

# ISLAMIC TEACHING AND PRACTICE OF ENVIRONMENTAL ETHICS IN BANGLADESH: A CASE STUDY

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## ABSTRACT

The present paper attempts to present Islamic environmental teachings as a guiding source for environmental ethics. After briefly discussing current Muslim practices in relation to the environment, the paper focuses on the way Bangladeshi Muslims deal with the environment. It also correlates Islamic environmental teachings with current Bangladeshi practices and attitudes towards environmental sustainability. The study thus makes a new contribution to the debate about environmental problems in Bangladesh.

## Introduction

The environment presents a burning issue that cannot be solved by any one nation, by any single governmental initiative, or by any single international organization. It is a global problem, although some local areas are more intensely affected. Because of uncontrolled human greed and all-pervasive economic activities, the natural world and its ecological systems are going to collapse.<sup>1</sup> To deal with this issue there is thus an urgent need for a combined effort from both governmental and non-governmental bodies, from both national and international initiatives, and from both secular and religious organizations. Thus, a collective approach and combined action plan is needed. In this present situation, secular people commonly think about the issue in conjunction with various activities. They are engaged in appreciable activity for the sake of the environment, although their criticism that religion is responsible for the ecological crisis creates some problems for religious people to work with them. For Lynn White (1967) and Arnold Toynbee (1972), religions invariably focus on human beings as the agents of God on earth, set upon proving their excellency and victory over the rest of creation. This gives humans open license to dominate the natural world, or so the argument from this view on religion goes. In this context, critics refer frequently to the Bible passage where Adam is commanded by God to “fill the earth,” “subdue it” and “rule over” it (Gen 1:27-28). For such critics, religious views on environmental ethics are

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<sup>1</sup> Even the World Bank has expressed its frustration when assessing the situation in terms of the environmental damage wrought in the name of economic development: “[M]any environmental problems continue to intensify, and, in many countries, there are few grounds for optimism” (WB 1996, 4; quoted in Dragun and Tisdell 1999, 1).



anthropocentric,<sup>2</sup> rather than bio-centric<sup>3</sup> or eco-centric.<sup>4</sup> These critics further argue that people must abandon such anthropocentric views in the interests of environmental preservation, and accept either a bio-centric or eco-centric approach to environmental ethics.

Unfortunately, religious people rarely talk about this matter, though religions do have the potential to mitigate the problem. Some scholars and theologians, such as John B. Cobb (1925-present),<sup>5</sup> and Seyyed Hossein Nasr (1933-present),<sup>6</sup> have sought to disprove the arguments of these secular environmental ethicists, arguing instead that the religious approach to environmental ethics is not only anthropocentric, it is also bio-centric and eco-centric. While human beings do have special status over others, they are commanded by the same God (Gen. 2: 15) to protect the natural world and to take care of other animals and plants. Thus religions should not be misunderstood by secular environmental scholars as responsible for the present environmental crisis; instead religious teachings should be considered an alternative to secular environmental ethics or world-wide green technology movements.

As a religion of peace, Islam inspires Muslims to maintain a peaceful life with both humans and non-humans (Mohamed 2014, 325). In the light of Islam, all creatures are included in the family of God, with the human being just one member.<sup>7</sup> The human being is only a microcosmic part of the macrocosmic universe. In Islam, as in the Judeo-Christian religious tradition, humans are given a dignified position as a crown of creation (Qur'an 2:30),<sup>8</sup> not only for ruling over others, but also for taking care of them on behalf of the Creator. Thus Muslims are not allowed to destroy any component of the natural world solely for economic benefits. The core teaching of Islam in terms of environmental ethics is to improve the environment, not to destroy it. There are repeated exhortations in Islamic religious texts to keep a balance with the natural world and to take care of what God has created. Unfortunately Muslims are not fully aware of these teachings of Islam, with current Muslim practices revealing a negligible understanding of the Islamic view of the environment.<sup>9</sup> This is seemingly true across all Muslim countries. Following modern world-views, Muslims are today concentrating on physical development to reap the economic benefits of the

<sup>2</sup> The term "anthropocentrism" comes from the Greek word *anthropos* for "human," and *kentron* for "center." It means an ideology that places human beings in the central position in the world, indicating their supremacy over all other creatures.

<sup>3</sup> The term originally comes from the Greek *bios*, "life" and *kentron*, "center" and so refers to all living things small and big, visible and invisible, human and non-human. The term is mostly used in an ecological sense of morality and responsibility, and implies there is inherent value in all living things in nature.

<sup>4</sup> The term "eco-centrism" (derived from the Greek *oikos*, "house," and *kentron*, "center") denotes a nature-centered worldview that places intrinsic value on all living organisms and their natural environment, regardless of their perceived usefulness or importance to human beings.

<sup>5</sup> Since 1969, Cobb has been writing extensively on environmental issues from a Christian theological point of view (Cobb 1972, 1; 1994, vii). His first book *Is It Too Late? A Theology of Ecology* was published in 1972. His other works (Birch and Cobb 1981; Daly and Cobb [1989]1994; Cobb 2007) also deal with the same issue.

<sup>6</sup> Nasr has been working actively on environmental problems since 1968, with his first publication *The Encounter of Man and Nature: The Spiritual Crisis of Modern Man*. He attempts to deal with the ecological crisis from an Islamic perspective. His other works (Nasr 1993, 1996) focus on the same issue from different angles.

<sup>7</sup> Prophet Muhammad (PBUH) is reported to have said, "[A]ll creatures are Allāh's family; and Allāh loves most those who treat His family well and kindly." (*Bayhaqi; Shamā'il Kubra*, quoted in Green Muslims, n.d.).

<sup>8</sup> According to the Qur'an (2:30) all human beings are the vicegerents (*khalīfah*) of Allāh on the earth. Allāh states, "[A]nd when your Lord said to the angels: I am making a *khalīfah* on the Earth..." Thus, in this verse Allāh talks about His will for sending His deputy on the earth. In another place (Qur'an 6:165) Allāh speaks about the responsibility of the vicegerent and how human beings are accountable to Him: "(A)nd it is He Who has made you *khalīfah* (successor) upon the earth...that He may try you through what He has given you." Thus it is a very special duty that Allāh be obeyed by human beings; otherwise, it is like rebellion or unbelief, as Allāh says, "(I)t is He Who has made you *khalīfah* (successor) upon the earth. And whoever disbelieves (in not performing his duty as a successive authority of Allāh on the earth) – upon him will be the consequence of this act..." (Qur'an 35:39).

<sup>9</sup> Perhaps this is due to lack of real Islamic education or perhaps it is because of the pressure of modern world-views, which are followed all over the world for material development. Like other nations, Muslim countries are influenced by materialistic and mechanistic world-views.

natural world (Izzi Dien 1997, 47, 50-54). By so doing they are not actually developing their countries in terms of quality of life; instead they are making their livable places unfit for dwelling peacefully with the natural world.

Bangladesh, where 90.39 percent of inhabitants belong to Islam (BBS 2011, xiii), is selected here as a case study in order to demonstrate some of the current practices of Muslims in response to environmental degradation. Bangladesh is a country of natural beauty and environmental diversity,<sup>10</sup> yet day-by-day it is becoming a worse place to live. The core objective of this paper is thus to examine why Muslims in Bangladesh are not responding to the environmental issue seriously, given Islam has clear guidelines on how to treat nature and the environment properly. Unfortunately, little value is placed in religious ethical principles in secular Bangladesh, although the Government of Bangladesh (GoB) could still appreciate Islamic environmental ethics as a supplement to the country's secular environmental policies and activities.<sup>11</sup> This paper thus seeks to present a brief survey of the initiatives taken by government in terms of environmental sustainability, as well as other activities undertaken by NGOs, civil society organizations and environmental activists, before assessing how seriously these programs are taken so far and some of their shortcomings. Having discussed these matters, the paper will present some suggestions for improving what Bangladeshi people are facing now in terms of environmental degradation.

## Islamic Teaching for Environmental Ethics

According to core Islamic beliefs, everything in the natural world is created by God; so in this sense there is a oneness of creation (*tawhīd al-khalq*).<sup>12</sup> In the prophetic tradition, the world is called the family of God ('*ayyāl Allāh*').<sup>13</sup> Thus Lubis (1998) considers human beings equal partners with other creatures. Shomali (2008, 2, 6) calls the earth "mother earth," arguing that the earth nurtures what is on it like a mother. He refers to a prophetic tradition where Prophet Muhammad said, "(P)reserve the earth because it is (metaphorically) your mother" (*Nahj al-fasaḥah*, ḥadīth no. 1130, quoted in Shomali 2008, 2). When considering how humans should treat the natural world, we should first think how human nature works with nature. In the view of Mohamed (2014, 317) the essential nature of the human being (*fiṭrah*) lives in harmony with nature, because human beings are always commanded by God to keep the middle position by virtue of moderation, balance and preservation (*al-waṣaṭ / al-mīzān*).<sup>14</sup>

<sup>10</sup> There are six seasons in a year. At the alteration of the seasons, people experience variation in natural charms. Bangladesh is considered the largest delta in the world. It is a riverine country, neither cold nor hot in terms of temperature. It is a mild tropical country where people enjoy both seasons in a middle way.

<sup>11</sup> Bangladesh is constitutionally a secular country, though Islam is declared to be its state religion. Some Islamic values are also considered at state level, but secular policy is highly favored in every layer of state affairs.

<sup>12</sup> Usually *tawhīd* means oneness. When it relates to Allāh it is called *tawhīdu (Allāh)*, meaning the oneness of Allāh. Here it relates to the creation of Allāh (Qur'an 30:25), i.e., *tawhīd al-khalq*, meaning the oneness of Allāh's creation. In this sense, Lubis (1998) states *tawhīd* is "the fundamental statement of the oneness of the Creator, from which everything else follows." For him, "it is the primordial testimony to the unity of all creation and to the interdependence of the natural order of which humanity is an intrinsic part." Lubis' argument and interpretation are followed and reinterpreted by Gada (2014, 134) with many other Qur'anic verses.

<sup>13</sup> See the foot-note no.1. Lubis (1998) refers this to *Kashf al-khafa*'.

<sup>14</sup> Allāh states in the Qur'an, "[A]nd thus We have made you [Muslims] as a median/just [balanced and moderated] nation..." (2:143). Prophet Muhammad (PBUH) says, "[T]he best of affairs is the medium one" (*Nahj al-fasaḥah*, ḥadīth no. 1481, quoted in Shomali 2008, 5). Muslims are therefore commanded to take a middle position between two extremes, be it between extravagance and niggardliness, or spirituality and secularity, or between finite and infinite, or between expenditure and earning, or between offering and receiving, and so on.

God has given humans a very prestigious status over all of His creatures (Qur'an, 17:70),<sup>15</sup> because God has appointed them as His vicegerents (*khalifah*) on the earth.<sup>16</sup> Many people have misunderstood this very dignified status as permission from God to dominate the rest of the creation of God. For Seyyed Hossein Nasr (Religious Nature 2015, 15), it is a very special kind of responsibility imposed by God upon human beings to take care of His creatures on His behalf.<sup>17</sup> This special status does not necessarily give open license to human beings for monopoly of domination. Instead it creates an acute balance between power and humility. Thus the role of humans in the world is the role of guardianship as custodians. In other word, it is stewardship as Mohamed (2014, 317) notes in her work.

All the creatures of God are kept before them as a trust (*amanah*),<sup>18</sup> so humans are expected to play a significant role in the environment as trustees. Humans are asked to improve the environment around them, not to destroy it in the name of so-called economic development, defense or power games, which are very common phenomena on the surface of earth. Sometimes this kind of development may seem necessary, but in most cases it is artificially created by uncontrolled human greed and desire.

Islam urges people to control all kinds of greed and desire. Thus, according to Islamic teaching, a Muslim cannot be greedy about the sort of economic development that causes problems for the non-human world. Everything is created by God and is also nurtured and taken care of by God's angels. This kind of religious belief gives an idea of the sacredness of the others; so, without a proper justification (that lies within the permission of God), none are allowed to harm them. God encompasses everything in the universe, nothing is beyond His sight.<sup>19</sup> Therefore, according to Islamic teachings about the environment, the natural world is sacred (Nasr [1968] 1976, 1993). None are allowed to blame any creation of God. Each part of creation, even if it is very tiny, is worthy and sacred. Thus human beings should have a sense of this sacredness of the rest of the creation.

As rational and responsible animals, human being ought to be thankful for what God has created in the universe, and from which they benefit. Humans are completely dependent on the rest of the creation for their own survival, and so are commanded by God not to misuse and abuse the natural resources (Qur'an 7:31; 17:26-27). They must stay away from any form of extravagance (*israf*), which Shomali (2008, 5) mentions as one of the potential causes of environmental degradation. Basically, this comes from uncontrolled human greed and negligence towards the resources of the environment. It is wasteful consumption which must be controlled by human

<sup>15</sup> Allāh says, "[A]nd We have certainly honored the children of Adam and carried them on the land and sea and provided for them of the good things and preferred them over much of what We have created, with (definite) preference" (Qur'an 17:70).

<sup>16</sup> See footnote 2. In addition, the Arabic term "*khalifah*" comes from the root word "*khalafun*," which means "followed," "succeeded" etc. So the word "*khalifah*" refers to the one who comes after and obeys the sender. *Khalifa* is provided by the sender with a very special power and responsibility concurrently. In the Qur'an, the term *khalifah* is mentioned nine times, and seven times it is found with prefix *fi al-arḍ*, which means successive authority on earth (Lubis 1998). The common English translations of the term *khalifah* are successor, deputy, viceroy, vicegerent, and trustee. According to Lubis (1998), its new translation is stewardship. In consideration of the preservation of the natural environment and the ecological system, Lubis' translation sounds very appropriate. Through such a new translation, Lubis attempts to see human beings as guardians of the earth, friends of the earth, custodians of the earth, with humans seen as the ones responsible for taking care of the environment.

<sup>17</sup> Sayyed Hossein Nasr uses the term *khalifah* as the responsibility of humans in taking care of Allāh's creation (Religious Nature 2015, 15). Nasr is not interested in its popular meaning, which is tied up with political authority and power. More importantly, Nasr wants to ensure the sense of responsibility in its political meaning.

<sup>18</sup> The Arabic term *amanah* refers to both trust and responsibility. It also means obligations (Saheeh International 2011, 416, footnote no.1156). It is a very unique characteristic of human beings that they accepted this kind of agreement from Allāh, when the rest of the creation refused to receive it, as Almighty Allāh states, "[I]ndeed, We offered *amanah* (the trust, responsibility, obligation) to the heavens and the earth and the mountains, and they declined to bear it and fear it; but human being accepted this offer..." (Qur'an 33:72). So, as *khalifah* of Allāh, humans must be honest and sincere in this unique trust and responsibility; otherwise, they will have to show their accountability to Allāh in the life after death.

<sup>19</sup> In the Qur'an it is stated, "[S]o wherever you [might] turn, there is the face of Allāh" (2:115).

accountability and responsibility to the environment, otherwise disaster/corruption (*fasād/zulm*) will appear in the whole world (Mohamed 2014, 317) in the form of uncontrolled destruction.<sup>20</sup>

The well-established Islamic maxim is “*Lā ḍarara wa lā ḍirara fī al-Islam*” (“harm not and don’t be harmed”),<sup>21</sup> and Shomali (2008, 5) indicates clearly that “there is no place in Islam for inflicting any harm on one’s self or on others.” This general rule of Islam is commonly applied to all things. Any sorts of harm, be it to any human or to any non-human being, is prohibited (*ḥaram*) and subject to punishment. Any act of corruption (*zulm*) and mischief (*fasād*) is always condemned in Islam (Qur’an 2:205; 7:56).

Shomaili (2008, 2) notes tree plantation is a work of worship to God (*‘ibadah*). Prophet Muhammad always encourages the planting of trees and discourages cutting them down. In the words of Prophet Muhammad, planting a tree is a charitable act: “[T]here is none among the Muslims who plants a tree or sows seeds in a field, and then a bird, a man or an animal eats from it, but is regarded a charitable gift (*ṣadaqah*) for him” (*Bukhārī*, ḥadīth no. 1071). Watering or feeding a tree is like the act of feeding or watering a believing man, as the Prophet of Islam states: “[W]hoever waters a date or lot tree it is as if he has given a drink to a thirty believer” (*Wassa’il al-Shi’a*, ḥadīth no. 17). Without justification, no tree should be cut down and even its leaves as well, as Prophet Muhammad says: “[U]nless you are compelled, do not cut down a tree” (*Wassa’il al-Shi’a*, ḥadīth no. 11). If a tree is cut down without a reasonable cause it is a punishable act. In the words of Prophet Muhammad: “[H]e who cuts a lot tree (without justification of a real cause behind it), Allah will send him to hellfire” (*Sunan Abū Dawūd*, ḥadīth no. 5228). Destroying farm lands (gardens and crops), even if these belong to the enemy with whom Muslims are fighting, is not allowed by the Prophet.<sup>22</sup> Prophet Muhammad never allows his companions to cut trees; instead he inspires them to plant trees till the last hour: “[I]f the doomsday (*qiyamah*) comes while you have a sapling in your hand, plant it before the Hour comes” (Musnad Ahmad, ḥadīth no. 12491).

In Islam, harming animals is a punishable act, while taking care of animals is considered a way to salvation. Killing animals without justification is forbidden (*ḥarām*) as the Prophet says: [W]hoever kills a sparrow or a bigger animal without respecting its rights to exist will be accountable to Allah for it on the Day of Judgement” (*Sunan al-Nasa’i*, quoted in Bilal 2017). A man is forgiven just because of watering a dog (*Bukhārī*, ḥadīth no. 2466). In the words of Prophet Muhammad, “[T]here is reward for serving any living being” (ibid.). On the other hand, a woman is punished in hell fire because she imprisoned a cat until death (ibid., ḥadīth no. 712).

Cleanliness and hygiene are part and parcel of Islam, without which Islamic faith and practice cannot be fulfilled. In consideration of its practical applications, cleanliness is half of faith (*al-ṭuhuru ṣaṭr al-iman*) (*Muslim*, ḥadīth no. 223). Islam not only talks about personal cleanliness (*ṭuhur*) and purification (both of the physical and the spiritual), in Islamic teachings public places (e.g., roads, parks, hospitals, educational institutions, offices, rivers, lakes, markets, etc.) are to be kept clean and hygienic. Prophet Muhammad commands his followers to clean their courtyards (*Jami al-Tirmidhī*, ḥadīth no. 2799). In the same ḥadīth, Allah is introduced as Clean (*Nazif*) and He loves cleanliness (ibid.). Removing harmful things from footpaths or roads, for the purpose of keeping the street safe and clean, is considered as an act of (*ṣadaqa*) charity (*Muslim*, ḥadīth no. 1009). Muslims are advised not to relieve themselves in watering places, roads, and places of shade (*Sunan Ibn Majah*, ḥadīth no. 328), because these acts disturb others in keeping the adjacent environment hygienic.

<sup>20</sup> That is why the Qur’an states: [D]isasters/corruptions [mischief/evil] have appeared on land and sea because of what humans have done [wrongly]...” (30:41).

<sup>21</sup> This ḥadīth is recorded by Ibn Majah (ḥadīth no. 2331, 2332), Ahmad (ḥadīth no. 2719, 2714) and Imām Malik (ḥadīth no. 1234).

<sup>22</sup> *Al-Kāfi*, ḥadīth no. 5.

God has created each and everything in the universe with a very perfect measurement and due proportion (Qur'an 67:3-4). God's creation is a life-supporting element for human existence. It is very unfair and unjust to do anything that can disturb the characteristics of anything existing in the creation. Izzi Dien (1997, 48) notes that all living creatures of the environment (biotic organisms of nature), even non-living things, glorify Allāh in their ways, as it is stated in the Qur'an: "[W]hatever is in the heavens and whatever is on the earth exalts Allāh" (61:1). Izzi Dien argues that human beings must be very sensitive about keeping in mind that to destroy anything in the creation means to stop giving voice to the glorification of Allāh. On the other hand, to protect Allāh's creatures is to keep praising Allāh. He raises a question: how is it possible for a Muslim to destroy a thing which is praying to Allāh? The whole creation is a sign of Allāh's wisdom, mercy, power and other attributes through which humans can grow their awareness and understanding about Almighty Creator (Izzi Dien 1997, 48). Thus, nature works for the spiritual understanding of the human mind in order to enhance the relationship with Allāh (Qur'an 13:2-4; 21:79).

For Shomali (2008, 6), everything in the environment has its own intrinsic value and is sacred. It has also instrumental value in consideration of others. Nothing belongs to absolutism. Values are relational, interdependent and hierarchical. Even human beings have both intrinsic and instrumental values, depending on the circumstances. Human beings must be respectful of the values of other creatures as they have not been given a monopoly in terms of values and rights. Humans are not lords or rulers of other beings; they are caretakers and trustees. As the crown of creation, humans have a very special responsibility to the rest of Allāh's creation, a responsibility that cannot be denied by human beings in the name of superiority. No other creature is assigned to perform this responsible duty (*amanah*). In this regard, Izzi Dien (1997, 49) emphasizes the Islamic term *amanah*, which denotes a very special kind of duty and responsibility, i.e., the responsibility for looking after Allāh's creation (ibid.). He suggests that this reciprocal relationship between humans and other creatures (animals and plants, including all abiotic organisms of the natural world) should be based on the concept of justice (*'adl*) and kindness/compassion (*ihsān*), and not on material and economic interest (ibid.). He cannot say how these Islamic concepts, *'adl* and *ihsān*, can articulate such relationships, however. Is it possible to implement relationships without a guiding regulation? Mohamed tries to cover this gap, since for her all these eco-ethical principles of Islam are kept into motion through a system of legal methods, laws and institutions that is called *shari'a* (2014, 317). The goal (*maqasid*) of *shari'a* is to seek the common universal welfare for all the creation of Allāh (ibid.). Islam aims to connect the whole of creation with its creator, Allāh, through maintaining good relationships within all of His creation. Mohamed (2014, 325) calls Islamic teachings on environmental ethics "theo-centric eco-ethics." She argues that in Islam "just, respectful and responsible interaction between humans and the natural world" is always supported and promoted" (ibid.).

Basic Islamic Environmental Principles in Positive Sense	Basic Islamic Environmental Principles in Negative Sense	Basic Islamic Environmental Principles in Due Management ( <i>Fiqh al-bi'ah</i> / Natural Resource Management)
<i>Tawḥīd al-khalq</i> (oneness of Allāh's creation) as a principle of divine unity	<i>Isrāf</i> (wastefulness) as a principle of frugality while utilizing natural resources	<i>'Adl</i> (justice) as a principle of keeping nature in its right place
<i>Khalīfah</i> (vicegerent and trustee of God on earth) as a principle of guardianship of planet / taking care of nature	<i>Tabdhīr</i> (squandering) as a principle of frugality while utilizing natural resources	<i>Qist</i> (fairness, equality and equity) as a principle of treating nature with fairness

<i>'Ubudiyyah</i> (being a true slave of God) as a principle of servanthood	<i>Fasād</i> (corruption on earth) as a principle of not degrading the balanced relationship with nature	<i>Ihsān</i> (perfection / excellence) as a principle of inspiring humans to be kind towards nature
<i>Amanah</i> (stewardship/trust) as a principle of responsibility	<i>Ẓulm</i> (unjust act / corruption / exploitation) as a principle of forbidding exploitation or depletion of natural resources	<i>Mīzān</i> (order of things) as the principle of balance / equilibrium in nature
<i>'Ākhirah</i> (belief in life after death) as a principle of accountability	<i>Takāthur</i> (greed) as a principle of not collaborating or bad competition in price of natural resources	<i>Qadar</i> (due proportion) as the principle of due measurement in nature
<i>Fitrah</i> (primordial human nature) as a principle of restoring reality of life	<i>"Lā ḍarara wa lā ḍirara fi al-Islam"</i> ("harm not and don't be harmed") as a principle of not harming anything in nature without proper justification	<i>Ḥarām</i> (forbidden / inviolable zones) as a principle of protection of lands
<i>Ayah</i> (both word of God and sign of God) as a principle of treating nature as a sign of God	---	<i>Hima</i> (protected areas) as a principle of conservation management
<i>Ayyal</i> (family of God) as a principle of relating creatures with God)	---	<i>Wasāṭiyyah</i> (balanced way of life) as a principle of moderation
<i>Tasbiḥ</i> (glorifying God) as a principle of glorification of God by saving nature	---	<i>Nazāfah</i> (clean / neat) as a principle of environmental hygiene
<i>Ummah</i> (community) as a principle of treating non-human animals as communities like humans	---	<i>Ṣadaqa</i> (charity) as a principle for inspiring humans to give space and opportunities for non-human animals to eat
<i>Al-muḥīṭ</i> (one of God's names / the Encompassing) as a principle of utmost care for nature	---	<i>Maqasid al-shari'a</i> (goal of Islamic laws) as a principle of seeking the common universal welfare of all creatures

**Figure 1. Islamic principles of the environment and its management**

Modern Islamic scholars thus try to relay Islamic guidelines on environmental ethics and thus revitalize human consciousness about preservation of the environment, though they do not make give concrete suggestions for articulating these guidelines within the legalizing bodies of modern states. Until such a connection is ensured, these guidelines may not work effectively.

### Current Muslim Environmental Practices

Unfortunately, all these basic principles of Islam in relation to environmental ethics are not voiced sufficiently by Islamic scholars, Islamic institutes (*madrasah*, schools, colleges and universities), and Islamic religious leaders (*Imāms*). Thus Muslims in general are not fully aware of these teachings, although the Qur'an and the Sunnah (the prophetic traditions of Islam) do provide the core foundation for such guidelines. In fact, current Muslim practices do not reflect basic Islamic principles of environmental ethics. Concerning environmental degradation, Muslim countries are not seen as different from the rest of the world (Izzi Dien 1997, 47). Religious scholars or eco-theologians, for instance Cobb (1972) and Nasr ([1968] 1976), blame the modern scientific world-view of nature, which is highly attached to materialism and secularism, for these world-wide environmental problems. The modern world-view, which was later connected with religious views, was triggered by the scientific revolution, humanism and the industrial world, thereby superseding the traditional view of nature. According to a secular worldview, nature is like a machine and has nothing to do with sacredness. From this conception, modern humans have been torturing nature and violating the ecological system in many ways since the fourteenth century C.E. Through the power of science and technology, European people colonized Muslim countries and introduced Muslims to modern education and a scientific way of understanding. A result of this was that the mainstream Muslim population moved away from Islamic education. Almost everything in the Western world, from philosophical understanding to scientific application, is now followed by Muslim countries (Izzi Dien 1997, 50). The Muslim world is just imitating what the Western world does in terms of economic development. Muslim countries are causing the degradation of the environment in the name of economic development in the same way the Western world has already done, and in this matter there is no basic difference between the Muslim world and the rest of the world.

After the discovery of oil in the middle east (in countries like Saudi Arabia, Bahrain, Qatar, United Arab Emirates, and Kuwait), multi-development works, for instance the building of modern cities with high-rise buildings and road networks, are funded by petro-dollars. The extraction of fossil oil from deep within the earth is itself polluting the environment, for it is then processed by chemicals for export to other areas, and this also at the price of nature. Finally, this fossil oil is used by modern vehicles as fuel which immediately hits the environment and pollutes air. As people of middle east have much more money, they are rapidly increasing use of various branded motor vehicles that emit vast amounts of carbon dioxide into the fresh air, and this luxurious life-style is based on wasteful use of natural resources. At the same time, the traditional characteristics of desert lands are being fatally damaged by the unprecedented construction of roads and cities. Other Muslim countries of Africa and Asia are also causing environmental problems through deforestation, unprecedented levels of construction, ruinous agricultural practices, landfills, chemical effluents, fossil-fuelled vehicles, unplanned land use, over-population, and industrialization. The Muslim world is not free from the charge of damaging the environment, and it is thus very unfortunate that we do not hear any strong voices from within Muslim countries seeking to mitigate or at least control the situation. There are very few individuals talking about the issues, and the voices of those that do mostly go unheard by Muslim governments and the mass of people.<sup>23</sup>

Despite that fact, we have recently seen Islamic scholars such as Seyyed Hossein Nasr (b.1933), Fazlun Khalid (b.1932), and İbrahim Özdemir (b.1960), among others, trying to contribute something to environmental ethics from an Islamic point of view. Their common focus

<sup>23</sup> In the case of Bangladesh, we see Professor Anu Muhammad (Economics Department of Jahangir Nagar University) being vocal and outspoken on environmental issues (like Sundorban rakhkha andolon / "Save the Sundarbans" movement) and proper utilization of natural resources. As a member of civil society, he raised his voice against the government's policies for so-called development at the price of environmental sustainability and natural resources. But his voice is not being heard; instead his campaign is always under threat (Independent Online Desk 2016).



points are that nature is sacred, and the human role must be one of stewardship. Muslims must modify their behavior in relation to the non-human world, and the value of non-human entities must be recognized (Saniotis 2012, 167). There are some organizations, such as the UK-based Islamic Foundation for Ecology and Environmental Science (IFEES) founded in 1994 (unofficially in 1980), the African Muslim Environment Network (AMEN) founded in 2006, and the Islamic Relief World Wide founded in 1984. Besides these, there are online organizations, such as Green Muslims, Global Muslim Climate Network, Muslim Environmental Watch, The World Muslim League, etc. All these organizations are working within their limitations for the preservation of the natural environment through increasing awareness. Very recently we discovered an Islamic Declaration on Global Climate Change (17-18 August 2015 in Istanbul), in which Islamic leaders called for Muslims to take necessary steps in responding to the issue, and where they urged governments to work with all member-states of the UN for global initiatives to mitigate the problem. At its sixth Islamic conference meeting with ministers of member-states in Rabat (8-9 October 2015), the Organization of Islamic Cooperation (OIC) discussed climate change, environmental protection and sustainable development. In the declaration, member countries were urged to immediately take a few steps, such as hosting green economic functions, creating environmentally-friendly energy systems and raising awareness for a sustainable environment. The OIC's secretary general, Dr. Iyad Ameen Madani, considers climate change a serious issue and also confesses that without collective (global) action it is not possible to mitigate the problem. Muslim countries are cooperating with international forums and agencies on many issues to do with the environment and climate change, and in particular are responding to the declaration of Rio-1992, the Rio+ 20, the Agenda 21, the Kyoto Protocol 1997, Cop 21, and so on. These are a few of the initiatives and activities of Muslim people and the Muslim world in relation to environmental issues, which are of course insufficient compared with the gravity of the problems. In the following pages, I focus on Bangladesh as a case study.

## **Environmental Problems in Bangladesh**

Bangladesh is a south Asian country bordered by India in the west, north and east, by Myanmar in the southeast, and by the Bay of Bengal in the south. Bangladesh is a country of natural beauty and environmental diversity. It has six seasons which vary from time to time. In the course of the year people experience many variations from summer to winter. There are many rivers, for which reason the country is called a land of rivers. Bangladesh is the meeting place of three mighty Himalayan rivers—the Ganges, the Brahmaputra and the Meghna (Asian Development Bank (ADB) 2004, 2) —which flow into the Bay of Bengal. It is a low-lying tropical country of fertile lands. That is why this small country of only 147,570 sq. km (Department of Environment 2011, 1; Chowdhury 2016) can feed a huge number of its population (149,772,364 as at the population census of 2011 of BBS and 161 million according to the World Bank (WB) Report [2015]). However, this beautiful country is now facing environmental problems, and as a result of which, has already turned into a vulnerable country in terms of environmental disasters (Salequzzaman and Stocker 2001, 104). The main environmental problems and their causes are as follows:

### **Degradation of Land and Loss of Soil Quality:**

Farmers are using chemical fertilizers, pesticides and agrochemicals on farming lands to produce more crops. These ruinous agricultural practices are the main causes of land degradation. Converting forest lands to farming lands, and the dumping of industrial effluents and hazardous waste into the soil have added to the damage to soil quality. In the hilly areas land degradation occurs due to soil erosion, and riverbank erosion is a common problem in areas beside rivers. Wetlands are drying rapidly due to drought. Bangladesh is heading towards economic development,

so urbanization and industrialization are capturing farming lands for non-agricultural purposes (DoE 2012, xviii; ADB 2004, 9-13).

#### Water Pollution and Contamination:

Surface water bodies are being polluted by industrial effluents, agrochemicals, chemical fertilizers, pesticides, etc. People dump waste indiscriminately into water bodies, which pollutes the water and contaminates its quality. Due to excessive extraction of ground water for drinking, irrigation or industrial purposes, the ground water resources are declining gradually and becoming contaminated with arsenic. According to the Bulletin of the World Health Organization (WHO)-2012, between 35 and 77 million people have already been affected by arsenic. Arsenic is causing the largest mass poisoning in the country's history (Flanagan, Johnston, and Yan 2012). People in arsenic-affected areas die each day because of arsenic poisoning (Islam 1999, 4). As an effect of worldwide climate change, the sea levels of the coastal area of Bangladesh are rising and increasing salinity in those areas, with people not having access to drinkable water.

#### Air Pollution:

Air pollution has reached alarming levels. Dhaka City has turned into a poisonous gas chamber (Islam 1999, 4): According to the Department of the Environment (DoE), the density of airborne particulate matter reaches 463 micrograms per cubic meter in Dhaka, which is the highest level in the world. Air pollution seriously affects the respiratory tract and causes irritation, headache, asthma, even cancer. Fossil-fuelled vehicles, industrial emissions, effluents from power generation, and brick kilns are the main causes of air pollution (DoE 2012, xx).

#### Unprecedented Construction:

Because of urbanization and industrialization, Bangladesh is experiencing unprecedented construction in the form of roads and houses for common people and industries. Mostly these constructions are carried out in unplanned ways. As a result, farming lands are reduced daily and the ecological systems of those areas are under threat.

#### Industrial (Chemical) Effluents:

Some industries (for instance pharmaceutical industries, tanneries, fertilizer factories, paper mills, textile mills, still industries, ship breaking industries in Chittagong, and brick kilns, etc.) are emitting industrial effluents into the soil and water across the country. Most of these industries do not have their own adequate disposal systems. Ultimately all these chemical and toxic effluents contaminate the air, water and soil by seriously damaging the environment and the ecological system.

#### Loss of Wetlands:

Wetlands carry additional water from heavy rains and serve the ecological systems. Due to population pressure and unplanned construction, wetlands are decreasing rapidly. With the decline of wetlands, the country's biodiversity is shrinking (Islam 1999, 4) and waterlogging is becoming a common problem for urban areas. Thus, the whole country is "severely affected by wetland loss" (Ghos et al. 1997, 83).

#### Exhaust Gases:

Bangladesh has no natural oil, but it does have some natural gas and coal mines. This gas is used in domestic cooking (especially in urban residential areas), in many industries, and in vehicles. Natural oil is used as fuel, especially in cars and diesel engines. It is also used for producing electricity. Coal is used in some brick kilns and in some power plant industries. When all these fossil-based natural resources are burnt for energy creation, their exhausted portions go directly

into the open air, which increases carbon dioxide in the atmosphere, thus causing global warming and depletion of the ozone layer.

#### Deforestation:

People are digging into mountains for housing and cutting forests in order to cultivate land. Besides this, hydro-electric power plants are being settled in some forest areas. Thus forest land is rapidly decreasing day-by-day. The forest area of Bangladesh has already declined from 15 to 5 percent over the last twenty years (Ghos et al. 1997, 83). Now the country's forest area is below the minimum requirement for a healthy environment. At least 25 percent of total land should belong to the country's forest, but in Bangladesh only 17 percent of the land is forest area.<sup>24</sup>

#### Desertification:

Bangladesh is likely to face desertification soon. Vast parts of the country, especially in south-western and north-western areas, are under serious threat. Desertification happens through deforestation, soil erosion, salination, waterlogging, overgrazing of pastures, inappropriate irrigation practices, mining, use of chemical fertilizers and pesticides, intensive cropping, absence of proper organic management, poor drainage and inadequate soil conservation (Ghos et al. 1997, 83). In a word, unsustainable land use patterns are causing the desertification (ibid).

#### Household, Medical and Industrial Solid Waste:

The country lacks proper waste management handling systems. In city areas, solid household waste is indiscriminately kept in open places, which causes environmental hazards and health risks. Uncontrolled and open dumping of waste with garbage sometimes blocks the drainage system, threatening contamination of the drinking water supply. Across the country, there are many public and private hospitals and clinics, but these health servicing centers have no adequate waste management. According to the ADB report (2004, 8), more than 98 percent of medical waste, such as disposable syringes, needles, blood-soaked pads, used blood bags, etc. are normally thrown in open dustbins. Such indiscriminate disposal of hazardous solid waste by hospitals poses a serious threat to health and the environment. As the country's priority is to set up various kinds of industries, huge amount of industrial waste are produced every day, but all these chemical, toxic and hazardous wastes are not properly disposed of. As a result, they are rapidly polluting the air, water and soil (ADB 2004, 7-8).

#### Noise Pollution:

Urbanization, industrialization and motorization create noise pollution. Indiscriminate use of hydraulic horns of vehicles, microphones and cassette players cause sound pollution in Bangladesh. According to the World Health Organization, noise should be below 60BD for a healthy environment, but according to DoE's survey, Dhaka City has already crossed this level. The DoE reveals that sound pollution is a cause of mental and physical illness, such as headaches, indigestion, high blood pressure, peptic ulcers, etc. Now millions of people are at serious health risk, ranging from deafness to heart attack (Tuhin 2008).

#### Inadequate and Improper Waste Management System:

According to DoE (2012, xxi) "approximately 13,332 tons of waste is produced every day in the urban areas of Bangladesh..." This number is increasing daily because of rapid growth in urbanization and industrialization (ibid.). The country's poor waste management systems cannot cope with the huge amount of waste generated by domestic, commercial and clinical activities.

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<sup>24</sup> *National Forest and Tree Resources Assessment 2005-2007, Bangladesh*, quoted in DoE (2012, 3).

Some waste is recycled through inadequate recycling facilities for reuse, but most is dumped in either soil or water. The unmanaged waste pollutes the air, water and land resources (Ibid.).

#### Chemical Runoff to Wetlands:

The traditional agricultural system, which was environmentally friendly, is being completely replaced by modern cultivation methods. As mentioned before, to increase production of crops and to guard against insects, farmers are indiscriminately using agrichemicals—chemical fertilizers and pesticides—on farm lands. This utilization of chemicals on the land results in chemical runoff to the surface water bodies (Islam 1999, 4), such as ponds, canals, lakes and rivers, and other wetlands. As a result, the country's aquaculture is now seriously at risk.

#### Depletion of biodiversity:

Due to shifting cultivation, urbanization, changing agricultural systems, commercial shrimp cultivation in coastal mangrove areas, deforestation, air pollution, water pollution, degradation of wetlands, hazardous environment etc., the country's biodiversity is seriously damaged. The flora and fauna are facing serious challenges to their survival. According to DoE (2012, 55), the country has lost 10 percent of its mammalian species, 3 percent of its avifauna and 4 percent of its reptiles within the last one hundred years. More than fifty species are critically endangered according to the report of IUCN (Islam 2005, 675).

#### Natural Calamities:

Due to its physiology and morphology, Bangladesh faces natural calamities every year. Floods, cyclones, tornadoes, earthquakes, storm surges, droughts, abnormal rainfall, hailstorm lighting, etc. destroy lives and property. Each year the country experiences many losses due to such natural disasters. Bangladesh is also called a country of natural calamities and disasters.

#### Unsanitary Conditions and Unhygienic Environment:

According to a WHO report, 50 percent of the country's people are deprived of hygienic sanitation facilities. The conditions in villages and in urban slums are the worst. In village schools, there is only one latrine for about one hundred students and these toilets are not cleaned regularly (Islam 2005, 676). Diseases like diarrhea are common due to these unsanitary and unhygienic conditions.

#### Overpopulation:

Overpopulation indicates over-exploitation of natural resources. It is a huge burden for a small country like Bangladesh. Such overpopulation always creates strong pressure on the environment and its natural resources. In order to meet their basic necessities, people are chopping trees, cutting mountains, extracting more ground water, producing more foods, setting up industries, building houses, and converting agricultural lands to non-farming lands. All these human activities undoubtedly damage the environment.

#### Climate Change and Vulnerability:

Greenhouse gas emissions are the main cause of global warming, through which the climate is changing all over the world. Bangladesh has contributed less than others to this cause, but nevertheless has to face a massive and dangerous situation due to climate change (ADB 2004, 15). Climate change results in sea level rises, high atmospheric temperatures, heavy rain, drought, intrusion of salt in river water and farming lands, floods, storms and lighting, cyclones, tornado, etc. (ibid.). The coastal areas are going to be the most affected by climate change. It is projected that by 2050 one third of the country's area (mainly coastal areas) will be under sea water. This will reduce drinkable water and arable lands in the southern part of the country. As a result, Bangladesh

will face problems of climate refugees. In the meantime, Bangladesh is “listed among the ten most vulnerable countries in the world”.<sup>25</sup>

No.	Causes	Contributing Factors	Responsibility
1	Degradation of land and loss of soil quality	Agrochemicals, converting forest lands to farming lands, dumping industrial effluents into soil, urbanization, and industrialization	Country people and GoB's inadequate environmental policy
2	Water pollution and contamination	Industrial effluents, agrochemicals, chemical fertilizers, and pesticides	---Do---
3	Air pollution	Fossil-fueled vehicles, industrial emissions, effluents of power generation, and brick kilns	GoB's inadequate environmental policy and regional industrialization
4	Unprecedented construction	Unplanned ways of construction	GoB's inadequate environmental policy
5	Industrial (chemical) effluents	Inadequate disposal system	---Do---
6	Loss of wetlands	Unplanned ways of construction	---Do---
7	Exhausted gases	Natural oil, natural gas and coal used by industries and vehicles	---Do---
8	Deforestation	Converting forest lands for farms and industries	Country people and GoB's inadequate environmental policy
9	Desertification	Soil erosion, salination, waterlogging, agrochemicals, and intensive cropping	---Do---
10	Household, medical and industrial solid waste	Lacking a proper waste management handling	GoB's inadequate environmental policy
11	Noise pollution	Motorized vehicles	---Do---
12	Improper waste management system	Unmanaged waste	Country people and GoB's inadequate environmental policy
13	Chemical runoff to wetlands	Chemical fertilizers, pesticides and industrial effluents	GoB's inadequate environmental policy
14	Depletion of biodiversity	Urbanization, changing agricultural system, commercial shrimp cultivation in coastal mangrove areas, air pollution, water pollution, and degradation of wetlands	Country people, GoB's inadequate environmental policy and regional industrialization
15	Natural calamities	Floods, cyclones, tornadoes, earthquakes, storm surges, droughts, abnormal rainfall, hailstorm lighting and landslide	Natural cause

<sup>25</sup> *Regional Study on the Causes and Consequences of Natural Disasters and the Protection and Preservation of the Environment* (Kathmandu: SAARC Secretariat), quoted in Ghos et al. (1997, 86).

16	Unsanitary condition and unhygienic environment	Lack of awareness and proper management system	Country people and GoB's inadequate environmental policy
17	Overpopulation	Unplanned family life	Country people
18	Climate change and vulnerability	Greenhouse gas emission across the globe	Industrial and developed world

**Figure 2. Causes of environmental problems in Bangladesh**

From the abovementioned visible causes, the country's environment and ecology are facing serious problems. This has had a negative impact on the economy, because the country's economy is based on agricultural products which are in turn dependent on living organisms and ecosystems. Environmental degradation directly affects human health (for instance, due to air pollution in Dhaka City, respiratory problems are very common). Environmental degradation leads to atmospheric change, extinction of flora and fauna, scarcity of natural resources, ozone layer depletion, and loss of tourism. It also aggravates poverty for marginalized people because their livelihoods (fishing, cultivation, etc.) are at serious risk. Nowadays, environmental scholars and environmental activists are concerned about these destructive effects, but perhaps they fail to grasp the root cause of the problems. The root cause seems to be ignorance about the intimate and deep spiritual relationship of human beings with the natural world. This gap can be closed by religious eco-ethics and eco-spirituality. This unexplored field will be discussed later in the recommendations. First, in a nutshell, how Bangladesh currently addresses these problems:

## **Response of Bangladesh to Environmental Issues**

### Government Steps:

According to the documents of DoE (2012), the Government of Bangladesh (GoB) is seen to be actively responding to international conventions with its follow-up activities. After the Stockholm Conference on Human Environment in 1972, the country issued the Water Pollution Control Ordinance in 1973 in order to take care of the water bodies of the country. The Environmental Pollution Control Board was founded in 1977 to work on improving the environment. The Department of Environment (DoE) was established in 1989 under the Ministry of Environment and Forest (MoEF). The Bangladesh government adopted an Environmental Policy in 1992 for maintenance of the ecological balance, environmentally friendly development and sustainable use of natural resources. The Environmental Conservation Act and Environmental Conservation Rules were enacted in 1995 and in 1997 respectively to set environmental standards in relation to the quality of air, water, noise, odour, emissions and discharge. The Environment Court Act (ECA) has been in force since 2010 dealing with environmental offences. In response to Agenda 21, in 1995 the country established a National Environment Management Action Plan (NEMAP) with the full participation of ordinary people, interest groups, resource users, environment stockholders, NGOs, and lobbyists. As the environment is a broad issue, it needs the increased participation of many bodies within the structures of government. In keeping with this spirit, other ministries, such as the Ministries of Agriculture, Land, Water Resources, Fisheries and Livestock, Industries, Health and Family Welfare, etc., plus many other institutions, are working for a healthy environment. With the recent adoption of a "polluter pays principle," DoE has attempted to make industries more responsible about the environment, even penalizing some for non-compliance with the policy (DoE 2012, 10-11).

The Bangladesh government also gives importance to environmental education, awareness and public participation. As per suggestions from the Department of the Environment, the

Bangladesh government has included environmental education in the curriculum of primary and secondary schools in science, social science, geography and the environment, and is also being taught with other general subjects. In many public and private universities, environmental science and management is taught as an independent subject, both at undergraduate and postgraduate levels. The Department of the Environment is attempting to increase people's awareness of the essential nature of the environment through knowledge dissemination. Some Green Clubs have been established by DoE at several schools in city areas in order to enhance knowledge of the environment among school students. The National Environmental Award is offered every year by GoB for the best performance in terms of environmental sustainability. The fifth of June is celebrated across the country as World Environment Day in order to make people more conscious of the environment (DoE 2012, 11).

#### Initiatives of Non-Governmental Organizations:

Apart from all these governmental initiatives, some Non-Governmental Organizations (NGOs) are working for environmental sustainability also. The Bangladesh Centre for Advanced Studies (BCAS) is a research-based organization.<sup>26</sup> Its primary concentration is sustainable development through a healthy environment. It was founded in 1986 and since then has been working for environmental justice through better management of natural resources, such as land, water, fisheries, forestry, agriculture and biodiversity. It advocates enhancing flexibility between natural and artificial means of economic growth. Over a thirty year period as an NGO it has become a leading research institute in sustainable development and environmental justice for the whole of South Asia. As part of its monitoring activities, BCAS produces an Environmental Impact Assessment (EIA) and a Social Impact Assessment (SIA). Clean technology, renewable energy, pollution management, and environment related health risks are considered part of BCAS's activities.

The Wildlife Trust of Bangladesh (WTB) was founded in 2003. Since its inception as a non-profit NGO it has been working to conserve the country's biodiversity. Its motto is "Protect the National Heritage" (Hussain 2011). The Trust collects data on wild animals and plants and then monitors these populations through observation. It works for institutional and policy development aimed at preserving Bangladesh's diversified flora and fauna, and persists in taking legal steps for the protection of wildlife. The WTB tries to save critically-endangered species by increasing public awareness of the value of conservation, and mitigates wildlife-human conflict by promoting positive reciprocal relationships (Masud 2011).

The Bangladesh Environmental Lawyers Association (BELA) was founded in 1993 to promote environmental justice through sound environmental jurisprudence.<sup>27</sup> As a non-governmental organization of lawyers, from the very outset BELA has been raising its voice against poor governance and non-implementation of environmental laws. Because of its persistence, special courts are now empowered to deal with environmental offences. The Association wants to see existing environmental laws implemented through judicial and administrative steps. It cooperates in resolving environmental disputes through court cases as well as other conflict resolution methods. BELA attempts to increase awareness about environmental laws through its campaigns; provides legal assistance and support for the protection of the environment; and collaborates with international organizations such as the Environmental Law Alliance Worldwide (E-LAW), Friends of the Earth International, International Union for Conservation of Nature (IUCN), and South Asian Watch on Trade and Economics and Environment (SAWTEE) in pursuit of environmental justice.

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<sup>26</sup> For details, see <https://www.bcas.net/index.php>

<sup>27</sup> For its detailed activities see <http://www.belabangla.org/who-we-do/>

Proshika is focused on an environmentally-sound Bangladesh.<sup>28</sup> One of its goals is environmental protection and under the Social Forestry Program (SFP), this organization works to plant new trees and protect existing ones. It accords importance to the regeneration of forest resources and promotes access for the poor to forest resources through a participatory approach. For this purpose, it attempts to facilitate grassroots organizations through motivation and awareness. Under this particular program, 90.52 million seedlings have already been produced and planted. Proshika also works in crop diversification projects, collaborating with the Department of Agricultural Extension and RAKAB. Under its Organic Agriculture Program (OAP) it attempts to convince farmers to practice organic methods in croplands and vegetable production. Proshika is also vocal against the use of chemical fertilizers and pesticides.

The Building Resources Across Communities (BRAC) organization has various initiatives related to the sustainability of the environment.<sup>29</sup> Under its Disaster Management and Climate Change (DMCC) initiative, it attempts to increase awareness about possible impacts of climate change and to reduce environmental risks. Its Water, Sanitation and Hygiene (WASH) program seeks to increase people's awareness about safe water, healthy sanitation and a hygienic environment. BRAC supplies rural people with deep tube wells and provides loans for the purpose of securing access to safe water (Masud 2011). Across the country BRAC advocates for the development of a water safety plan (ibid.). In saline and arsenic affected areas, BRAC installs hand pumping deep tube well, digs ponds, and filters water to remove the arsenic. In some rural areas BRAC provides sanitary latrine facilities for poor people (ibid).

Simple Action For the Environment (SAFE) launched from 2008.<sup>30</sup> Its aim is to reduce vulnerability to the environment caused by floods and strong winds. For this purpose, it advises people to build houses using traditional methods and to plant as many trees as possible.

#### Voluntary Civic Organizations:

Poribesh Rokkha Shopoth (POROSH) was launched in 1997 as a community-based environmental movement. The primary concern of POROSH was Dhaka City, especially the city's lakes and parks. Because of its persistent activities, the city corporation took some necessary steps to save Gulshan Lake (Islam 1999, 15). The movement also advocates clean air, clean water, and clean streets for city dwellers, and through distribution of leaflets and organizing rallies has tried to increase awareness among common people (Islam 1999, 14).

In 2000, POROSH was transformed into Bangladesh Poribesh Andolon (BAPA),<sup>31</sup> which is now considered a very common forum for citizens of Bangladesh to save the environment. The main objective of BAPA is to protect the environment from further degradation and to work for a strong civic movement for environmental justice. It campaigns and holds rallies to highlight how essential the environment is to human life and to increase awareness. It works as a pressure group against any sort of environmental damage. Because of its persistence, two-stroke engine vehicles (TSEV) have been prohibited and the GoB imposed a ban of polyenes. The organization pioneered a river saving movement in Dhaka, which is now transformed into a country-wide river saving movement. At local level, BAPA supports and motivates pro-environmental organizations, while at international level it collaborates with many other regional and international organizations.

Some social service organizations, such as Rotary Clubs, Lions Clubs, Apex Clubs, etc., provide informal environmental education to generate environmental awareness (Salequzzaman and Stocker 2001, 115). Similarly, Bangladesh Poribesh Unnayan Sangstha (Bangladesh POUH) also plays a vital role in increasing awareness through non-formal education (Ibid., 116). Across

<sup>28</sup> For details see <http://www.proshika.org/what-proshika-does.html>

<sup>29</sup> [http://www.brac.net/#what\\_we\\_do](http://www.brac.net/#what_we_do) can be seen for details.

<sup>30</sup> See <https://safebangladesh.wordpress.com>

<sup>31</sup> See <http://www.bapa.org.bd/Default.aspx>



the country it has established fifty informal primary schools to serve this purpose.<sup>32</sup> Because it realizes that textual learning will not ensure environmental sustainability, students are required to go on field trips to develop a better perception of the environment. POUSH organizes tours for students for this purpose.

Doctors for Health and Environment (DHE) seek to make people conscious of the importance of a healthy environment for public health (Islam 1999, 14). The organization also provides some health-care facilities for people affected by hazardous environments and sometimes sends medical teams to affected areas .

#### Issue-based Movements:

Temporary issue-based movements are also seen in Bangladesh. These basically originate from a specific local area and its people. Because of such movements, trees of the Osmany Uddyan in Dhaka City and farming lands in Tangail, Jessore and Munshiganj were protected from construction in the name of so-called development (ibid.).

#### Media and Press:

In Bangladesh, both the electronic and print media play a role in increasing awareness about environmental issues among common people (ibid.). The satellite channels and radios treat environment-related issues on the news as important. The daily newspapers also focus on treating such news as important. Some environmental activists use social media, e.g., Facebook, to let people know about the environment. The author operates a Facebook page called Global Voice for Sustainable Development-Bangladesh Chapter (<https://www.facebook.com/GVSDBD/>) for informing online users about fact and fiction in relation to economic development and the environment. Online movements like “Riverine People” and “River of Words” are other Facebook pages making people conscious of the need for healthy rivers.

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<sup>32</sup> S. Saeed, W. Goldstein, and R. Shrestha, eds., *Planning Environmental Communication and Education: Lessons from Asia* (IUCN-Commission on Education and Communication, International Union for the Conservation of Nature (IUCN), 1998), quoted in Salequzzaman and Stocker (2001, 116).

Acting agents	Modes of activity
<b>Government of Bangladesh</b> MoEF → DoE →	policy making, disaster management, including environmental issues in educational curriculum, and awareness campaign
<b>NOGs</b> BCAS → WTB → BELA → Proshika → BRAC →	study and research on environmental issues data collection & research on ecological areas dealing with environmental jurisprudence plantation for social forestation increasing awareness of hygienic environment, and dealing with disaster management
<b>Voluntary Civic Organizations</b> BAPA →  Rotary Clubs, → Lions Clubs, → Apex Clubs, → & POUSH →  DHE →	working for a civic movement for environmental sustainability  conducting informal environmental education and increasing awareness of healthy environment  providing free health-care facilities to some people affected by hazardous environment
<b>Issue-based movements</b> →	focusing on important issues related to livelihood and recreation
<b>Media</b> Electronic media, → Print media, → & Social Media →	making people conscious that ecological equilibrium and environmental sustainability are essential

**Figure 3. Four agents involved in dealing with the country's degraded environment**

The roles of the Bangladesh government, NGOs, voluntary civic organizations, issue-based movements, and the media, offer appreciable and encouraging signs. Because of their policies and activities, and because they are working jointly for the same purpose, there is a slight improvement and people's awareness of the environment is increasing day by day. Nevertheless, the achievements are limited and unstable in relation to the vastness of the problem (Islam 1999, 15). Despite all these on-going steps and activities, environmental pollution is still increasing, land is degrading, soil quality is decreasing, water is becoming contaminated with chemicals and arsenic, salinity in water and soil is increasing, the air is becoming poisonous, rivers are dying, greenery is declining, wetlands are vanishing, waste is being dumped in open places and in water bodies, sea levels are rising, the ecological system is collapsing, biodiversity is at risk, and many species of

flora and fauna are on the way of extinction. As a result, healthy human life, and even viable economic development, the reason the environment is being degraded in the first place, are now at serious risk in the country. Our concern is thus: what are the real deficiencies in the policies and initiatives taken by the GoB and NGOs? Is the work done to date enough to deal with this vast problem? What more needs to be done?

## **Findings and Recommendations**

It is evident from the preceding passages that Bangladesh faces a severe environmental situation despite its response to the issue through governmental and non-governmental initiatives. It is true that Bangladesh is a developing country and its huge population is struggling with poverty, and that government policy and the demands of the people demands prioritize economic development at the price of the environment. The way the country is pushing for economic development has triggered the present environmental degradation (Jahan and Alauddin 1999, 306; Alauddin and Hossain 2001, 236). Traditionally the environment is not placed high on the agenda in GoB (Islam 1999, 8). Environmental sustainability is still seen as a secondary issue, indicating that because of a focus on short-term benefits, long-term benefits are being jeopardized. Such a perception may be influenced by the so-called Environmental Kuznets' Curve (EKC), which suggests that developing countries should achieve economic growth first, because it is economic development that can take care of environmental degradation later on (Islam 1999, 7). According to recent research findings this is a myth (Ibid.). Nobel Laureate economist Kenneth Arrow and some other scientists have disproved this notion (ibid.).

The environment in Nigeria is suffering fatally because decision-makers have followed this theory (Islam 1999, 2). By contrast, a country like Costa Rica has achieved remarkable economic development without degrading the environment (Ibid.). Bangladesh should learn from Costa Rica's experience that economic affluence and environmental sustainability can go hand in hand. This experience is also in accordance with the basic Islamic principle of moderation and balance. Islam (1999, 8) shows how poor people become victims of environmental problems. In Bangladesh, poor people are suffering serious health problems because of arsenic-contaminated water and poisonous air. If drinkable water and clean air are considered matters of social justice, considerable priority needs to be given to keeping the environment healthy (Islam 1999, 2), for it is not possible to have clean air and drinkable water without a healthy environment. According to Islamic principles, these are very special gifts from Allah for common utilization by all creatures, including human beings; so no-one has the right to pollute them.

For Islam, "environmental deterioration is not an inevitability of economic growth" (1999, 8). He sees it as lack of proper implementation of the policies adopted by the GoB so far (ibid.). He is optimistic that if Bangladesh can take the steps Costa Rica took, it will be possible for Bangladesh to also achieve economic development without degrading the environment (ibid.). In this regard, if economic development and growth is slow or constant, we should all be satisfied. This is called sustainable development, through which peoples of all walks of life, even the coming generation, can benefit in the same way, without creating heavy pressure on the environment and ecology. Bangladesh is now in a lose-lose situation, as Islam puts it (ibid.), because the country allows economic growth at the price of the environment. Yet it has been proven in many cases, especially in the case of Nigeria, that ultimately such development at the price of the environment makes economies vulnerable also. Bangladesh should adopt a win-win policy position by preserving the environment in tandem with economic development (ibid.). Keeping a balance between economic development and environmental stewardship is not only important work, it is also a significant duty and responsibility from an Islamic point of view. With a proper management system, financial affluence and environmental sustainability do work together. This should be a priority for a Muslim majority country. Bangladesh is a democratic country despite its vulnerable democratic institutes.

Considering the majority interest, the GoB should immediately take the necessary steps in this regard.

Because of the inefficiency of the relevant bodies, many projects related to environmental sustainability are not working properly. According to several assessments from the World Bank,<sup>33</sup> some foreign funds are not being used in right ways for improving the environment. Donor agencies, including the World Bank, Asian Development Bank and United Nations frequently become frustrated with GoB officials about the progress and implementation of jointly-taken projects. There is also bureaucratic complexity, which makes it difficult to complete any project in a timely manner. The GoB should concentrate on such inefficiency and bureaucratic complexity and take the necessary steps to quickly implement projects that are designed for the improvement of the environment.

The issue of the environment is not only an issue for DoE, but involves many other ministries and departments of the GoB. All bodies of the GoB should respond simultaneously for the greater cause of the environment. It is very unfortunate there is huge lack of response to the issue from all sides, and there is thus an urgent need for moderation and integration within the GoB's functions.

It is frequently said that officials of GoB are unable to negotiate properly with international communities to effect the country's interest. As mentioned before, without making any significant contribution to the greenhouse effect itself, Bangladesh is nevertheless one of the worst sufferers of global warming and climate change. Unfortunately Bangladesh still cannot attract due attention from the international community to this serious problem, and neither can it form any alliances with other countries that have already been affected in order to solve the problem through global initiatives. Bangladesh cannot even extract compensation from developed countries and industrial worlds, although many international forums have decreed that carbon emission countries should compensate affected countries. The country's main rivers come from the Himalayas through India, and the flow of all these rivers is now reduced by various dams being constructed by the Indian government for electrical production and irrigation purposes. In dry seasons, the rivers cannot supply minimum water as before. As a result, major parts of the country are going to become desert and the country's biodiversity has already been seriously affected. Bangladesh could persistently negotiate with the Indian government, arguing that the water flow of international rivers cannot be stopped by any one country as per international river laws. For this purpose, it could also seek cooperation from SAARC countries and the international community in order to put pressure on India to compromise and ensure adequate water flow of Bangladesh's rivers in the dry seasons. While such strategic steps are yet to be considered by Bangladesh, the GoB should in fact take these steps immediately in the greater interest of the country.

The GoB has recently issued some rules and regulations relating to the environment. For example, the environmental court has been established to handle disputes over environment-related procedures and management. Yet none of these initiatives are equipped with proper and adequate resources. Yet if these proposed changes were immediately put into practice, there would undoubtedly be positive results. Lack of trained and committed manpower, along with other logistical support, means these laws and regulations are not implemented in a timely manner. In line with these adapted rules, GoB should force industries to follow the Environmental Impact Assessment (EIA) for less pollution or for controlling pollution (Salequzzaman and Stocker 2001, 121). After duly making a cost-benefit analysis, GoB should allow foreign companies or other corporate industries to conduct their businesses in Bangladesh; otherwise the country should be satisfied with low economic development adjusted to the natural environment.

Bangladesh is a highly densely populated country. People's everyday livelihoods are met by the country's limited natural resources. These resources are now under threat because of unplanned land use and pollution of the environment. On this point, the GoB should take immediate steps to

<sup>33</sup> *The Daily Star*, October 1998, quoted in Islam (1999, 10).

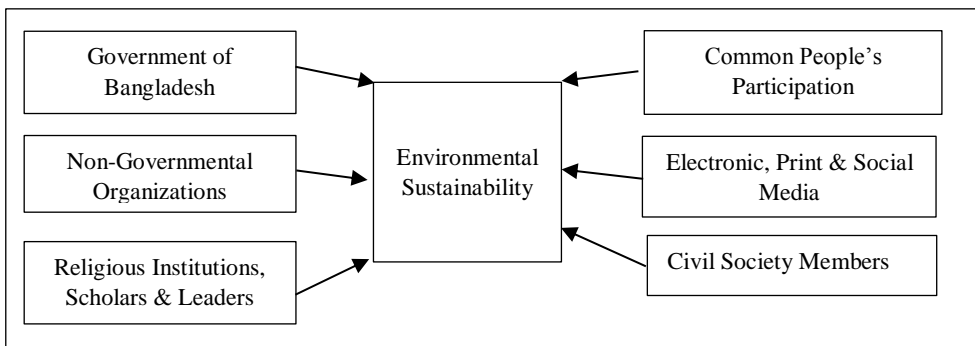
ensure sustainable use of the soil, water, forest and wetlands. A proper environmental planning and management system is urgently needed in this regard.

Environmental education is included in the country's educational curriculum from primary to university levels, but with limited options and not up to the required standard. Presently this education is limited within the spheres of the social sciences, biological sciences and technology, or at best, is given the name of environmental science/environmental studies and an independent department. Such education lacks proper guidelines and research facilities, both within the courses themselves and the departments. Environmental problems vary; so too environmental education should be diversified also, articulating all the varied religious, humanitarian, social science, life science, physical science, engineering and technology, and commercial benefits (Chowdhury 2014, 58). Programmes should be aimed to train up graduates in such a way that they can work effectively in environmental planning and management with their diversified knowledge. Environmental problems need more work from a variety of perspectives, only the country has not created significant opportunities for graduates. The GoB should concentrate on properly utilizing such potential human resources for mitigating the problems. If these graduates were provided with adequate resources, they could contribute their acquired knowledge and understanding to the creation of an environmentally-friendly society that allows also for sustainable development.

Bangladesh lacks a strong social movement for environmental protection (Islam 1999, 12). In countries like Germany, Sweden, and New Zealand, members of civil society and various organizations are always putting strong pressure on government in the cause of the environment (Salequzzaman and Stocker 2001, 119). Some political parties, for instance the Green Party in Germany, are vocal on the issue (ibid.). The role of civil society is critical for conducting a popular and strong social movement in Bangladesh. Admittedly, the country's civil society is divided into many groups based on political affiliations and ideologies, so they are not united on any burning issue. Since members of civil society are well educated and intelligent, they should quickly understand the necessity for working together to grow a strong social movement across the country, thereby creating huge pressure on the GoB to prioritize the environment. Such a social movement may also be advanced by a collaboration of student organizations, professional associations, literary and cultural organizations, rights organizations, trade unions and labor organizations, faith-based organizations, and also political parties. If a strong social or civil movement were to be organized and conducted with all these human resources, the political parties of the country would be obliged to pay attention to the environment (ibid.). Perhaps this could be a potential means of preventing Bangladesh from experiencing an environmental disaster.

Bangladesh is connected with the rest of the world, which is blindly following the modern scientific worldview on the environment. According to this modern worldview, and as noted before, the environment is like a machine without any sacred identity. Such a scientific and philosophical understanding of the environment has worked for the degradation of the environment over the centuries, from the thirteenth century onwards. Bangladesh, though a predominantly Muslim country, cannot take such a secular approach to the natural world. Because of their modern Western education, most educated people take this secular view of the environment. That is why people do not really feel a deeply-rooted attachment to the environment, such as is found in Islamic teachings. While the GoB and NGOs are trying to spread awareness among people about the importance of the natural environment, this is basically from a secular perspective. That is why people are conscious about the environment, yet without feeling love and respect for it. Islamic teaching on environmental ethics, along with its philosophical and spiritual approach, should be given priority in order to increase people's inner feelings of love and respect for non-human animals, plants, and even non-living things like soil, air, and water, given that all things are created by the same Creator who created human beings. They are not alien to humans, but are instead relatives of human beings in the sense of the oneness of creation (*tawhīd al-khalq*). The environment can thus easily be related and relevant to many other Islamic teachings, as mentioned before. This is yet to done, having been tackled by neither the GoB nor the NGOs, nor any members of civil society, environmental

movements or environmental activists. Not even Islamic religious leaders, for instance the *Imāms* who deliver sermons (*khuṭbah*) at Friday congregational prayer and the Islamic scholars (who teach Islam at educational institutes) are active in making people conscious of the environment through Islamic teachings. In Bangladesh, there are more than two lacs mosques (*masjid*) and mosque-based preliminary Quran teaching schools (*maktab*) mainly served by *Imāms*. If all these Imams took the initiative to make people conscious of the environment, they could do so easily through their *khuṭbah* (Friday sermons). Thousands of students graduate from Islamic education through different categories of (*madrasah*), namely Islamic educational institutes like ‘*Āliya*, *Qawmī*, and *Ḥafīziya madrasah*. Mohamed (2014, 321-325, 326) shows how Islamic institutions (*masjid*, *maktab*, and *madrasah*), with the cooperation of other educational institutes, could play a vital role in increasing people’s awareness about the importance of the natural environment. Thus the GoB should concentrate on properly utilizing these vast resources as a potential supplement to environment related policies and programs. Some courses related to Islam and moral studies are taught from Grade Three to Grade Twelve in the country’s general educational system. Furthermore, in many public and private universities, and in government and non-government colleges, Islamic studies are being taught as a course or as an independent subject at graduate and undergraduate levels. Yet teachers and students of Islamic educational institutes and the Islamic studies departments of general educational institutes are not discussing environmental problems from an Islamic perspective. How then is it possible to disseminate basic Islamic principles of environmental ethics among those Muslims who follow religious guidance in their everyday life? If the GoB takes the initiative in including Islamic teachings on environmental ethics in Islamic studies and in the curricula of all Islamic educational institutes, it would be possible to make an enormous number of students aware that the environment is essential for life. For this purpose, teachers and *Imāms* must be properly trained with logistical support and updated information. The same could be done by other religious teachers and scholars in their institutional capacities. The GoB and NGOs should work together in this way to utilize the vast human resources and institutional opportunities embedded in the faith traditions of the country, in order to deepen awareness about the environment. In addition, the Islamic educational sector can support a strong social environmental movement, as Mohamed points out (2014, 326), thereby putting huge pressure on government to accord priority to environmental issues. Thus if the country’s civil society, NGOs, and secular environmental scholars and activists come together and cooperate with Islamic scholars, religious leaders and institutes, the environmental movement would gather considerable momentum.



## Concluding Remarks

Islam provides the idea of the environment articulating human life in the form of the unity of creation (*tawhīd al-khalq*). Thus Islamic teachings on the sustainability of the environment provide some basic suggestions on how human beings should behave towards nature and the environment. It is a shortcoming of Muslims all over the world that they are not following Islam properly in their real lives. Current Muslim practices in terms of environmental ethics are not fully in compliance with Islamic teachings as prescribed in the Qur'an and Sunnah. The Muslim world is not isolated from the Western world; instead it imitates other parts of the globe. Education, administration and state affairs do not draw upon Islamic teaching as the main source of instruction. Muslims have transformed Islamic religiosity into a cultural identity. Islam is thus unable to create strong pressure on state policies and on the present social structures of the Muslim world in order to ensure the issue of environmental sustainability is highest on the agenda.

Like other Muslim countries, Bangladesh does not respond to Islamic guidance in prioritizing the environment. At the same time, religious scholars, teachers and educational institutes have not taken the initiative to talk about and work for the sustainability of the environment through increasing public awareness. There are some policies and activities by the GoB, NGOs, voluntary civic organizations, and the media that are related to environmental justice, but these are inadequate against the unfathomable depth of the problem. Besides, all these activities lack moderation and clear integration with policies and decisions. While there are also issue-based movements that have achieved some success, these movements cannot stop further damage to the environment. Because of these various inadequacies, Bangladesh cannot protect its environment from degradation; instead it has already become vulnerable to pollution by its people and by the global climate change over which it has no control.

Having articulated these concrete problems and deficiencies in the present situation, let us ponder what can be done to mitigate them. As noted in the preceding passages, there is an urgent need to change our attitude to the environment into one of deep love and respect. As responsible human beings, every one of us is morally bound to improve our own treatment of the natural world as co-creators, and then to collectively work for a significant change in life-style from family to state. We have to remember that we are not lords of the natural world; instead, as the crown of the creation we are friends and caretakers. If we feel deeply in our hearts the oneness of creation, how is it possible to be silent when our fellow-creatures are suffering greatly or fighting for their survival? How is it possible to harm them or kill them without a proper justification? We can receive benefits from them after ensuring their ongoing existence or growth is maintained at least at current levels. As responsible creatures of Almighty Allah, we are commanded to improve the whole environment through our knowledge and activities, not to degrade it with our uncontrolled greed or show off our "superiority" over other animals, plants, or abiotic organisms of the environment. If such deep philosophical and spiritual teachings of Islam (and other religions which have more or less the same teachings about nature and the environment) were to be included in the educational curriculum and taught by well-trained teachers with deep feelings for the environment, our younger generations may soon develop a deep inner awareness of the environment. We thus recommend the GoB consider implementing this policy. By providing logistical support to faith communities, the GoB will inspire them to make people conscious of the environment. In Bangladesh, a huge number of mosques and madrasah could function as assets in working for environmental sustainability. The Ministry of Religious Affairs could take the initiative through the Islamic Foundation of Bangladesh and issue a circular to all *Imāms* advocating inclusion in their Friday sermons (*khuṭbah*) the Islamic teachings on the environmental sustainability. After due consultation with Islamic scholars and people who have expertise on the environment, the Islamic Foundation of Bangladesh could provide the *Imāms* with some guidelines for these sermons (*khuṭbah*) for. In Bangladesh, faith-based institutes, communities and organizations are seen as isolated from policy making processes, and the activities of the GoB and other NGOs. Yet for a greater purpose, all these potential resources should be brought together in the mainstream arena to work together to mitigate current environmental problems. Though the environmental problem is basically a global rather

than a local issue, the solution may come from collective action plans and activities that result from incorporating the micro level efforts of the society into the macro level attempts at international level. In sum, a holistic approach to environmental ethics, with the cooperation of religious and faith-based institutes should be implemented through combined efforts and with participation from people at all levels of society.

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## Abbreviations used in the Paper

ADB: Asian Development Bank  
 AMEN: African Muslim Environmental Network  
 BAPA: Bangladesh Poribesh Andolon  
 BCAS: Bangladesh Centre for Advanced Studies  
 BELA: Bangladesh Environmental Lawyers Association  
 BRAC: Building Resources Across Communities  
 CANSA: Climate Action Network South Asia  
 CEE: Centre for Environmental Education  
 C.E.: Common Era  
 DMCC: Disaster Management and Climate Change  
 DHE: Doctors for Health and Environment  
 DoE: Department of Environment  
 ECA: Environmental Court Act  
 EIA: Environment Impact Assessment  
 EKC: Environmental Kuznets' Curve  
 E-LAW: Environmental Law Alliance Worldwide  
 GoB: Government of Bangladesh  
 IFEEs: Islamic Foundation for Ecology and Environmental Science  
 IUCN: International Union for Conservation of Nature  
 MoEF: Ministry of Environment and Forest  
 NCS: National Conservation Strategy  
 NGOs: Non-Governmental Organizations  
 NEMAP: National Environmental Management Action Plan  
 NSD: North South Dialogue  
 OAP: Organic Agricultural Program  
 OIC: Organization of Islamic Cooperation  
 POROSH: Poribesh Rokkha Shopoth  
 PBUH: Peace Be Upon Him  
 RAKAB: Rajshahi Krishi Unnayan Bank  
 RING: Regional and International Networking Group  
 UN: United Nations  
 UK: United Kingdom  
 UNCED: United Nations Conference on Environment and Development  
 SAARC: South Asian Association for Regional Cooperation  
 SAFE: Simple Action for the Environment  
 SAWTEE: South Asian Watch on Trade, Economics and Environment  
 SEMP: Sustainable Environmental Management Program  
 SFP: Social Forestry Program  
 SIA: Social Impact Assessment  
 TSEV: Two-Stroke Engine Vehicle  
 WB: World Bank  
 WHO: World Health Organization  
 WTB: Wildlife Trust of Bangladesh  
 WASH: Water, Sanitation and Hygiene  
 WSSD: World Summit on Sustainable Development

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