen's interest in environmental issues preceded her becoming a Muslim. Rianne ten Veen was quoted saying "I was impressed by what both the Qur'an and the

example of the Prophet Muhammad teach us about looking after God’s creation... submitting to God and doing our best to be God’s vicegerent (khalifa) or guardian to the earth’ (Emel magazine, June 2010). The goal of MINE is to increase environmental awareness, share environment-related information and events, and provide training and social events. <https://muslimbirmingham.wordpress.com/mine-and-homeplanet-show/>.

For example, MINE supported

an event at Birmingham Botanical Gardens on Bank Holiday Monday, 26 May 2008. The city’s ‘Friends of the Earth’ group and the Faith Leaders ‘Faiths for the City’ initiative organized a joint event, ‘Believing in our Environment’. . . ., it is difficult to know what impact this event had upon those who spoke or attended, but at the very least it seems that ten Veen’s contribution might have helped visitors from different faith communities to consider environmental ethics from an Islamic perspective (Gilliat Ray and Bryant, 2011).

Welsh Environmental Link Creating Opportunities for Muslim Engagement

(WELCOME)

WELCOME was established in 2009 as a project to share Islamic information. Due to the lack of enough committed regular members, WELCOME’s focus is in providing support to other voluntary groups as a way of spreading information about Islamic environmentalism. “Nevertheless, via social activities rather than formal regular meetings, the pioneers of WELCOME have sought to inculcate environmental awareness by organizing day trips for local Muslims and their families, especially to places of significance for conservation.” (Gilliat Ray and Bryant, 2011).

Muslim Green Team

Muslim Green Team is a campaign of the Service Corps department of the Muslim American Society (MAS). MAS is a charitable, religious, social, cultural and educational, organization. Corps established Muslim Green Team. The chief objectives of the Muslim Green Team are:

- To fulfill our duty to Allah (swt) in adopting environmentally friendly practices.
 - To contribute to the increasingly global effort to reverse the effects of environmentally-irresponsible practices.
 - To raise awareness about environmental issues within the Muslim community.
 - To demonstrate the environmental message of Islam.
 - To contribute the unique, Islamic perspective of the environment to the national and global environmental conversation.
- [\(https://muslimenvironment.wordpress.com/category/environmental-projects-using-islam/muslim-green-team/\)](https://muslimenvironment.wordpress.com/category/environmental-projects-using-islam/muslim-green-team/)

The Muslim Green Team in the Washington, DC, Metro area is an organized group of Muslims who share the same goal. Their goal is to put an end to the damaging impacts of climate change. Using the ADAMS (All Dulles Area Muslim Society) center as home, the DC green Muslims organize Ramadan Iftars where Muslims come together to break the Ramadan fast and talk about how young leaders can take tangible steps towards building a larger Green Muslim movement (Abdul-Matin, 2010). In 2007, they held a “green iftar” campaign and encouraged Muslims to buy local produce (Saniotis, 2011). They also encourage local Masjids in the area to use solar power for heating water for worshipper’s ablutions (Feder, 2009). Setting a goal of cutting the carbon footprint of its 5000 families by 10% in one year, ADAMS was able to achieve its goal through having their congregants reduce their driving, installing solar panels, and upgrading their interior lighting (Feder, 2009). Since their first gathering in 2007, Green Muslims

continued organizing events “to raise awareness, develop tool-kits that include practical tips on protecting the environment, and volunteer opportunities for youth.”

<http://www.greenmuslims.org>).

These Muslim groups and organizations may be small-scale, but it is a reflection of how active and committed Muslims in the west are to the promotion of environmental conservation. It was reported by Aisha (RA), that the Prophet was asked: “*What deeds are loved most by Allah?*” He replied, “*The most regular constant deeds even though they may be few.*” He added, “*Don’t take upon yourselves, except the deeds which are within your ability.*” (Al-Bukhari).

In Britain, the Internet, Islamic radio stations, and Islamic satellite channels have given Muslim environmentalists an avenue to convey their sustainable environmental messages (Ball, 2008) and facilitate developing environmental activities groups. This avenue was put to use by the London-based ‘Islam Channel’ which ran a pilot program “How Green is your Deen?” in 2007 (Ball, 2008). Similarly, a Muslim Community Radio (MCR) station in London made the subject of environmental responsibility the focus of its broadcasting during the Muslim fasting month (Ramadan). DeHanas (2010) investigated the MCR (87.8 FM) broadcasting campaign in the East End of London, focusing only on the Women’s Hour radio programming during the month of Ramadan in 2007. About every ten minute during the broadcast, a pre-recorded musical jingle with two young male voices pleasantly interrupts the program with the following street rap style lyrics:

M C R

Authu bilahi minash shaitanu rajeem (I seek refuge with Allah from the accursed satan)
Bismillah ir-rahman ir-raheem (in the name of Allah the Compassionate, the Merciful)
Keep your deen clean
Keep your scene clean
Drop your rubbish in the bin
Yo!
This is Muslim Community Radio!

DeHanas concludes that programs such as the Women's Hour environmental campaign have

significant potential to motivate ecological collective action... If large-scale environmental action is to be catalysed in Tower Hamlets, Muslim women are well positioned to play a leading role. Muslim females currently have the highest levels of academic achievement of any subgroup in Tower Hamlets schools (Dench, Gavron and Young, 2006: 142). Muslim mothers are typically the predominant influence in the socialization and values education of their next generation. Based on the high profile of environmentalism in Women's Hour programming and the apparent enthusiastic response among listeners, there is room for healthy optimism that an Islamic environmentalism can take root, if it is not underway already.

In general, Muslim scholars are becoming more and more involved in the environmental movement. The fatwas listed below are examples of how Muslim learned men are responding to certain environmental situations, and how they are willing to engage with their communities.

Australia

A study was conducted in Australia by Lawson and Miller (2011), aiming at researching the degree of awareness and engagement of religious communities in the State of Victoria regarding their current environmental issues. Taking into consideration Victoria's water crisis, Imams of Melbourne issued a fatwa (ruling) allowing worshipers to wash once when making ablution instead of three (the norm). The fatwa in this case

represents the responsiveness of Melbourne's Imams to the situation as well as their willing engagement within the community. It is worth noting here that there exist another well-known Islamic form of ablution (dry ablution using pure soil) called 'tayammum', but Imams did not see it as the appropriate form of ablution for the Muslims of Melbourne since water was readily available for them.

Muslim Environmental Thinkers

Ecological insights of Muslim scholars and thinkers which are based on Islamic environmental ethics give good indication of how much or how little Muslim Ecological behavior is affected by their own understandings and interpretations of Islam. Today, there are many Muslim environmental thinkers living in western countries and in Muslim majority countries, however, three scholars exemplify this ethic. They are Seyyed Hossain Nasr, Fazlun Khalid and Tarik Ramadan (Saniotis, 2011).

Seyyed Hossain Nasr Professor of Islamic Studies at George Washington University and founder of the Iranian Academy of Philosophy, is considered to be one of the world's leading experts on Islamic science and spirituality. As we saw above, He argues, that today's environmental crisis is the result of the reductionist view of nature which has been advocated by modern secular science (Nasr, 1996); Humanism, which was triggered by the European Renaissance, gave birth to the desacralisation of nature which became an object of exploitation.

Fazlun Khalid, an ecologist and founder of Islamic Foundation for Ecology and Environmental Sciences in Birmingham England, believes that Islamic teaching sets

limits to human behavior against excess within four principles: Tawhid, Fitra, Mizan, and Khalifa. We understand from these four principles that all of the creation originated from the same source ‘Allah’ in an exact and balanced manner, it was intended to function as a whole, and humankind is part of the creation world but with the element of choice, that allows him to “choose to act against the divine Will using the very gift of reasoning bestowed upon it by the Creator. Submission to the divine will, the natural law that holds in check the instincts of the predator, is the way to uphold our responsibilities as the Creator’s Khalif. Humankind are the guardians of the natural order” (Khalid, 2002)

Tariq Ramadan, a Swiss academic, philosopher and professor of Contemporary Islamic Studies in the Faculty of Oriental Studies at the University of Oxford, believes that Muslim majority countries have engrossed themselves with western consumerism and they need to return to the teachings of Islam. Ramadan indicates that Muslim’s unawareness of environmental issues is due in part to their adaptation of the western style of consumeristic behavior (Ramadan, 2004).

Research Project

The inspiration behind this research project is that solutions to environmental problems must look beyond individuals as economic actors and consider the spiritual dimensions of their ideas and motives. The economic systems in place today have made consumerism the governing parameter for societies (Malkawi, 2002). The impact of capitalism which has become the global economy called globalization, is in part responsible for the over exploitation of natural resources. The environmental movement cannot be expected to make true progress and necessary changes without first changing

peoples' attitude and behaviors towards the natural world, and peoples' behaviors cannot be expected to change under the Capitalism system.

The Capitalism economy looks at the needs and benefits as they are, not as the society should be. Thus, man is viewed as a purely materialistic creature, with no relevance to his spiritual needs, ethical thoughts, and moral objectives. Capitalism does not give weight to any value, except to the material value of the product and the material nature of the human need. Cheating in the economic sense is valuable as long as it leads to profitability (Enron and Arthur Anderson). Monopoly is feasible economically, while it can be maintained and supported (Microsoft). Under capitalism, feeding a poor (wealth distribution) may be done only if it brings a material benefit, such as tax break. But it will not happen in response to an order from God or in pursuit of God's pleasure and satisfaction (Malkawi, 2002)

We are in need of faith-based environmental activism that would restore nature its sacredness which has been stripped away by secularism and modern science. Muslim psyche was not immune from the effects of such secularistic views and practices (Nasr, 1996). The only way to prevent human-caused destruction of the environment, is to view nature and the rest of the creation as having inherent value. In mitigating the over-exploitation of natural resources and saving the environment from further damage, we must first change the core attitude of people towards nature, which is the most responsible driver of such actions. Even though today Muslims are not necessarily known for their eco-ethical practices (DeHanas, 2010), still Islam is equipped both scripturally and historically to produce active and practical environmentalists, and lead the way to a

sustainable environment. Muslim scholars, leaders and Imams can play a major role in the fight against ‘eco-terrorism’. They can change Muslims attitudes and environmental behaviors through promoting awareness of Islamic environmental ethics.

Islam’s moderation, promotes environmental sustainability and teaches against human greed, overconsumption and extreme exploitation of resources. It sets limits on human behavior. Islamic institutions, particularly in the west, can help establish a realistic and meaningful environmental movement. This movement can change people’s attitude towards the natural world. Without a constant reminder of their responsibilities as vicegerents of the earth, people will remain unjust and their irrationality will continue to supersede their actions (Bagader et al., 1994). Initiating educational programs and seriously getting involved in practical environmental activities, Islamic Centers and Masjids in the U.S. can close the gap between the theory of Islamic environment and the practices amongst Muslims.

The work in this research is aimed at investigating Imams’ environmental views and actions in the greater Seattle area. This study is set to reveal whether Imams are:

- Aware and concerned about today’s environmental crisis
- Working towards bringing awareness to their congregations
- Including environmental topics in their Friday Sermons
- Engaged in any educational program or community work concerning the environment
- Familiarizing Muslims with how the Creator has entrusted them part of His power on earth, making vicegerency (Khalifa) their central role on earth

An in-depth one-on-one interview was conducted with several Imams in the Seattle greater area. The Information gathered from the interviews was organized and analyzed for ideas, links and patterns that could be used to present informative suggestions.

CHAPTER 3: Methodology

To complete this research, information was gathered about what Imams of local Masjids are doing to educate the Muslims about today's environmental crisis and their responsibilities towards nature bestowed upon them by Allah (SWT) as vicegerents (Khalifa) on this Earth. This information was obtained from in-depth, one-on-one interviews with a number of local Imams. The interviews were conducted and guided by one interviewer (me), which gave consistency to the interpretation of the collected information. The data was organized in a systematic way and then analyzed for patterns. This chapter provides details about the informants, data collection and analysis techniques used in this research study.

Informants

The participants' willingness to share their views, opinions and ideas played a major factor in the selection process. The interviewees consisted of several Imams in the greater Seattle area. A total of six Imams were interviewed. Three Imams were in their thirties, two in their forties, and one in his fifties. They all had a college education and all have been working as Imams in the U.S for many years. There were all from different backgrounds and upbringing. The countries these Imams come from are: Indonesia (1), Cambodia (1), Egypt (1), Somalia (2) and the U.S. (1).

Data collection

The data collected from the interviews was fundamental to the completion of my final thesis research work. The information obtained during the interviewing process was collected and used in accordance with the Evergreen State College's Human Subjects Review Process. Prior to the start of the interviews, the interviewees all agreed to serve as a subject in my research project. It was explained to them that the purpose of the interviews was to gather information about the awareness level inside their Masjids of today's environmental issues, the Masjids involvement (if any) in programs or activities concerning the environment, and how to encourage Muslims to get involved in the greening of their communities. To ensure confidentiality, names of the informants and identifying information about them was not displayed in any way in the final research paper. Informants understood that the risks to them were minimal and all agreed to be audio recorded for this project without compensation of any kind. Subjects were also informed that they could skip any question or stop the interview and withdraw their full participation from the study at any point before or during the interview without penalty. In addition, access to my thesis paper was made available to the interviewed subjects, upon request through The Evergreen State College's online library, as well as a hard copy located in the Evergreen library's archival section. The interview information was shared only with my faculty reader, Dr. Kevin Francis. All digital information and data gathered from the interview process was appropriately deleted, and all paper copies of the transcribed interviews were destroyed upon completion of the final draft. The interviews were guided by a checklist of questions, audio-taped, and transcribed verbatim. The length of these interviews varied between 21 and 38 minutes with a mean of about 27

minutes. The Imams were asked eleven questions which could be expanded upon. Some detailed follow up questions were also necessary to get a complete and full understanding of the interviewees' views.

Interview Questions

1. What is environmentalism from an Islamic perspective?
2. As an Imam and a community leader, what does the environmental movement mean to you?
3. Are you worried or concerned about today's environmental crisis?
4. Using Islamic terms, how would you label pollution and other activities and behaviors that are driving our natural resources towards a complete depletion?
5. Do you think that people in your Masjid are aware of today's environmental issues?
6. Are environmental issues on the topic list of your Friday Sermons?
7. What are you doing to make sure that Muslims who attend your Masjid are part of the environmental solution and not the problem?
8. Is your Masjid engaged in any local environmental educational program, or with other community members on issues concerning the environment?
9. Would you be in support of implementing stricter environmental regulations?

10. Are you in support of achieving economic prosperity, even if it is at the expense of the health of our environment?
11. What can Imams do to help Muslims in North America feel at home, so that they can become productive citizens, and help enhance our planet's ecological state?

Data analysis

Analysis of data is a process of examining, systematically organizing and presenting information in search of useful themes and ideas (Minichiello et al, 1995). The purpose is to find some sense and meaning in the information collected. After transcribing verbatim the interviews, the answers for each question were compared with the goal of identifying themes and finding patterns.

*Outside of some follow-up questions, all Imams received the same questions in the same order

CHAPTER 4: Results & Discussion

Questions 1 & 2:

“What is environmentalism from an Islamic perspective?” and

“As an Imam and a community leader, what does the environmental movement mean to you?”

Two out of six Imams were not familiar with the term ‘environmentalism’. English was not their first language and they had never used this term in English. However, once I translated the term to Arabic and explained its relation to the term environment, they all had much to share about it from an Islamic perspective.

In response to these first two questions, three terms protect, care, and nourish were all used by five out of six Imams in reference to Islam’s attitude towards fauna, flora and the rest of the creation world. As one Imam stated, “basically, environmentalism from an Islamic perspective is carrying and nourishing the Earth that God Almighty gave us, so that you know, we can leave it in good condition for those who come after us to inherit”. Statements by other Imams such as “environmentalism in Islam is a way of life” and “environmentalism is an act of worship in Islam” are indicative of the great importance environmentalism holds in Islam.

Only one Imam out of six did not use the terms protect, care and nourish, when answering these first two questions, but instead explained how Allah created this balanced universe and He (SWT) “doesn’t want us to interrupt this perfect balance which He had establish, and we need to maintain as the Prophet (PBUH) told us in His Sunnah.”

He stated that “environmentalism in Islam is keeping and maintaining the balance which Allah has already established.” He even went as far as saying that environmentalism “is the foundation of our Tawhid”. That is why, he said, Allah created great signs surrounding us to reflect and ponder on, so that we “come to know that Allah is alone without any partners.” He continued explaining how we’re not able to see Allah with our naked eyes, but we can certainly “see Him through His Ayat (signs) which He displayed on the universe.” These signs exhibit Allah’s great attributes. “We can see Him [Allah] through His attributes, the attribute of Qudrah (ability), the attribute of Ilm (knowledge), the attribute of Hikmah (wisdom), these magnificent attributes and qualities of Allah (SWT) we can see with our naked eyes through His creation. That is why we Muslims always say ‘AllahuAkbar’ (Allah is great)”.

Only one other Imam shared a similar comment along with his answers for the first two questions and said “Many Ayats in the Qur’an ask us to look, you know, to all the creation” to see Allah’s greatness. However, this does not mean that the other four Imams don’t share the same belief that Allah (SWT) has created these signs (Ayat) for human beings needs and objectives such as contemplation and worship. This is a common knowledge amongst Muslims.

In response to the second question, all six Imams acknowledged the importance of the environmental movement in our lives today, and in the lives of future generations. One particular Imam said that the environmental movement “...means a lot, it means that my children will have a better future, it means, that you know, that the community will be more stable, it means that it will be less wars. Because when things in nature change, the human behavior also changes with it. So it means a lot to all of us.”

One Imam considers the environmental movement a necessary reforming act and said that “any reforming act that helps people, where human beings can get benefit from it, is considered an act of worship. Allah (SWT) said whoever causes it to live; it is as if he caused everyone to live³⁹. When you take care of the environment, you are helping people to live.”

A similar comment was made when another Imam said that the environmental movement seeks to protect the environment which in turn protects us. “When we protect and take care of our environment, it means that we are protecting ourselves and our resources. So without the health of the environment, the life will not be good.”

The Imams statements illustrate the importance of protecting the natural resources for people’s wellbeing. They all recognize the importance of the environmental movement and its vital role in securing people’s basic physical and, most importantly, spiritual needs. Because, Muslims understand that worshiping Allah is the purpose of the entire ‘khalq’ (creation or environment).

Question 3:

“Are you worried or concerned about today’s environmental crisis?”

As expected, six out of six Imams showed concern over the environmental issues we’re experiencing today. They all expressed their concern in statements such as “Yes, we worry about that”, “yes, this is everybody’s concern”, “Yes, everyone should be worried about that”, “we worry about that, and I think, uh, many Muslim organizations

³⁹ *And if anyone saved a life, it would be as if he saved the life of the whole people (Qur’an 5:32)*

have this [environmental concern]”, “Yeah, I’m very worried and concerned about where we’re headed” and “Yes, as Muslims, we should be worried and we should be concerned”.

It is evident in the interviewees’ comments and statements that they are all aware of the magnitude of human activities impacts on the natural world. However, their expressed concerns stem from a range of practical, moral and spiritual reasons.

One out of six Imams had a moral ground for his concerns. He attributed people’s bad behaviors towards the environment to greed and ego. In his answer he said: “Yeah, yeah, because human being, sometimes because of the greed and ego, they don’t care about the suffering of the others or polluting the environment. Like, uh, building factories, you know, in the middle of the place that supposed to be protected”.

Three Imams out of six gave practical reasoning for their concern and made specific mention of climate and weather as a serious issue:

Because it is horrible the way the people are harming the environment today. We see how the weather and the water is harmed by the people, and how it is damaging the lives of many people.

Yes, right now, the climate is different from before. I am not that old, and what I saw in the past is different from today, lots of calamities. This causes concern. For example, the weather this year is very different from last year. This year is very hot. So, if the weather keeps changing like this, maybe this can have an effect on the snow in the mountains.

Smoke and all of this, you know, we worry about that, and I think, uh, many Muslim organization they join this [environmental concern]. I have a sister from Indonesia, who worked with the ex-vice president Al Gore in the global warming to make people aware [raising awareness about climate change].

It is evident from these quotes that these Imams believe in global warming and are aware of some of the environmental issues humankind is faced with today. They also, regard it a serious issue that warrants concern.

One out of six Imams based his concern on a spiritual reason. He went to great length citing specific examples from the Prophet's Sunnah that expressed the Prophet's deep concern for the rest of the creation, and how we as Muslims should follow in His footsteps, and react the same way He (PBUH) did whenever the balance was interrupted.

The following is part of his long detailed answer:

The Prophet (PBUH) use to react whenever the balance was interrupted... He said be careful even in how you treat animals who are weak in creation... He told us that a group of his companions, when they burned the nest of ants with fire, He became very worried and saddened. He showed us His concern and His worry when some of His companions interrupted the nest of a bird. He told us how much concern He has when a camel came and complained to Him about the overburden he was enduring at the hands of its master, by having him carry extremely heavy loads and not feeding him properly. And the Prophet (PBUH) would go and intercede between the animal and its master... You see more Surahs⁴⁰ are named after the environment than any Prophets or any Pious people to show us how important it is. Allah (SWT) tells us this environment, this creation is engaged in the worship of Allah just like how we are engaged in the worship of Allah. So we need to make sure that we have a good relationship with the rest of the creation. He (SWT) said that there is nothing that Allah created except it is glorifying Allah, they're humming the praises of Allah, including the mountains that use to hum the praises with Dawud (David) (AS)⁴¹, to such an extent that Allah tells us they had feelings. When people associate partners with Allah, the Heavens, the Earth, the Mountains all get angry for Allah's sake. They are not just dumb creation like we perceive... This is how we should be as Muslims in relationship with the environment. We should have that worry and that concern, because they are creation with great intellect and are also worshipping Allah the way we are worshipping Allah.

Although only one Imam focused on the spiritual side for his concern, it does not necessarily mean that the others don't agree or don't care about the spiritual aspect of things. This could simply mean that they took the question in a different direction than he did. However, considering that these men specialize and focus on morality and religion as their life work, it might be surprising for some to hear that three out of six gave practical

⁴⁰ Chapters in the Qur'an

⁴¹ Short for (Alayhis-Salaam) in Arabic which means (May Peace be upon Him)

reasoning for their concern, and responded to the question in terms of real-world consequences.

Question 4:

“Using Islamic terms, how would you label pollution and other activities and behaviors that are driving our natural resources towards a complete depletion?”

The purpose of this question was to see if the Imams considered pollution, degradation and ruin as a form of corruption and mischief (Fassad⁴²) on Earth, and they all did. In their responses, some used the term in its Arabic form, “There are many Ayat which say: ‘Wa La Tufssidu⁴³ Fel-Ard⁴⁴’ ...don’t make pollution” and “harming the environment is Fassad.” Some used its English translation form in statements like “Pollution is a kind of corruption” and “Allah tells us in the Qur’an, that corruption had appeared in the land and in the sea, because of the doings of mankind’s hands.”

In addition to using the term ‘Fassad’ to label actions and behaviors that are degrading our environment, two out of six Imams added the Arabic term ‘Israf’⁴⁵. One used it to address the water wasting issue, “the term ‘Israf’ is basically the opposite of conserving, being wasteful. So when, when water is being used abundantly and freely without the concern that water scarcity uh, might be a reality for us one day, it’s really

⁴² An Islamic concept which means spreading mischief and/or corruption

⁴³ Don’t commit Fassad

⁴⁴ On Earth

⁴⁵ Waste or overconsumption (to be ‘Musrif’ is to be wasteful) / *Eat and drink, but waste not by excess, for Allah loveth not the wasters* (Qur’an 7:31)

hurting our environment.” The second one used it to address consumerism in general, “Consumerism and even technology sometimes are causing lots of damage to the Earth. Because we used to, we would only go get the supplies for today’s needs without worrying about tomorrow. But, today, sadly and unfortunately, we get supplies for a whole month which we will not consume and end up going to waste. We are bringing so much that we cannot consume... That is why the Earth is going to waste.”

Two out of six Imams based their answers on the basic general Islamic rule of ‘La darara wala dirar’⁴⁶. One said that “this general rule of ‘La darara wala dirar’ encompasses everything that is of benefit to mankind, whether it is related to the environment, or the protection of one’s religion, or the protection of one’s offspring, or the protection of people’s wealth, or anything else. So everything falls under this general rule.” And the other one said that “there is a Hadith, do not cause or receive harm. This includes everything, man, animals, plants.”

It is not surprising to hear two Imams mention the rule of ‘La darara wala dirar’. It is a very well-known rule amongst Imams and Muslim leaders. The Prophet (PBUH) said: “There should be neither harm nor reciprocal harm.” But it is rather surprising to hear the Imams invoke a number of key terms which summarize humankind’s actions responsible for our ecological state today. If we’re able to rid ourselves of corruption, mischief, waste, overconsumption and consumerism, this planet will be in better shape than what it is in today. Even technology was mentioned in their responses. Without ethical norms as the basis on which technological instruments can operate on, its development becomes a serious environmental threat. Nasr, one of today’s world leading

⁴⁶There should be no harm nor reciprocal harm

experts on Islamic science and spirituality, believes that Islam intentionally halted technological development once its environmental threat became evident (Al-Damkhi, 2007).

Question 5:

“Do you think that people in your Masjid are aware of today’s environmental issues?”

One out of six Imams was certain that Muslims in his Masjid are aware. He said: “Yes, people know that the environment today is not like before. Things have changed. From what I can see, people are aware. Sickneses that did not exist before now are common in the community. So, people know that things are different today than before.”

Another Imam considered the majority of his congregation to be aware of the environmental issues existing today. When asked if he could give a percentage of the awareness level inside his Masjid, he said: “If I have to guess, this is not exact, I would say about 60% of the people in this Masjid care and 40% don’t.”

In answering the question, the Imam used the word care instead of aware. Presumably, he believes that 60% of his congregation is aware of today’s environmental issues and care about them, and 40% are not aware and don’t care. When awareness of the impact of the environment on humankind is brought to the forefront of everyday living, then caring about today’s environmental issues will follow. There will not be caring without awareness first.

One out of six Imams believed that the awareness level inside the Masjid was very low. He also blamed leaders such as himself for not raising the level of awareness.

He said: “No, very few people are aware. And unfortunately as leaders in the Muslim communities we are not doing great job educating the people.” Responses such as this one are reflective on how these interviews are effecting the degree level of concern with some of the Imams.

Out of these first three Imams, one is certain that his congregation is fully aware of today’s environmental issues, one believes that the majority of his congregation is aware, and the third Imam believes that the awareness level inside his Masjid is very low.

The other three Imams are in agreement that awareness level depends on the person’s background and where they come from. All three out of six agreed that the level of awareness was high amongst Muslims who grew up here in the United States, and low amongst those who emigrated from third world countries. One Imam added age and education as two more variables that affect the awareness level. The latter’s response indicates that the education level and awareness level are positively related:

I think that the majority of the people of this community, especially the older generation, they cannot understand and they are not aware of the great environmental damage. But the young generation, the ones who were born and raised here, are going to school and learning about the different issues about the environment. The old people like me, we don’t have a clear view about the environment. So, yeah, the majority of the people here probably don’t know.

So, those who grew up in the West, they’re more aware than the Muslims who immigrated here, because of their cultures.

It depends on the person and where they come from and the level of culture they have. People here come from different backgrounds and it depends on where they were raised in; if he used to take care of the environment where he came from, he would do the same thing here.

It is worth noting that putting forth this specific detailed information wasn’t expected as there was no prompting in the question to go in this direction. This is an indication of how strong these Imams feel about the relationship between culture,

background and environmental awareness level. As mentioned above in the literature review chapter, Muslim Majority countries today seem to be indifferent towards the environment, and are in violation of Islamic ethos and practices.

Question 6:

“Are environmental issues on the topic list of your Friday Sermons?”

Based on their statements, the Imams can possibly be placed into four different categories:

1. Imams address environmental issues in their Friday Sermons (one out of six Imams):

I mean, there was a time when I focused on, you know, GMO and non-GMO products. And I spoke about the chemicals they use on plants and vegetation, and what happened to the vegetation afterwards on the land. Uh, you know, because if crops cannot grow naturally and they require genetically modified seeds to grow, and then those seeds destroy the fertility of the land that is an environmental issue... So yes I try to, you know, include these topics into my Sermons.

This one Imam here, directly and explicitly addresses environmental issues in his Friday Sermons and talks about it in practical terms.

2. Imams address environmental issues in an indirect and general way (Two out of six Imams):

I mention a lot but indirect, especially about hygiene and how to make the proper ‘wudu’⁴⁷ and “I think, in a general way. We talk about things that are harmful to the lives of people and their resources..., and also we talk about the use of water and not to make Israf (overconsumption). So we talk in general, sometimes, but not about the specific issues.

⁴⁷ The practice of ritual washing before daily prayer (British Dictionary definition)

3. In the third category, Imams are not addressing environmental issues but feel like they are addressing them, simply because their Sermons are about reform (one out of six Imams): “Actually, it is not given the exact name of environment. But as I mentioned, every speech and every sermon I give, the main concern is to reform. And the environment movement is part of reforming.”
4. The last category is where Imams admit that they’re not addressing environmental issues but feel strongly about including them in the future (two out of six Imams): said that the environmental issues were not part of the Friday Sermons topic list, “No, but now it will be InshaAllah, because it is very important.” and “To be honest not really, sometimes we make a mention of little things but not like this. InshaAllah, now, it will be. Thank you for making me aware of the subject. Now, my Sermons will include environmental issues. It is very important. I think today, I learned more from you than you did from me and I thank you for that.”

Question 7:

“What are you doing to familiarize Muslims with the responsibility of stewardship ‘Khalifa’ on earth bestowed on them by Allah (SWT) and what is expected of them towards the environment?”

This question is based on the Ayat where Allah (SWT) before creating humankind, said to the angels: *I will create a vicegerent on earth* (2:30). This

concept of Khalifa or vicegerent which represents people central role on earth is confirmed also by the Hadith of the Prophet Mohammad (PBUH) reported by Abu Sa'id al-Khudri: *The world is sweet and green, and verily Allah has installed you as Khalifa in it in order to see how you act.*

All six Imams showed a deep understanding of the important concept in our Deen.

They believed that everything given to us by the Creator is a trust, for example: “The earth also is a trust”, “Allah trusts us to preserve the environment and take care of the Earth” and “Because this Earth was inherited by human beings, it does not mean that it, its own by human beings, but it’s inherited by them as the vicegerents of Allah on Earth.”

The Imams believe that it is important for Muslims to understand their role as a Khalifa and also “to understand their tasks in worshipping Allah and that it is part of their faith.”

Nearly all Imams (five out of six) were in agreement that education is the way to familiarize Muslims with their stewardship responsibility on earth and what is expected of them towards the environment. Here are three examples:

The easiest way for Muslims to really understand their responsibility as a Khalifa on this Earth, [and] what does Allah (SWT) expect from us is education.

The core and heart of Islam revolves in Ilm⁴⁸. That is why the Qur’an started with the word Iqraa⁴⁹. And that is why most of the time Allah ends the chapter with an Ayat (verse) asking don’t people know, don’t people ponder and reflect.

⁴⁸ knowledge

⁴⁹ Read or rehearse

Through education first, and also through seminars and presentations, we can basically instill responsibilities in the Muslims.

Statement such as “So maybe we need to give more sermons about pollution and what’s happening to the air around us” indicate a sense of realization that they’re not doing enough to directly address these pressing and important issues, and should do so more often.

Question 8:

“Is your Masjid engaged in any local environmental educational program, or with other community members on issues concerning the environment?”

Four Masjids out of six are engaged in some type of environmental educational program or activities that help keep their communities clean.

One Masjid had an expert, who worked with the ex-vice president Al Gore in raising awareness about the global warming issue, come from California to give lectures and lead workshops on environmental issues.

The second Masjid was involved with an organization called ‘White Center Community Development Association’. They worked on cleaning their community and covering graffiti with mirrors painting on the walls.

The other two Masjids worked closely with their local City and County officials in teaching Muslims through workshops how to use chemicals, hygiene products, and how to recycle correctly to protect the environment. They said that they’re always ready to work with anyone who is working on protecting the

environment and are promising to do even more by engaging Muslims in community work and educational programs.

With the two Masjids out of six that are not engaged in any program or activity, one is willing to respond if approached by an organization. The Imam said: “If we get invited we would respond and accept. So far, we did not get any invitation from any institution or organization.” The other Imam was very embarrassed with his Masjid’s lack of involvement in local environmental educational programs or activities: “With a painful heart, I have to say no.”

Overall, there is a promising pattern with Imams showing their willingness and in some cases enthusiasm, to start educational programs and be engaged in local environmental activities concerning the environment, or in some cases increase their engagement levels.

Question 9 & 10:

“Would you be in support of implementing stricter environmental regulations?” and “Are you in support of achieving economic prosperity, even if it is at the expense of the health of our environment?”

Six out of six Imams said they would support the implementation of stricter regulations. For instance, one said that “as Muslims we have to support it. Because that is how you protect people and the environment.” Another Imam said: “Yes, I would like to be part of that. I am ready, because, it helps protect me, my life and the life of my children, and the life of everybody. Yeah, I’ll be happy to give my support.”

Also, six out of six Imams all said they would not support capital gain over the health of our environment. In the words of one Imam “it is against the teachings of Islam.”

‘Warding off evil (or harm) takes precedence over bringing and seeking interests (or benefits)’ is one of the major principles upon which Sharia has evolved. This principle or guideline was mentioned in the Imams responses. For instance, one Imam said: “Islam does not allow us to gain economic prosperity at the expense of damaging the Earth and at the expense of greater harm.” Another Imam said: “protecting the environment should take precedence over material gain” and “luxury would not be completed if the environment is not healthy.”

As mentioned above in chapter 2, one of the major principles upon which Sharia has evolved is the principle of ‘community’s interests take precedence over individual’s interests’. This principle was also mentioned in the Imams responses. One Imam said: “The benefit to the community as whole, takes precedence over the benefit of one, few people, or a company.”

In addition, one Imam based his answer on the following Ayat: *when he turns his back, his aim everywhere is to spread mischief through the earth and destroy crops and cattle. But Allah loveth not mischief (2:205)* and said: “destroying or damaging the environment is considered a major crime in Islam.”

Question 11:

“What can Imams do to help Muslims in North America feel at home, so that they can become productive citizens, and help enhance our planet’s ecological state?”

In their responses, six out of six Imams seemed to recognize the importance of this question. However their convergence on the seriousness of this issue did not stop them from diverging in how they can help in practice. For example, one of them suggested that Imams “take part in the community development process”. Another Imam believed that the solution lies in following the example of the Prophet Mohammad (PBUH) and said:

Again, the greatest thing we can do as Imams is, one of the biggest teachings that is missing from Masjids is truly bringing back the life of the Prophet (PBUH) into our lives, because at the end of the day, Allah (SWT) has made the Prophet our greatest model and example. For this reason, He (PBUH) loved Mecca so much, and even when He was leaving Mecca, He shed tears of sadness and pain. But when He went to Medina, not only He adapted to the environment, He supported Medina and made a special Duaa (supplication) for the Ansaar (people of Medina). ... He made Muhajereen (people migrating from Mecca) feel like Medina is their home so much as that when Muslims gain back Mecca many Muhajereen chose to stay in Medina where the majority of them are buried in Medina. So the best solution to this is bringing back the example of the Prophet (PBUH). Teaching people that the love of the home country is there, but wherever we are, we have to have the same concern, and the same respect, and the same responsibility as back home. Yes, the love of home country is part of Iman (belief), but also where we are, we have a role and a goal. That is why most of them (Companions of the Prophet) wherever they migrated they made that place their home and were very productive.

One out of six Imams was very involved in converting Muslims, the elderly in particular, into active and productive members of our communities. He attends many conventions such as ICNA⁵⁰ and ISNA⁵¹ conventions, and is involved in many activities

⁵⁰ Islamic Circle of North America

⁵¹ Islamic Society of North America

that emphasize the need and the importance for Muslims to feel at home. According to him, there are three types of Muslims here in the U.S. One type that “consider this [country] as not their land even if they live thirty years here”. The second type is what he referred to as ‘the melted one’ where Muslims lose their identities and start behaving like everyone else around them. The third type of Muslims are those who get integrated into society and are active in community work but, they do so without any compromise to their Islamic belief. He said this last type is the type that all Imams want (referring to the Imams he works with and meets with during different conventions).

Two out of six Imams mentioned Prophet Yusuf (AS) as one of the best examples to follow as a solution for this issue. This is because Prophet Yusuf (AS) lived all his young life threatened by plots made by His brothers out of jealousy. They finally decided to exile Him instead of killing Him. As a young boy, He was sold as a slave in a foreign country (Egypt). He was then sent to prison after He was seduced by a great man's wife whose wish wasn't fulfilled. He remained in prison for years. In spite of all the injustices done to Him:

He helped them overcome one of the greatest crises they were about to experience. ..., He used His talent and skills to help them overcome the drought and improve Egypt's economy. He told them that He was blessed with the talent to run their finance ministry and He made Egypt the most advanced and civilized nation at the time.

When people needed Him, He didn't say, oh, I don't care you are non-Muslims. He came forward and became part of the solution of the county at the time, without compromising His belief. This is what we need now from Muslims.

This is what we need to do, each one of us, we need to use the talents that Allah has given us, wherever we are, to make that area, because at the end Allah says, the Earth belongs to Allah, it doesn't belong to America or, it belongs to Allah (SWT). And Allah (SWT) told us that He wants us to make Imara (Settling) of the Earth wherever we are. This is our worship to Allah (SWT).

As a standard follow-up question for the Imams who did not mention Prophet Yusuf (AS) on their own, I would ask what they think of Him as an example for others to follow. All four of them completely agreed with me. For instance, one Imam said: “yes, that is the perfect example.”

It is clear from their responses, that they all realize the importance of Muslims positive integration into society. They believe that through education and social participation, Muslims can make a difference within their communities and help better the future of their children and future generations. They all either mentioned Prophet Yusuf (AS) as the best example to follow for the ‘feel at home’ goal, or agreed with Him being the best model upon me mentioning him.

It is only through involvement and participation that Muslims can make a difference in their local communities and their society. They can do so without losing their Islamic principles and identities. They each have their own individual skills, expertise and talents to offer. “[T]heir participation should make a difference not because of their otherness but because of the singular richness they bring to their society.” (Tariq, 2013).

CHAPTER 5: Conclusion

In general, environmentalists seem to think that the environmental movement is a secular one and its success thus far relies upon its separation from religion. For instance, Hawken (2007) claims that religion or ideology only divides people: “[the movement] is not bound together by an ‘-ism’. What unifies it is ideas, not ideologies. . . As they expand, ideological movements divide and redivide . . . Today there are more than one thousand Christian denominations in the United States. Other notable examples of sectarianism are Shi’a and Sunni Muslims” (page 16). This unconventional movement, to use Hawken’s term, highlights the great and the good which humans are capable of accomplishing when working together. However, the forces behind the movement remain, for the most part, purely external (Hosseini, 1997).

The secularized world view of modern science presented for public consumption and backed by school curriculums has stripped the natural world of its sacredness. This has resulted in poor understanding of our place in the natural world and has translated into actions that led to the overexploitation of the natural resources (Khalid, 2001).

The model shown by Islam of our place in the natural world has become of important interests (Saniotis, 2011) in the midst of the devastating environmental state where all forms of life are threatened. The Islamic Environmental Management Systems mentioned above such as *ihyaa al-mawat*, *al-hima*, *al-harim*, and *hisba*’s office, are evident of Islam’s ability to produce active and practical environmental measures. Islamic law or Sharia has evolved upon three major principles: 1) Community’s interests are a

priority over individual's interests. 2) Warding off evil (or harm) takes precedence over bringing interests (or benefits). 3) Smaller loss (or harm) cannot be alleviated through prescribing a bigger loss and bigger interest (or benefit) comes before smaller one. These principles along with other Islamic environmental ethics, if applied, can change attitudes and behaviors responsible for today's ecological state.

The efforts of the environmental movement are missing the most important key component which is spirituality. The movement cannot address the overall worldview that nature is something separate from us and that its resources are only there for our exploitation without first restoring to nature its sacredness. There is a great need for faith-based environmental activism that would view people and the environment as one creation designed by Allah (SWT) to function as whole. Islam can give those, who believe in its truth as well as those with open hearts and minds, a new perspective and consciousness of the natural world. If given a real chance, Islam is equipped both scripturally and historically to produce active and practical environmentalists, and lead the way to a sustainable environment.

The ecological ethics in Islam are arguably based on three major founding concepts or principles: 1) Tawhid⁵² which is the basis of Muslims thoughts and actions that covers every aspect of personal and social life. 2) Khilafah⁵³ or vicegerency which is

⁵² The oneness of Allah, which in Islam is believed to be the message of all Prophets and Messengers throughout Men's history, is the key to Paradise. No amount of good work will help a person attain Paradise without first establishing Tawhid. That is because Shirk (opposite of Tawhid), which is associating partners with Allah, nullifies all good actions and deeds. Allah forgives everything but Shirk. Allah (SWT) said: "Whoever rejects Evil and believes in Allah hath the most trustworthy handhold, which never breaks." (2:256) and the Prophet (PBUH) said: "Whoever says (La-Ilaha-Illa-Allah), and rejects and disbelieves in all that is worshipped besides Allah, his wealth and blood will be protected, and his account will be with Allah" Sahih Muslim.

⁵³ To be a khalifa, is to be vicegerent, or caretaker.

declared in the Qur'an and affirms human's duties and responsibilities towards the creation as the ones given the privilege of being able to reason. 3) Akhirah⁵⁴ or the hereafter which is the belief that gives lives meaning and purpose beyond just material gains and physical pleasures; knowing that they would ultimately be accountable for their actions helps restrain people's greed and deter them from transgressing against other creation. Based on these three major concepts along with other rules and principles mentioned above, Islamic environmentalism can halt further damage to the creation of Allah (the environment).

Muslims believe that humankind is placed as vicegerent on this Earth. As such, it is compulsory act upon each and every Muslim to do the best they can to protect and preserve the environment by undertaking and supporting sustainable projects. After all, maintaining and protecting the environment simply means maintaining and protecting Sharia's objectives. People need not only to protect the environment from degradation and over-exploitation of resources, but also need to care, revere, and nurture it to achieve its goal and fulfil its purpose. Humankind is answerable to Allah to be just in his dealings, not to disturb the already established balance, and maintain the natural world.

This research study showed that there was a high level of awareness of environmental issues amongst Imams in the greater Seattle area. They all recognize the importance of the environmental movement in securing people's basic physical and spiritual needs. They all considered pollution and degradation as a form of corruption and mischief (Fassad) on Earth that warrant fighting against, and they were all in favor of

⁵⁴ Life after resurrection

supporting and implementing harsher regulations. Additionally, nearly all Imams (five out of six) were in agreement that education is the way to familiarize Muslims with being Khalifa as people's central role on Earth, and raise awareness level amongst adherents. Yet, at the same time this awareness did not translate well into action. Of the six Imams only one directly included environmental topics in their Friday Sermons, two were not engaged in any environmental program, and four sporadically showed a modest level of engagement in environmental educational program or community work concerning the environment. However, they all showed a willingness to do more by including environmental topics into their future Lectures, getting their respective Masjids involved in more community activities, and working with any environmental organization that is willing to include them.

Imams also acknowledged the importance of having Muslims feel like they're home. Nurturing this feeling of belonging would help the Muslims here become more productive within their communities which in turn would help enhance our planet's ecological state. All Imams agreed with the story of Prophet Yusuf (AS) told in the Qur'an as the best story from which one can use to draw valuable lessons in motivating Muslims who feel as outsiders to get integrated into society. As mentioned in the results and discussion chapter, in spite of all the injustices done to Prophet Yusuf (AS) in exile, when Egypt was facing the greatest crises, He not only used His talent to run their finance ministry and help them overcome their economic challenge, He made Egypt an advanced and civilized nation at the time.

Imams can change attitudes and environmental behaviors through promoting awareness of Islamic environmental ethics. They can build active Muslim environmental

members in society, young leaders and role models in the greening of our communities, and fierce fighters against environmental pollution and degradation in general.

During the interviews, all six Imams exhibited rich knowledge of the Qur'an and Hadith text which talk about the protection of plants, animals and the environment in general. One of the Imams, after his long answers, summarized everything for me and said that "Islam's solution to environmental problems lies in the adaptation of its guidance." It was a great experience interviewing the six attentive and bright Imams. They all had a wealth of knowledge with information which could potentially positively influence Muslims here to be more productive and strong active community members. They have an untapped potential to create a higher environmental awareness level and better vicegerents (Khalifa) on Earth.

Overall, there is a promising pattern with Imams showing their willingness to start educational programs and be engaged in local environmental activities concerning the environment, or in some cases increase their engagement levels. Furthermore, one can sense the degree level of concern some of the Imams showed as the result of participating in the interview:

With a painful heart, I have to say no. But, now you have brought lots of beautiful ideas to my mind, you know.

At a local level, what is within our ability, I can educate them to stop buying things that cause harm to the environment, such as foam cups, foam plates, this tissue paper, you know, all of this stuff is within our capabilities. We can easily reduce that and somehow somehow food waste, the way we recycle them, instead of just dumping them in the garbage. We can designate proper recycle area. We can start with that ability by becoming strict on those areas, people will slowly gain awareness and rekindle in their heart and grow with more ideas InshaAllah. That is my plan now for our Masjid and our community.

No, very few people are aware. And unfortunately as leaders in the Muslim communities we are not doing great job educating the people.

Thank you for making me aware of the subject. Now, my Sermons will include environmental issues. It is very important. I think today, I learned more from you than you did from me, and I thank you for that.

So maybe we need to give more sermons about pollution and what's happening to the air around us.

These quotes are indicative of the effects that this type of conversation had on the Imams. Perhaps this would be one way of increasing attention and getting Imams to think more in this direction. Some Imams even offered me open invitation to lecture about environmental subject in their Masjids whenever I could. Environmental groups might be overlooking and not including Muslims and Masjids in their efforts to raise the levels of awareness and involvement from people. In one of the responses, an Imam said: "If we get invited we would respond and accept. So far, we did not get any invitation from any institution or organization."

In addition, the information derived from these interviews could help future researchers in areas such as environmental teachings in Islam, or Muslim environmental practices in North America benefit from having these results available. For instance, one Imam after expressing how the interview initiated a brainstorming session in his mind about ideas and activities he could involve his congregation in, said: "Thank you for making me aware of the subject. Now, my Sermons will include environmental issues. It is very important. I think today, I learned more from you than you did from me and I think you for that." Considering their overall willingness to respond, local environmental groups can improve Muslim environmental practices by simply creating opportunities for

Imams to engage their Masjids in. One of the Imams said: “we are always ready to work with anyone who is working to clean and protect the environment.” There is much work to be done in initiating, or in some instances, increasing the engagement level of local Masjids.

However, it is important to note that the findings in this thesis project are based on a very small sample size. The data collected can perhaps serve as preliminary foundation for further research studies. Future studies could benefit from using a much larger sample size by including the rest of the Imams in the area, and also by asking more follow-up questions that provide a deeper insight. Sometimes, follow-up questions can incite even more relevant and helpful answers.

Allah (SWT) knows best

Bibliography

- Abdul-Matin Ibrahim (2010). *Green Deen: What Islam Teaches About Protecting the Planet*. Berrett-Koehler Publisher, Inc. San Francisco, CA.
- Ahmad ibn Hanbal. *Al-Musnad*. 20 vols. ed. Ahmad Shakir and Hamza Ahmad al-Zayn. Cairo: Dar al-Hadith, 1995.
- Al-Ashqar Umar S (2003). *Islamic Creed Series. Belief in Allah: In the Light of the Qur'an and Sunnah. Vol.1* translated by Nasiruddin al-khattab. International Islamic Publishing House. Riyadh, Saudi Arabia.
- Al-Damkhi Ali Mohamed (2008). Environmental ethics in Islam: principles, violations, and future perspectives. *International Journal of Environmental Studies*, Vol. 65, No. 1, February 2008, 11–31. <http://www.tandf.co.uk/journals>. doi: 10.1080/00207230701859724.
- Al-Wajeez fe Ahkame Zakat by Salah Asawy
- Arli Denni and Fandy Tjiptono (2014). The End of Religion? Examining the Role of Religiousness, Materialism, and Long-Term Orientation on Consumer Ethics in Indonesia. *Journal of Business Ethics* 123, no. 3 (September 2014): 385–400. doi:10.1007/s10551-013-1846-4.
- Ball Luzita (2008). *Green Deen vs Gloom and Doom: Environmental Activism Islamic Style*. Online: http://www.shapworkingparty.org.uk/journals/articles_0809/ball_long.pdf.
- Bagader Abubakr Ahmad, El-Sabbagh, Abdullatif Tawfik El-Chirazi, Al-Glayand Mohamad As-Sayyid and Samarrai Mawil Yousuf Izzi-Deen (1993), *Environmental Protection in Islam*, 2nd edn (Saudi Arabia: Mepa), available online at: <http://www.islamset.com/env/>
- Bagader Abubakr Ahmad, El-Sabbagh, Abdullatif Tawfik El-Chirazi, Al-Glayand Mohamad As-Sayyid and Samarrai Mawil Yousuf Izzi-Deen (1994). *Environmental Protection in Islam*. IUCN Environmental Policy and Law paper No. 20, IUCN, Gland Switzerland.
- Baxter Jamie and John Eyles (1999). The Utility of in-Depth Interviews for Studying the Meaning of Environmental Risk. *The Professional Geographer* 51, no. 2 (1999): 307–20.
- Bloom Arnold. J (2010). *Global Climate Change: Convergence of Disciplines*. Sunderland, MA: Sinauer Associates, Inc.
- Carson Rachel (2002). *Silent Spring*. A Mariner Book. Fortieth anniversary edition. Houghton Mifflin Company. New York, New York.

- Chan Arthur H (1989). The Changing View of Property Rights in Natural Resources Management. *American Journal of Economics and Sociology* 48, no. 2 (1989): 193–201.
- Charles ‘Prince of Wales’ (2010). Islam and the Environment: a speech delivered at Oxford University in the summer of 2010. From website: www.princeofwales.gov.uk.
- Dafydd Jones Rhys (2010). Islam and the Rural Landscape: Discourses of Absence in West Wales. *Social & Cultural Geography* 11, no. 8 (December 2010): 751–68. doi:10.1080/14649365.2010.521853.
- Dench Geoff, Gavron Kate and Young Michael (2006). *The New East End: Kinship, Race and Conflict* London: Profile Books.
- DeHanas Daniel Nilsson (2009). Broadcasting Green: Grassroots Environmentalism on Muslim Women’s Radio. *The Sociological Review* 57, no. s2: 141–55.
- De Lemos, H. M. (2006). Environmental technologies and international trade. *Comparative Technology Transfer and Society*, 4(1), 56–70.
- Dickinson Daniel (2005). Eco-Islam hits Zanzibar fishermen BBC News, Pemba, Tanzania 17 February. (<http://news.bbc.co.uk/2/hi/africa/4271519.stm>).
- Du Xingqiang, Wei Jian, Quan Zeng, and Yingjie Du (2014). Corporate Environmental Responsibility in Polluting Industries: Does Religion Matter?. *Journal of Business Ethics* 124, no. 3 (October 2014): 485–507. doi:10.1007/s10551-013-1888-7.
- Dutton Yassin (1992) Natural Resources in Islam. In *Islam and Ecology 1992*. F. M. Khalid and J. O’Brien. Fakenham Photosetting Limited. Mackays of Chatham PLC, Kent, Great Britain.
- Elfakhani Said and Zafar U. Ahmed (2013). Philosophical Basis of Entrepreneurship Principles Within an Islamic Ethical Framework. *Journal of Transnational Management* 18, no. 1 (January 2013): 52–78. doi:10.1080/15475778.2013.752780.
- Emel magazine, June (2010). The Muslim lifestyle magazine from the website: <http://www.emel.com/>
- Feder Lester (2009). DC Muslims embrace the environment. Center for American Progress. http://www.americanprogress.org/issues/2009/01/feder_dc_muslims.html, January 13.
- Fetzer S. Joel and Soper J. Christopher (2004). *Muslims and the State in Britain, France and Germany*. Cambridge: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511790973>
- Foltz Richard C (2001). Environmental Initiatives in Contemporary Iran. *Central Asian Survey* 20, no. 2 (2001): 155–65.

- Gelling Peter (2009). Indonesia: The home of “Green Islam.” Global Post
<http://www.globalpost.com/dispatch/indonesia/091111/islam-environment-indonesia-green>.
- Gilliat-Ray Sophie and Mark Bryant (2011). Are British Muslims ‘Green’? An Overview of Environmental Activism among Muslims in Britain. *Journal for the Study of Religion, Nature and Culture* 5, no. 3 (September 29, 2011): 284–306.
 doi:10.1558/jsrnc.v5i3.284.
- Hamed Safei El-Deen (1993). Seeing the environment through Islamic eyes: application of Shariah to natural resources planning and management. *Journal of Agricultural and Environmental Ethics*, 6(2), 145–164.
- Haneef Sayed Sikandar Shah (2002). Principles of Environmental Law in Islam. In: *Arab Law Quarterly*, Sayed Sikandar Shah Haneef, Vol. 17, No. 3 (2002), pp. 241-254.
 Stable URL: <http://www.jstor.org/stable/3382024>.
- Haq S. Nomanul (2001) Islam in A Companion to Environmental Philosophy (ed D. Jamieson), Blackwell Publishers Inc., Malden, Massachusetts, USA.
 doi:10.1002/9780470751664.ch8. Academic journal article. *Harvard International Review*, Vol. 35, No. 1, Summer 2013.
- Hartmann Thom (2002). *Unequal protection: The rise of corporate dominance and the theft of human rights*. Rodale Inc, New York.
- Hartmann Thom (2014). *Corporations control our lives*. From:
<http://www.thomhartmann.com/blog/2014/01/corporations-control-our-lives>.
 Visited on June 2015.
- Hawken Paul (2007). *Blessed Unrest: How the Largest Social Movement in History Is Restoring Grace, Justice, and Beauty to the World*. Penguin Group (USA) Inc, New York, New York.
- Hope Marjorie and James Young (1994). Islam and Ecology. *Cross Currents* 44, no. 2: 180–93.
<http://rite.btik.com>
- Hussain Muzammal (2009). History of Wisdom in Nature and Islamic Environmentalism in the UK. Online:
http://www.wisdominnature.org.uk/About%20Us/About_Us_docs/history.htm.
- http://wwf.panda.org/what_we_do/endangered_species/elephants/?217531/Indonesian-Muslim-Council-Issues-Fatwa-to-Protect-Threatened-Animals
- <http://berkeleycenter.georgetown.edu/organizations/african-muslim-environment-network>
- <http://www.ifees.org.uk>
- <http://www.greenmuslims.org>

<https://muslimbirmingham.wordpress.com/mine-and-homeplanet-show>

<https://muslimenvironment.wordpress.com/category/environmental-projects-using-islam/muslim-green-team>

www.shineonline.org.uk

Isa Noor Munirah and Saadan Man (2014). First Things First: Application of Islamic Principles of Priority in the Ethical Assessment of Genetically Modified Foods. *Journal of Agricultural and Environmental Ethics* 27, no. 5 (October 2014): 857–70. doi:10.1007/s10806-014-9504-0.

Izzi Dien Mawil Y (1992). Islamic Ethics and the Environment. In *Islam and Ecology 1992*. F. M. Khalid and J. O'Brien. Fakenham Photosetting Limited. Mackays of Chatham PLC, Kent, Great Britain.

Izzi Dien Mawil Y (1997). Islam and the Environment: Theory and Practice, *Journal of Beliefs and Values* 18.1: 45-57.

Kamla Rania, Sonja Gallhofer and Jim Haslam (2006). Islam, Nature and Accounting: Islamic Principles and the Notion of Accounting for the Environment. *Accounting Forum* 30, no. 3 (September 2006): 245–65. doi:10.1016/j.accfor.2006.05.003.

Karagiannis Emmanuel (2015). When the Green Gets Greener: Political Islam's Newly-Found Environmentalism. *Small Wars & Insurgencies* 26, no. 1 (January 2, 2015): 181–201. doi:10.1080/09592318.2014.959768.

Khalid Fazlun Majeed (1992). The Disconnected People. In *Islam and Ecology 1992*. Khalid, Fazlun Majeed and O'Brien Joanne. Fakenham Photosetting Limited. Mackays of Chatham PLC, Kent, Great Britain.

Khalid Fazlun Majeed and O'Brien Joanne (1992). *Islam and Ecology*. Fakenham Photosetting Limited. Mackays of Chatham PLC, Kent, Great Britain.

Khalid Fazlun Majeed (1999). *Qur'an, Creation and Conservation*. Islamic Foundation for Ecology and Environmental Sciences, Birmingham, 1999.
<http://www.ifees.org.uk/wp-content/uploads/2015/04/1380144345.pdf>.

Khalid Fazlun Majeed (2000). Islamic Pathways to Ecological Sanity – An Evaluation for the New Millennium, *Ecology and Development, J. Inst. Ecol.*, 3, Bandung, Indonesia.

Khalid Fazlun Majeed (2010). *The Environment in Islam: Islam and the Environment Ethics and Practice*. The 15th General Conference, 27- 29 September 2010.

Kula Erhun (2001). Islam and environmental conservation. *Environmental Conservation*, 28(1), 2–9.

Knechtel John (2009). *Water*. MIT Press. Cambridge, Mass.

- Lal, D. (1997). *Ecological imperialism: The prospective costs of Kyoto for the developing world. The costs of Kyoto: Climate change policy and its implications.* Washington, DC: Competitive Enterprise Institute.
- Lawson Justin T and Miller Kelly K (2011). *Green Revelations in a Country of Drought, Flood and Fire: A Case Study of Abrahamic Faith Communities and Sustainability.* *International Journal of Environmental Studies* 68, no. 6 (December 2011): 965–79. doi:10.1080/00207233.2011.614094.
- Mahathir Mohamad ‘Prime Minister of Malaysia’ (1999). *Malaysia on Track for 2020 Vision.* Source: <http://www.smpke.jpm.my/01/10/1999>
- Maidin Ainul Jaria and Oseni Omar (2011). *Islamic Principles on Sustainable Land Use Planning and Development.* *Journal of Islamic Law Review*, Vol. 7, No. 1, June 2011, pp. 57-89.
- Malkawi Mohammad (2002). *Economic Justice: Islam versus Capitalism, 2002.* http://www.geocities.ws/abdul_hakeem1924/economic_justice_islam_vs_capitalism.pdf.
- Marttunen Mika and Hamalainen Raimo P (1995). *Decision analysis interviews in environmental impact assessment.* *European Journal of Operational Research* 87 (1995) 551-563.
- Masri Al-Hafiz B. A (1992). *Islam and Ecology.* In *Islam and Ecology 1992.* F. M. Khalid and J. O’Brien. Fakenham Photosetting Limited. Mackays of Chatham PLC, Kent, Great Britain.
- Mattson Ingrid (2011). *The Islamic View on Consumption & Material Development in Light of Environmental Pollution.* Hartford Seminary. Hartford CT, USA.
- Mattson Ingrid, Murad Wilfried Hofmann, Martin Arneth, and Dietmar Mieth (2011). *Islam, Christianity & the Environment.* Amman, Jordan: Royal Aal Al-Bayt Institute for Islamic Thought, 2011.
- Michaels David (2008). *DOUBT IS THEIR PRODUCT: How Industry’s Assault on Science Threatens Your Health.* Oxford University Press. New York, NY.
- Minichiello Victor, Aroni Rosalie, Timewell Eric, and Alexander Loris (1995). *In-Depth Interviewing: principles, techniques, analysis.* 2nd ed. Longman Australia Pty Ltd. National Library of Australia. Cataloguing-in-Publication data. Melbourne Australia.
- Mirpuri Anoop, Keith P. Feldman, and Georgia M. Roberts (2009). *Antiracism and Environmental Justice in an Age of Neoliberalism: An Interview with Van Jones.* *Antipode* 41, no. 3 (June 2009): 401–15. doi:10.1111/j.1467-8330.2009.00680.x.
- Mishkat al-Masabih, Vol. 2, p. 387

- Mohamed Najma (2007). Islamic Ecoethics: From Theory to Practice, paper presented at the World Environmental Education Congress, Durban, 4 July 2007. Online: <http://www.facebook.com/topic.php?uid=7192390478&topic=3246>.
- Mohamed Najma (2013). Islamic Education, Eco-Ethics and Community. *Studies in Philosophy and Education* 33, no. 3: 315–28. doi:10.1007/s11217-013-9387-y.
- Mukheibir Pierre (2010). *Water Access, Water Scarcity, and Climate Change* Springer Science+Business Media, LLC.
- Munn, R. E., ed. *Encyclopedia of Global Environmental Change*. Chichester ; New York: Wiley, 2002.
- Nabuurs G. J, Masera. O, Andrasko. K, Benitez- Ponce. P, Boer. R, Dutschke. M, Elsidig. E, Ford-Robertson. J, Frumhoff. P, Karjalainen. T, Krankina. O, Kurz. W. A, Matsumoto. M, Oyhantcabal. W, Ravindranath. N. H, Sanz Sanchez. M. J, and Zhang. X (2007) Forestry. In: *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Metz, B., O. R. Davidson, P. R. Bosch, R. Dave, and L. A. Meyer, eds. Cambridge University Press, New York. pp. 541-584.
- Nasr Seyyed Hossein (1992). Islam and environmental crisis, in: S.C. Rockefeller and J.C. Elder (Eds) *Spirit and Nature* (Boston, MA: Beacon Press), pp. 83–108.
- Nasr Seyyed Hossein (1996). *RELIGION AND THE ORDER OF NATURE*. The 1994 Cadbury Lectures at the University of Birmingham. Oxford University Press, New York, NY.
- Nasr Seyyed Hossein (1997). *Man and Nature: the spiritual crisis of modern man*. ABC International Group, Inc. KAZI Publications, Chicago, IL.
- Negus Yunus (1992) *Science Whithin Islam*. In *Islam and Ecology 1992*. F. M. Khalid and J. O'Brien. Fakenham Photosetting Limited. Mackays of Chatham PLC, Kent, Great Britain.
- Orgaz Francisco and Gonzalez-Dugo Victoria (2011). Reflections on food security under water scarcity. *Journal of Experimental Botany*, Vol. 62, No. 12, pp. 4079–4086.
- Paker, Hande, Fikret Adaman, Zeynep Kadirbeyoğlu, and Begüm Özkaynak (2013). Environmental Organisations in Turkey: Engaging the State and Capital. *Environmental Politics* 22, no. 5 (September 2013): 760–78. doi:10.1080/09644016.2013.825138.
- Pierre Mukheibir 2010. *Water Access, Water Scarcity, and Climate Change* Springer Science+Business Media, LLC.
- Ramadan Tariq (2013). *The Future of the New "We": Muslims in the West to Western Muslims*.

- Rahim, H. Z. (1991). Ecology in Islam: Protection of the web of life a duty for Muslims. *The Washington Report on Middle East Affairs*, X(4), 65. Retrieved from <http://search.proquest.com/docview/218799913?accountid=11199>.
- Ray Donna E., Shawn L. Berman, Michael E. Johnson-Cramer, and Harry J. Van Buren (2014). Refining Normative Stakeholder Theory: Insights from Judaism, Christianity, and Islam. *Journal of Management, Spirituality & Religion* 11, no. 4 (October 2, 2014): 331–56. doi:10.1080/14766086.2014.910821.
- Ryan Gery W and H. Russell Bernard (2003). Techniques to Identify Themes. *Field Methods* 15, no. 1 (February 1, 2003): 85–109. doi:10.1177/1525822X02239569.
- Sabzevari Rahmatollah Joghataei (2014). ETHICAL MANAGEMENT OF WATER IN ISLAM. *International Journal of Analytical, Pharmaceutical and Biomedical Sciences*. Vol.3: Issue-6: December-2014. ISSN:2278-0246. Available online at www.ijapbs.com
- Saniotis Arthur (2012). Muslims and Ecology: Fostering Islamic Environmental Ethics. *Contemporary Islam* 6, no. 2 (July 2012): 155–71. doi:10.1007/s11562-011-0173-8.
- Sardar, Z. (Ed), 1988, *The Touch of Midas: Science, Values and Environment in Islam and the West* (Malaysia: Pelanduk Publications).
- Sardar, Z., & Malik, Z. A. (1994). *Muhammad for beginners*. Cambridge: Icon Books.
- Schwencke, A. M., M. S. Berger, and W. B. Drees (2012). Globalized Eco-Islam. A Survey of Global Is, 2012. <http://ppi.unas.ac.id/wp-content/uploads/2015/01/report-globalized-eco-islam-a-survey-schwencke-vs-24-february-2012-pdf.pdf>.
- Smith Gar (2002). Islam and the Environment. *Earth Island Journal* 17, no. 2 (2002): 26–26.
- Spengler. (2005). The demographics of radical Islam. *Asia Times online*. August 23. (Accessed on July 5 2006, at http://www.atimes.com/atimes/Front_Page/GH23Aa01.html).
- The Holy Qur'an (1996). *The Meaning of The Holy Qur'an: Revised Translation, Commentary and Newly Compiled Comprehensive Index*. Yusuf Ali Abdullah [translation], 8th ed. Beltsville, Maryland USA: Amana Publications.
- The Pew Global Attitudes & Trends Project. 22-Nation Pew Global Attitudes Survey. June 17, 2010. Pew Research Center. www.pewglobal.org.
- Tucker Mary Evelyn and Grim John (2007). Ethical Dimensions of Environmental Protection.docx. (n.d.). *Chronicle of Higher Education*. 2/9/2007, Vol. 53 Issue 23, Special Section pB9-B10. 2p.
- UNICEF and Organización Mundial de la Salud (2009). *Diarrhoea: Why Children Are Still Dying and What Can Be Done*. New York: United Nations Children's Fund, 2009.

- United Nations (2013). The Millennium Development Goals Report, 2013.
- Vadillo Umar Ibrahim and Khalid Fazlun Majeed (1992). Trade and Commerce in Islam. In Islam and Ecology 1992. F. M. Khalid and J. O'Brien. Fakenham Photosetting Limited. Mackays of Chatham PLC, Kent, Great Britain.
- Van Selm, Martine, and Nicholas W. Jankowski (2006). Conducting Online Surveys. *Quality and Quantity* 40, no. 3 (June 2006): 435–56. doi:10.1007/s11135-005-8081-8.
- Vidal, J. (2005). The Greening of Islam. *The Guardian*, 30 November.
- White Richard (1996). *The Organic Machine: The Remaking of the Columbia River* (Hill and Wang Critical Issues). Hill and Wang Publisher, Canada.
- Ziran, Zhong (1999). Natural Resources Planning, Management, and Sustainable Use in China. *Resources Policy* 25, no. 4 (1999): 211–20.